

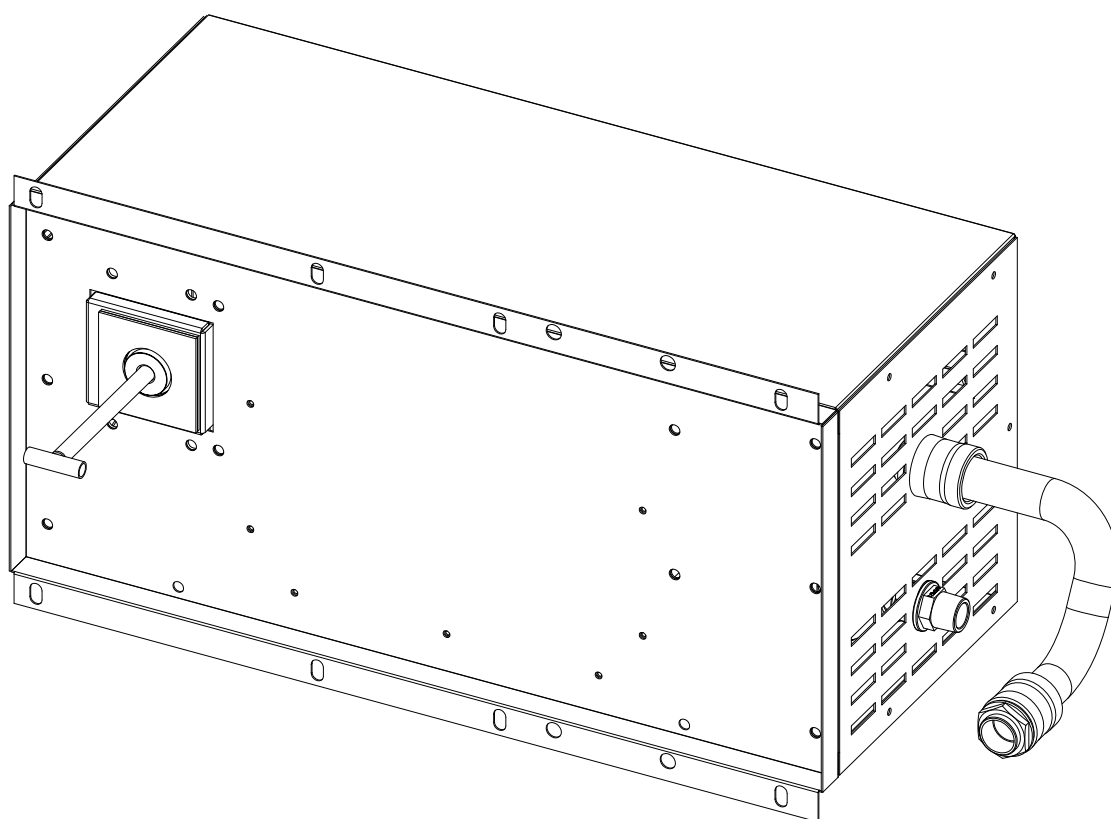
08/2017

Mod: VAP3-4

Production code: 0TU0V02



Diamond
catering equipment



VAPORIZER 2.8kW

Instruction and maintenance manual

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1. GENERAL CHARACTERISTICS

The steaming system is composed of a water heater (steam generator) controlled via two solenoid valves and an electronic switchboard enabling to manage the steam supply according to a pre-set time.

The user interface (a membrane switch keyboard) is placed outside the circuit, has a led and is connected to the card by a special cable.

The wiring system must be carried out by separating the low and high tension lines.

2. HARDWARE

2.1 MEMBRANE SWITCHES (EXTERNAL)

2.1.1 INPUTS (ING)



1st Steam DOSAGE START button (4 steaming seconds)/ Steam dosage STOP button



2nd Steam DOSAGE START button (6 steaming seconds)/ Steam dosage STOP button



3rd Steam DOSAGE START button (8 steaming seconds)/ Steam dosage STOP button



4th Steam DOSAGE START button (10 steaming seconds)/ Steam dosage STOP button



CONTINUOUS DOSAGE START button (continuous steam supply)/ Steam dosage STOP button /Button to ENTER the programming mode.

