



**PL6 / PL7
(115 V)**

SERVICE MANUAL

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REV.	DATA	MODIFIED PAGES
1	16/06/15	2, 3
2	08/07/15	4

1) WARNINGS

The machines works with boiling water. Take care when opening.
Carry out maintenance work only with the machine disconnected from the mains.
The machine is not waterproof, therefore do not clean with water jets.



Do not switch on the machine without water in the basin and without baskets

Eurochef declines all responsibility where improper use of the machine causes personal injury accidents or damages to property.

2) SPECIFICATION AND TECHNICAL DATA

Baskets working separately with different time scales.
Basket control with 4 pre-set times for each basket.

	<u>PL6 with sauce-heater</u>	<u>PL7 without sauce-heater</u>
Reprogramming times:	Keyboard operated	
Basin capacity:	10 litres approx.	
Water control:	automatic, with probe for stand level and temperature	
Water supply:	by means of 4.5 lt reserve tank Possibility of connection to the water mains by the same solenoid valve.	
Water heating:	immersed heating element	
Steam elimination	recirculation extractor	
Sauce-heater	Heating thermostate plate, 200 W	
Total power consumption	2,85 Kw	2,6 Kw
Water heating power consumption	2,5 Kw	2,5 Kw
Power supply	220/400 V - 50/60 Hz	220/400 v – 50/60 Hz
Dimensions	width 67 cm depth 47 cm height 55 cm	width 57 cm depth 47 cm height 55 cm
Empty weight:	Kg 29	Kg 26



3) INSTALLATION INSTRUCTIONS

Positioning

The machine must be placed in a proper ambient and with a good ventilation, protected from atmospheric agents. As the machine does not totally eliminate the produced steam, an efficient extractor may be installed to exchange the air.

The machine has to be placed ensuring that the top is clear of obstructions, and leaving a clearance of at least 15 cm on each side for ventilation.

It must be level. If necessary, check the height of the feet by unscrewing or screwing them up having first loosened the locknut.

Slide the condensation collecting tray into the guides under the machine. This was not mounted for safety during transport.

Water connection

If mains water is available it is worthwhile having a permanent supply to the machine.

To do this, remove the sauce heater and the right side wall and disconnect the fittings which connect the electro-valve to the internal water tank.

Connect the electro-valve directly to the water mains using a food-grade plastic tube which must pass through the hole in the bottom of the plate.

The fittings for the electro-valve are G1/8 in size or G1/4.

Install a ball valve near the machine to cut off the water while maintenance of the electro-valve is taking place.

When it is not possible to connect the machine to the water mains, water is supplied from an internal tank accessible from the top of the machine, which is filled before using the machine and which is refilled during operation of the machine.

WHEN FIRST REFILLING THE TANK CHECK THAT THERE ARE NO AIR BUBBLES IN THE CONNECTION TUBE THAT MIGHT OBSTRUCT THE WATER FLOW. IF NECESSARY, PRESS THE TUBE TO REMOVE THE AIR.

NB: When heating for the first time the tank will only be refilled when the temperature of the water is higher than 90°C.

Electrical connection

Ensure that the plant is well earthed, according to IEC regulations, and check that the current corresponds with that stated on the registration plate on the machine.

Finally, check that the plant to which the machine is connected has the power shown on the registration plate.

There must be an automatic, fused or thermally protected switch between the machine and the electric mains supply.

In case of malfunction of the machine, do not try to repair it temporary.

Contact the seller or, if necessary, the manufacturer.

The guarantee expires if the machine is tampered or in case that non-original spare parts are used.

If the power supply cable is damaged, it has to be changed from the manufacturer or from its technicians, to prevent any risk.

In any case, the power supply cable must have the designation HO7RN-F with dimension 3 x 1.5 mm².

4) SETTINGS

Cooking time settings

When the "ON-OFF" green light is on, press the "TIME SET" button to enter the programming mode. "01" appears on the left display to indicate that you are in programme 1, which corresponds to the time preset for the yellow button 1.