REMARKS:

The  button has two functions:

- When pressed continuously (for more than 3 seconds) the system enters the programming mode. This is confirmed by the flashing led.
- When pressed for a moment, the button activates a particular volumetric steam dosage delivery known as 'continuous' i.e. dosage is not programmable by the user.

2.2 CARD

2.2.1 INPUTS (ING)

ALIM Card feeding connectors

SLIV Level probe

REF Earthing

2.2.2 OUTPUTS (OUT)

RL3 Steam injection solenoid valve actuator (**RELAY**)

ECAR Water heater feeding solenoid valve actuator (**RELAY**)

REMARKS:

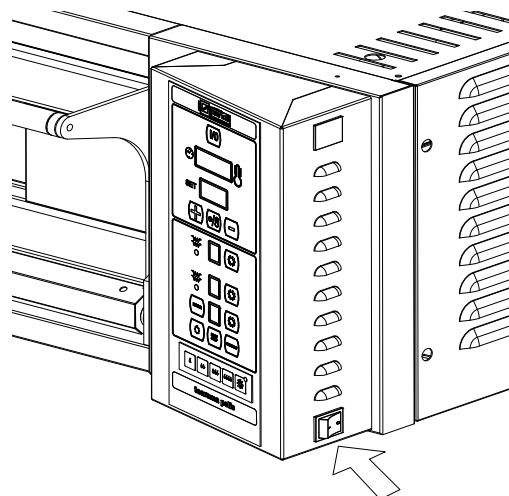
The outputs (pump and delivery) are controlled by two separate relays.

3. OPERATION

3.1 ON/OFF STATE

⊘ **DO NOT** switch the steaming unit on before connecting the pipe (at steaming unit water inlet) and opening the water feeding tap.

The manufacturer takes no responsibility for damages deriving from failure to observe the above mentioned instructions.



A green switch 0-1 outside the card (see picture above) provides for switching on and off the steaming system.

On switch on condition "1" the steaming unit turns on (the green light keeps on for a few seconds and the resistance ignition cycle starts).

The steaming unit push button panel is always enabled but **you have to wait about 8-10 minutes** from the first ignition before proceeding with the steam supply.

When the green light of the switch 0/1 turns off, the steaming unit is fully loaded.

On switch off condition "O" the steaming system turns off and the card is no longer fed.

STEAMING UNIT YIELD TABLE

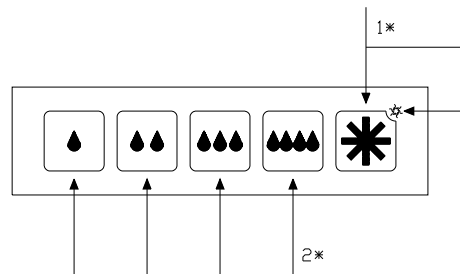
Maximum quantity of steam for continuous steam supply ($\pm$ Nos. 5 pulses by key )	± 50	seconds
Maximum recovery time after exhaustion of steaming unit ($\pm$ Nos. 5 pulses by key )	± 4	minutes
Minimum recovery time after exhaustion of steaming unit (max No. 1 impulse by key )	± 1	minute

3.2 PROGRAMMING

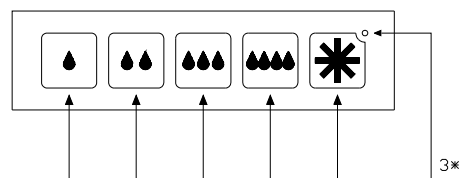
By pressing the  button for at least 3 seconds you enter the programming mode.

The flashing led on the membrane keyboard tells the operator that the programming mode is now available. **(1*)**

Within 5 seconds (from entering the programming mode) press the key for the steam dosage you intend to set. **(2*)** Once the desired time has been reached (amount of supplied steam according to the set time) press the same key once again to save the datum.



The membrane will switch off **(3*)**.



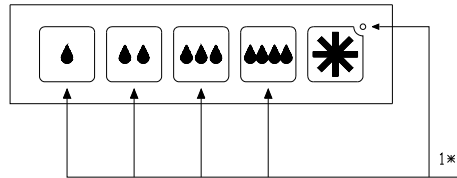
Carry out the same above mentioned operations to programme the remaining steam dosages.

3.3 STEAM DOSAGE DELIVERY

Turn the steaming unit on by means of the green switch 0/1. Before proceeding with the steam delivery wait about 8-10 minutes (steaming unit cycle ignition)

and then press one of the keys     to supply the previously programmed steam amount.

The LED on the membrane keyboard will turn on and keep lighted **(1*)**.

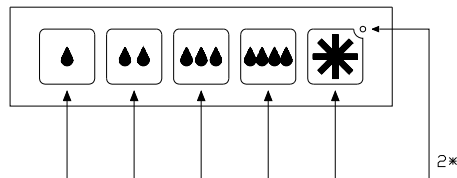


The selected dosage will stop after the previously programmed delivery time has elapsed or may be stopped at any time by pressing one of the

keys     .

This last operation enables to stop the steam dosage delivery before the programmed time end (STOP VOLUMETRIC DOSAGES).

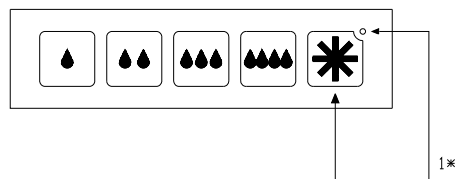
In both cases (dosage end or dosage stop) the Led. **(2*)** will switch off.



3.4“CONTINUOUS” DOSAGE DELIVERY

By pressing the  key for less than 3 seconds (acknowledgement upon key release) the ‘CONTINUOUS’ dosage delivery mode is activated.

The LED on the membrane keyboard will turn on and keep lighted **(1*)**.

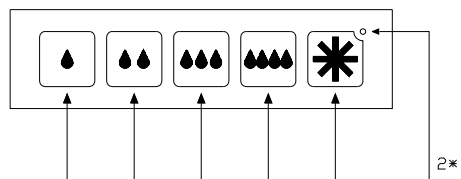


By pressing the keys      the required steam delivery will be stopped immediately.

Remarks: We remind you that CONTINUOUS delivery dosage is not indefinite.

A limit has been set (that is ± 5 impulses given by pressing the key , corresponding to 50 steam seconds) after which there is a decrease of the steam pressure. We suggest stopping the delivery and waiting a few minutes for the water heater to recover the steaming capacity.

The LED **(2)*** will switch off.



4. FAILURES

List of possible failures:

- 1) Failed ignition of heating element; check the presence of water feeding.
- 2) Failed ignition of main switch pilot lamp; faulty heating element (check also the thermal protection of the heating element).
- 3) Failed water loading; check the water or the electric connection.