Programming is carried out using the yellow buttons 1, 2 and 3.

Button 1 is used to display preset values and to memorise new values, button 2 to increase the values displayed on the left display and 3 to decrease them.

Therefore, when the display indicates 01 (the first programme) press button 1 to display the preset time.

To increase it press button 2, to decrease it press button 3. When the desired time is displayed, press button 1 to memorise it. The number 01, of the programme being worked on, will again appear on the display. To change programme, use button 2 (increase) and 3 (decrease).

Carry on similarly to change the times of the other programmes (see the list in the previous paragraph). Finally, press the "TIME SET" button again to exit from the programming mode.

Set points for the electronic board

The standard default values are shown for use by the service technician. Remember that, with the exception of the preparation times for the portions, **the user is prohibited from changing the programming of the electronic card, tampering with which could cause irreparable damage.**

The manufacturer declines all responsibility in the case of unauthorised intervention on the programming of the card and any such programming will render null and void the guarantee.

Programme	Value checked	Value set number
01	immersion time button 1 left	40 seconds
02	immersion time button 2 left	90 seconds
03	immersion time button 3 left	150 seconds
04	immersion time button 4 left	600 seconds
05	immersion time button 1 right	60 seconds
06	immersion time button 2 right	120 seconds
07	immersion time button 3 right	180 seconds
08	immersion time button 4 right	600 seconds
09	water temperature	97°C*
10	hysteresis	00
11	left basket rising time	40 second tenths
12	draining time	30 second tenths
13	fan intervention temperature	40°C
14	left basket descending time	35 second tenths
15	low temperature time-out time	999 seconds
16	max.basket motion time	25 seconds
17	time for level alarm switch on	10 seconds
18	max time for refill	20 minutes
19	motion time to offload left basket	30 second tenths
20	right basket rising time	46 second tenths
21	right basket descending time	35 second tenths
22	motion time to off-load right basket	33 second tenths
23	interval motion baskets	20 seconds
24	part-load heating	01 minute
25	off	00
26	draining pause	0 off 1 on

To change the programming, except for the first 8 programmes, the programme switch on the electronic board must be operated, or press keys 1 and 4 on the right at the same time, together with the "Time Set" key.

The method of programming is the same as illustrated in the previous paragraph for the portion preparation times.



N.B: If the machine is installed well above sea level, boiling temperature may be lower than the set-point value. In this case the element is always connected because the set point is never reached. The machine must therefore be calibrated approximately to a value of 2° C less than the boiling temperature.

WATER BOILING TEMPERATURES

<i>Altitude above the sea-level</i>	<i>Temperature °C</i>
200mt	99,3° C
400 mt	98,6° C
600 mt	97,9° C
800 mt	97,2° C
1000 mt	96,5° C
1200 mt	95,8° C
1400 mt	95,1° C
1600 mt	94,4° C
1800 mt	93,7° C
2000 mt	93,0° C
2200 mt	92,3° C
2400 mt	91,6° C
2600 mt	90,9° C
2800 mt	90,2° C
3000 mt	89,4° C



5) SELFTEST

In the lower part of the electronic board, at the right side of the microprocessor, there are two small pins (contacts). To enter in the self-test mode, keep them in short-circuit while switching on the machine. This can be made also using a screwdriver, paying much attention to avoid touching other alive parts of the electronic board.

Two numbers will appear on the displays: the left one has no meaning, while the one at the right side is the release number of the software.

The upper and the lower leds remain lit, and this can be helpful to place correctly the sticker of the keyboard if it has to be changed.

Press ON/OFF push- button to test the displays: letters UAO appear at the left side, then at the right side, then 888 appears on both the displays.

When the left-hand display shows letters I O, the push buttons, including "TIME SET" and "ON/OFF", can be tested. Pushing one button, its number is shown on the display and the relevant led turns on. "TIME SET" is nr. 9 "ON/OFF" is nr. 10.