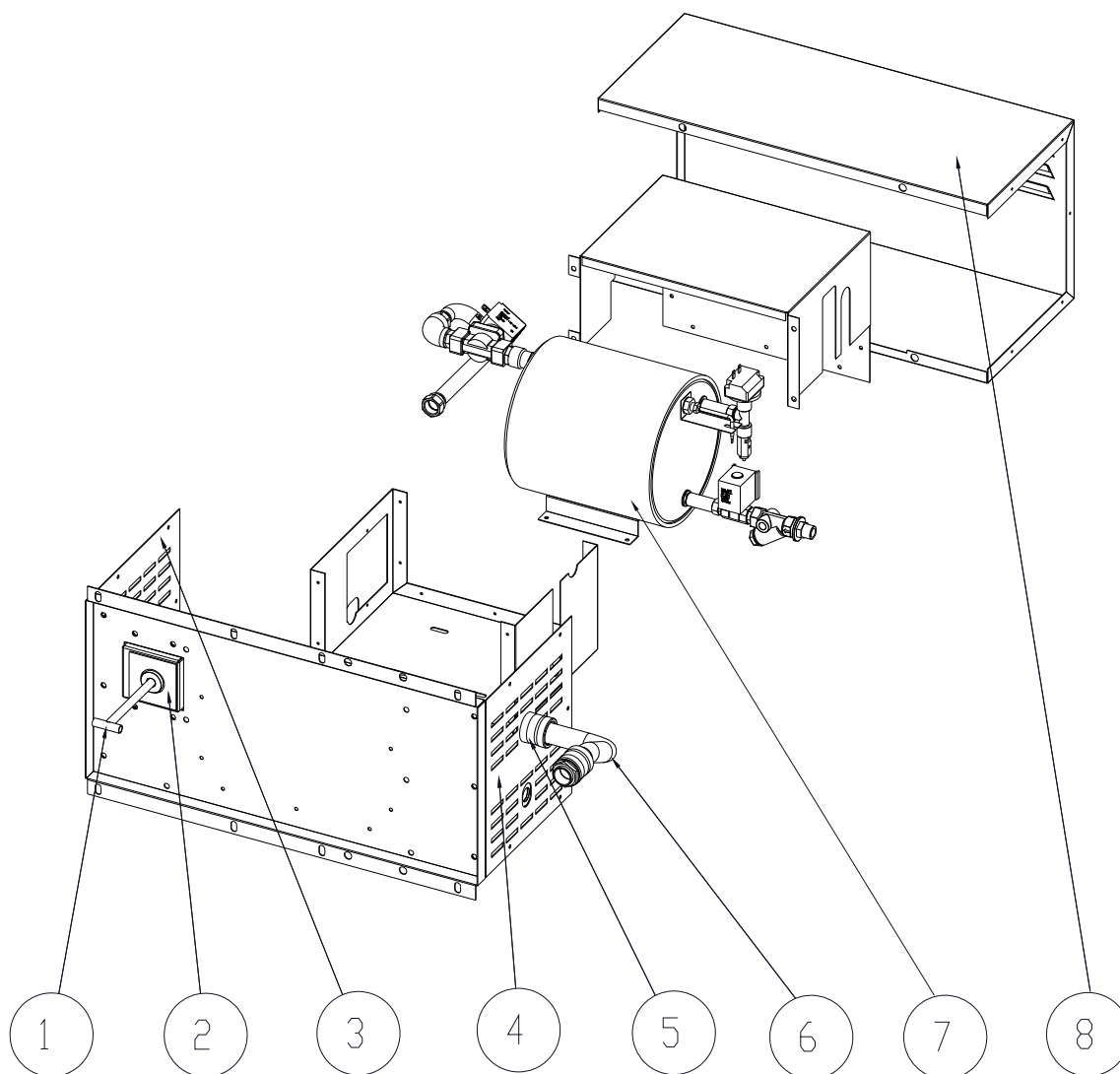
5. TECHNICAL SPECIFICATIONS

Maximum amount of water for continuous steaming	±250	ml
Voltage	230 Vac 1N 50Hz	Vac
Current	12	A
Electric power	2.8	kW
Actuator	relay	
Push button panel	Keyboard with electronic keys	
Electrical connection	through the baking module electric panel	
Working temperature of card	50 max	°C
Humidity	40 - 80 % without condensation	
Water inlet connection	Rp ½" ISO 7	
Water feed maximum pressure	16	bar

REMARKS: We reserve the right to replace, if necessary, components used with other devices made by various manufacturers but with the same electrical characteristics and in accordance with the same norms and standard.

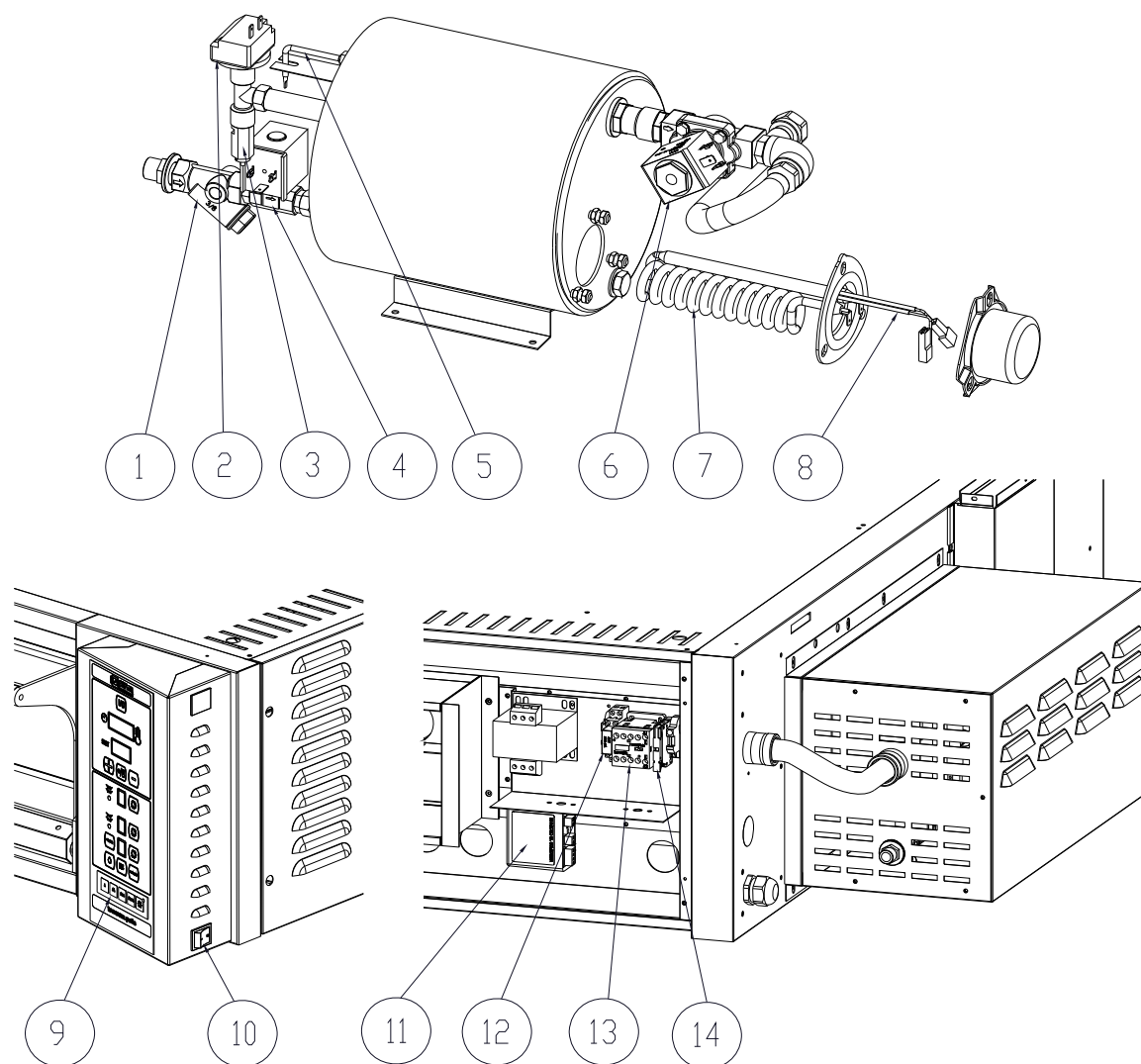
6.EXPLODED VIEWS AND WIRING DIAGRAM

6.1 EXPLODED VIEW OF VARIOUS COMPONENTS



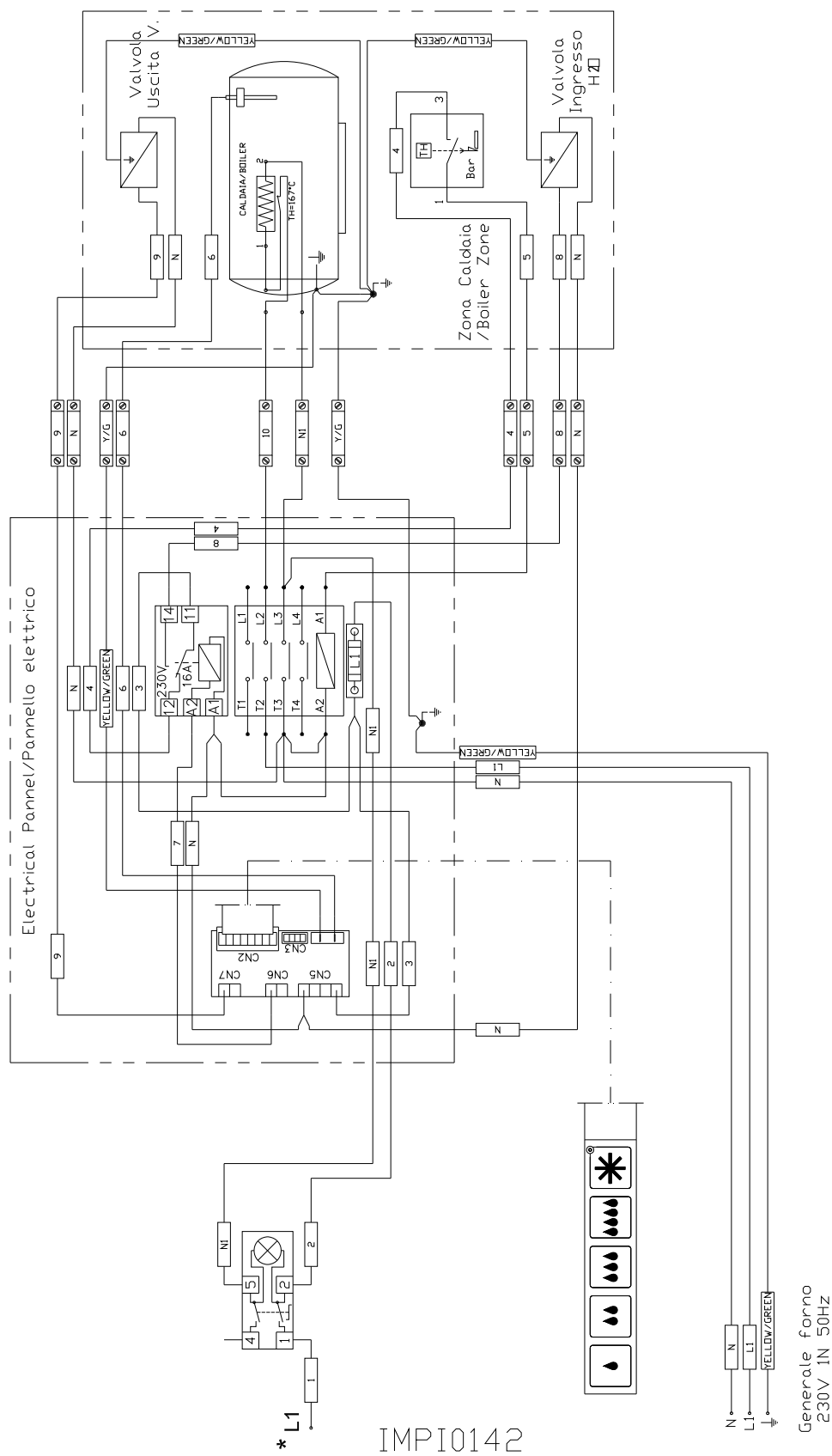
Pos	Description	Codes
1	INJECTOR PIPE SUPPORT	SUPP0306
2	SILICON GASKET	GUAR0040
3	LEFT SIDE PLATE HEATER	FIAN0405
4	RIGHT SIDE PLATE HEATER	FIAN0404
5	PIPE FITTING WITH RING NUT FOR CORRUGATED PIPE	GASI0049
6	CORRUGATED PIPE	TUBO0101
7	COMPLETE STEAM HEATER	CARP1623