Pressing ON/OFF, the test of the buttons ends and the temperature probes are checked. The left hand display shows the temperature read by the lower probe and the right-hand display shows the one read by the level probe. Toggling the probes it is possible to see the temperatures changing.

Pressing TIME SET, the outputs of the electronic board are checked.

Push-button 1 is used to make the test. When an output is ON, led WAIT is on, when the output is OFF, the led READY is on.

Push-button 2 is used to go to the following output and button 3 to go back to the previous one.

Initially the left-hand display shows U 1, i.e. output 1, which is the one of the control switch of the water heater.

Pressing 1 the output is activated, the control switch makes and the element becomes hot.

Pressing 2 the display shows U 2, which is the output of the air blower.

U 3 is the left-hand motor when it lifts the basket and U 4 the same motor when it lowers the basket.

In order to test also the microswitch of the motor, it is better to remove the baskets before making the test.

In this way the motor shaft can turn freely and the lever of the microswitch can enter and exit from the slot of its cam. When the left-hand microswitch feels the slot, the led of the left-hand push-button 1 turns on, while when testing the right-hand microswitch, the led of the right-hand push-button 1 turns on.

U 5 is the right-hand motor lifting the basket.

U 6 is the right-hand motor lowering the basket.

U 7 is the sauces element.

U 8 is the water solenoid-valve.

U 9 e U A are not in use.

Pressing TIME SET the program exits from the self-test.

6) SAUCE HEATER (only in PL6 model)

The sauce-heater basins are placed on a thermostatically-controlled heating plate.

The working temperature of this plate should be left fixed, but should regulation be needed, turn the knob of the thermostat placed under the electronic card on the left side of the machine, remembering that before removing the hatch enclosing the electrical parts, it is very important to switch off the current to the machine.

Temperatures advisable for sauces vary from about 65 to 80 degrees Centigrade.

Lower temperatures favour the growth of bacteria, while at higher temperatures the sauces cook and stick to the bottom of the basin.

7) READING OF THE PORTIONS SUPPLIED

To read the number of portions supplied, press yellow buttons 1 and 4 at the same time.

The figure shown on the display on the left indicates values up to 999, while each LED alight on the yellow and white buttons indicate a thousand.

For example, if the display indicates 452 and two LEDs are alight, then 2,452 portions have been supplied.

The count goes as far as 8,999 portions, and then is zeroed.

8) KEYBOARD MESSAGES

Some possible malfunctions are shown by an error code which appears on the left display together with an alternating acoustic signal.

In this case the machine remains blocked until conditions return to normal.

Before asking for technical assistance carry out a reset test by turning the machine off and then on using the master switch.