6.2 EXPLODED VIEW OF ELECTRICAL COMPONENTS



Pos.	Description	Code
1	WATER FILTER	FLTR0002
2	STEAMING UNIT PRESSURE SWITCH	ELET0548
3	STEAMING UNIT SAFETY VALVE	ELET0551
4	SOLENOID VALVE AT STEAMING UNIT INLET	ELET0549
5	STEAMING UNIT LEVEL PROBE	ELET0552
6	SOLENOID VALVE	ELET0525
7	HEATING ELEMENT	RESI0133
8	THERMAL FUSE	ELET0550
9	STEAMING UNIT KEYBOARD	ELET0138
10	GREEN LUMINOUS BIP SWITCH 0-1	INTE0010
11	DOSAGE AND LEVEL CONTROL BOX	ELET0533
12	RELAY	ELET0456
13	CIRCUIT BRAKER	ELET0480
14	FUSE-HOLDER CLAMP 4 MMQ	ELET0440
	FUSE	ELET0204

6.3 WIRING DIAGRAM



* Feeding downstream from the oven main circuit breaker

STEAMING UNIT KIT ASSEMBLY

1 – The steaming unit kit is composed of the water heater assembly and the electric components group placed on the oven as shown in Picture 1.

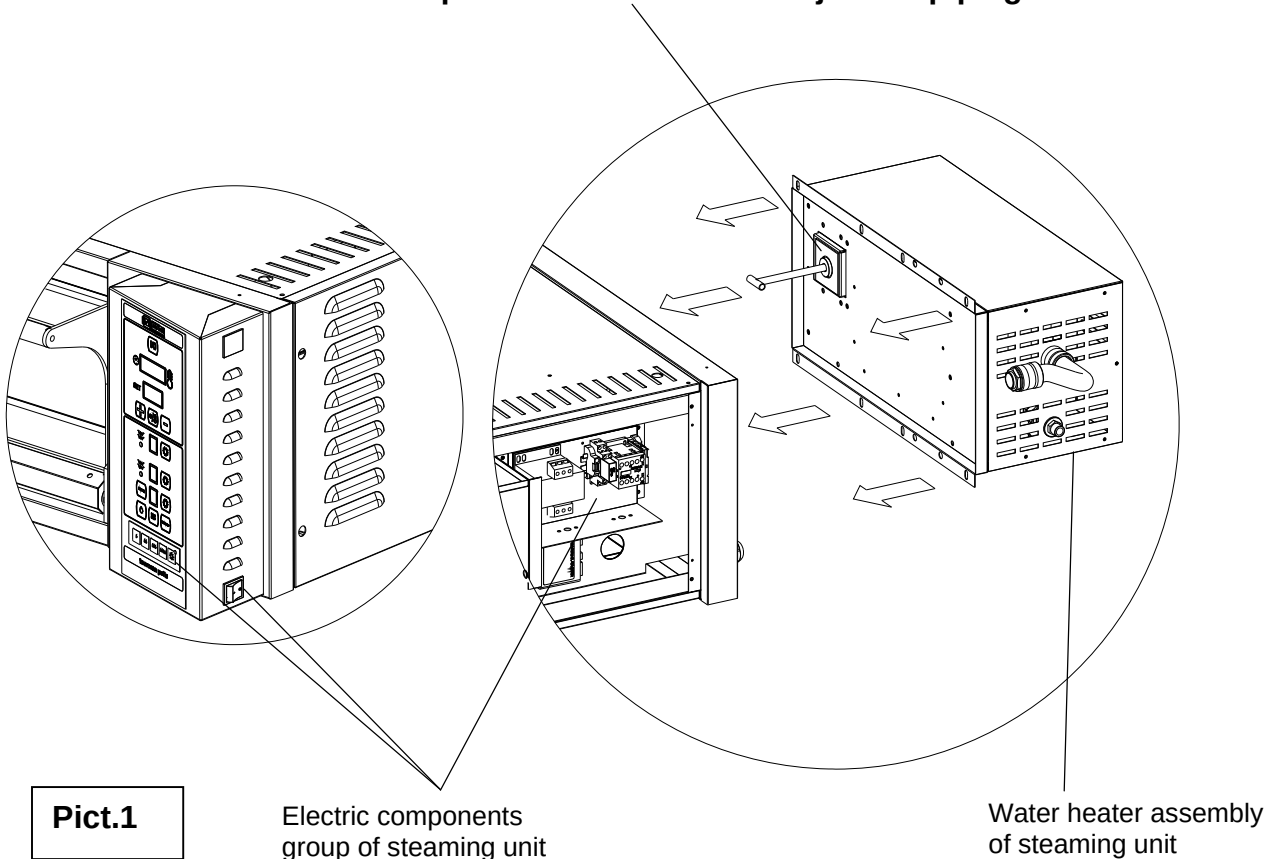
2 – The electrical connection is to be carried out according to the above shown wiring diagram.