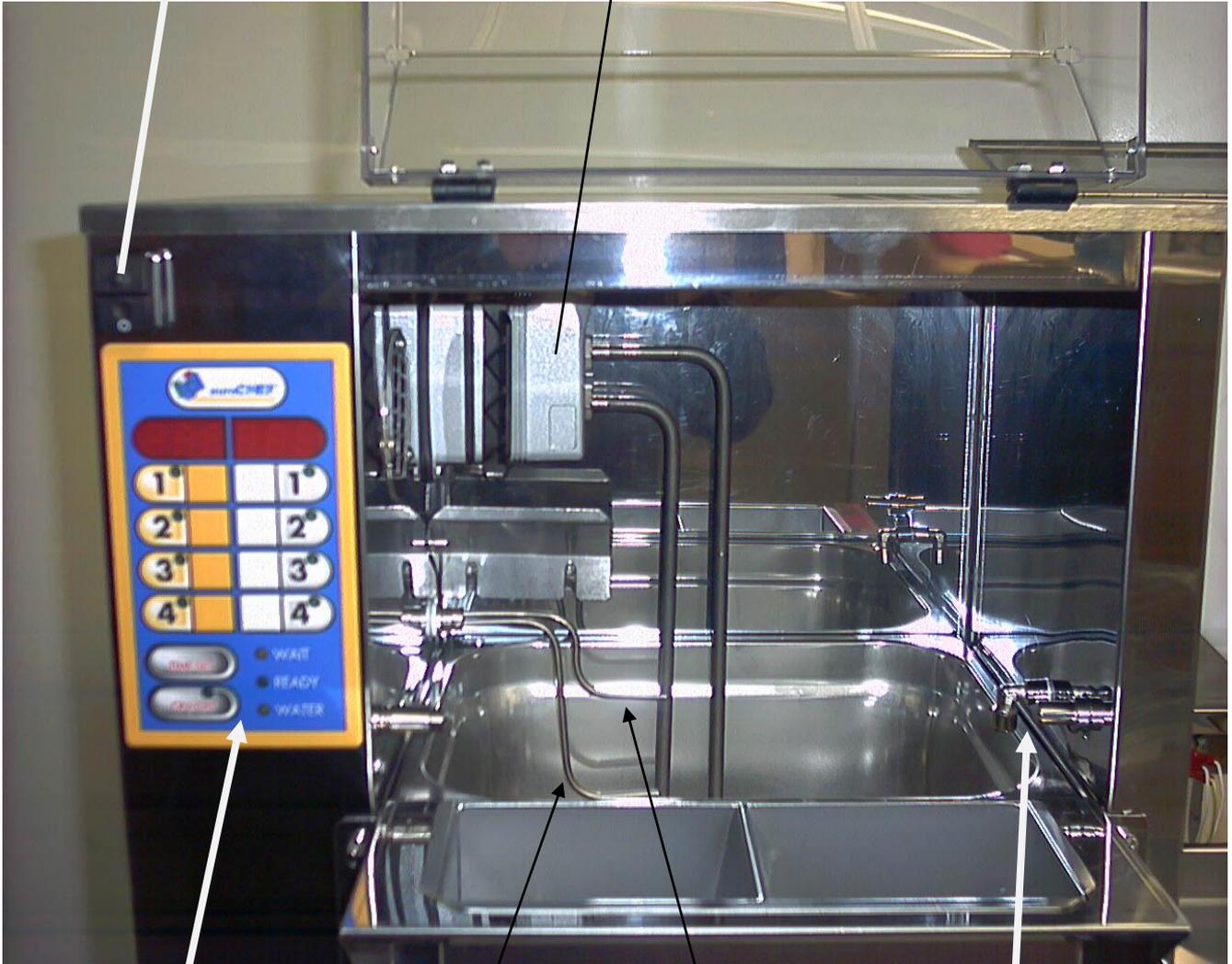
Malfunction messages are as follows

- A01 No heating
The card does not show the increase in temperature with the heating ON. The probe may be broken or the heating relay may be defective.
- A02 Probe not connected or temperature too high
The cause of the signal may be malfunctioning of the probe.
- A03 Non-control of the left motor
The signal indicates that the motor does not stop at the preset time which might be because
1) the cam on the motor itself has shifted or 2) the relevant microswitch is broken or 3) a total motion time of the basket was preset which is higher than the limit (normally 25 seconds) foreseen for programme 16.
- A04 Non-control of the right motor
As above
- A05 Heating not working properly
During the heating phase the temperature does not increase within the time foreseen in programme 15.
- A06 Non-control of the level
The probe does not read the level or shows a temperature under zero.
- A07 Level probe short circuited
- A08 The heating is turned off after a long period without water.
This message can appears also when water in the basin is at a temperature of about 0° C.