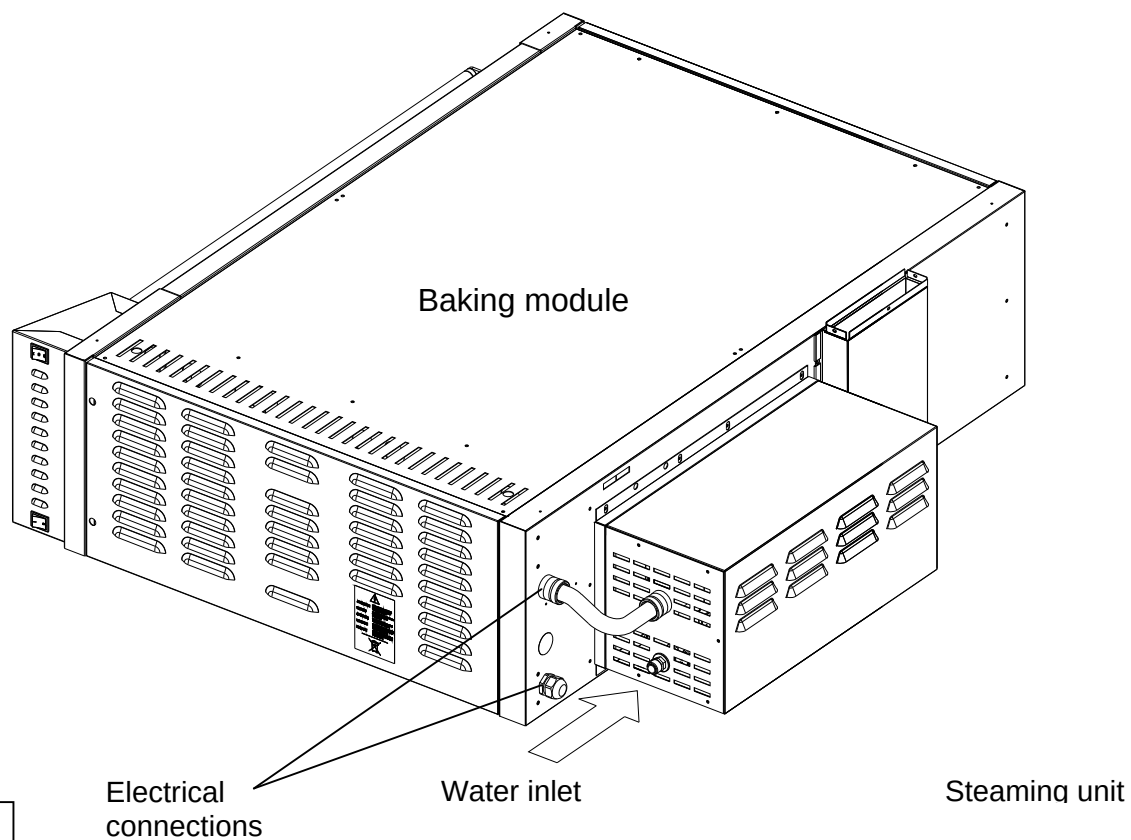
3 – The connection to the water supply mains is to be carried out according to the scheme shown in Picture 2.

REMARKS: the use of a water softener to be placed at the steaming unit water inlet **IS MANDATORY**;

The manufacturer takes no responsibility for damages deriving from failure to observe the above mentioned instructions.

ATTENTION: Check the presence of the steam injection pipe gasket





Separate collection. This product must not be disposed of with normal household waste. Local regulations may provide for separate collection of this kind of product.