PICTURE A

MAIN SWITCH

HEATING ELEMENT CONNECTOR



KEYBOARD

TEMPERATURE
PROBE

LEVEL
PROBE

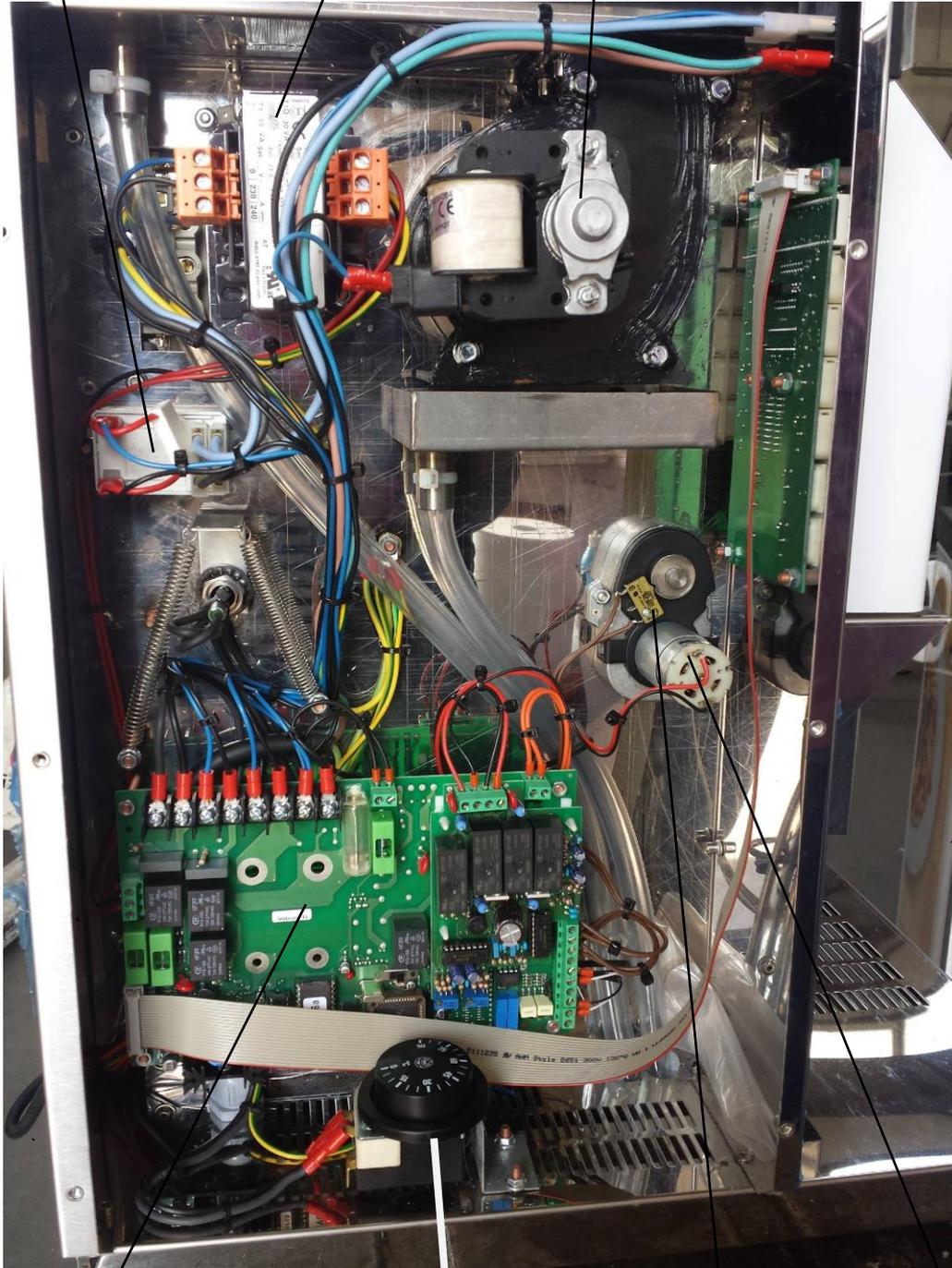
WATER
JUNCTION

PICTURE B

HEATING RELAY

TRANSFORMER

BLOWER



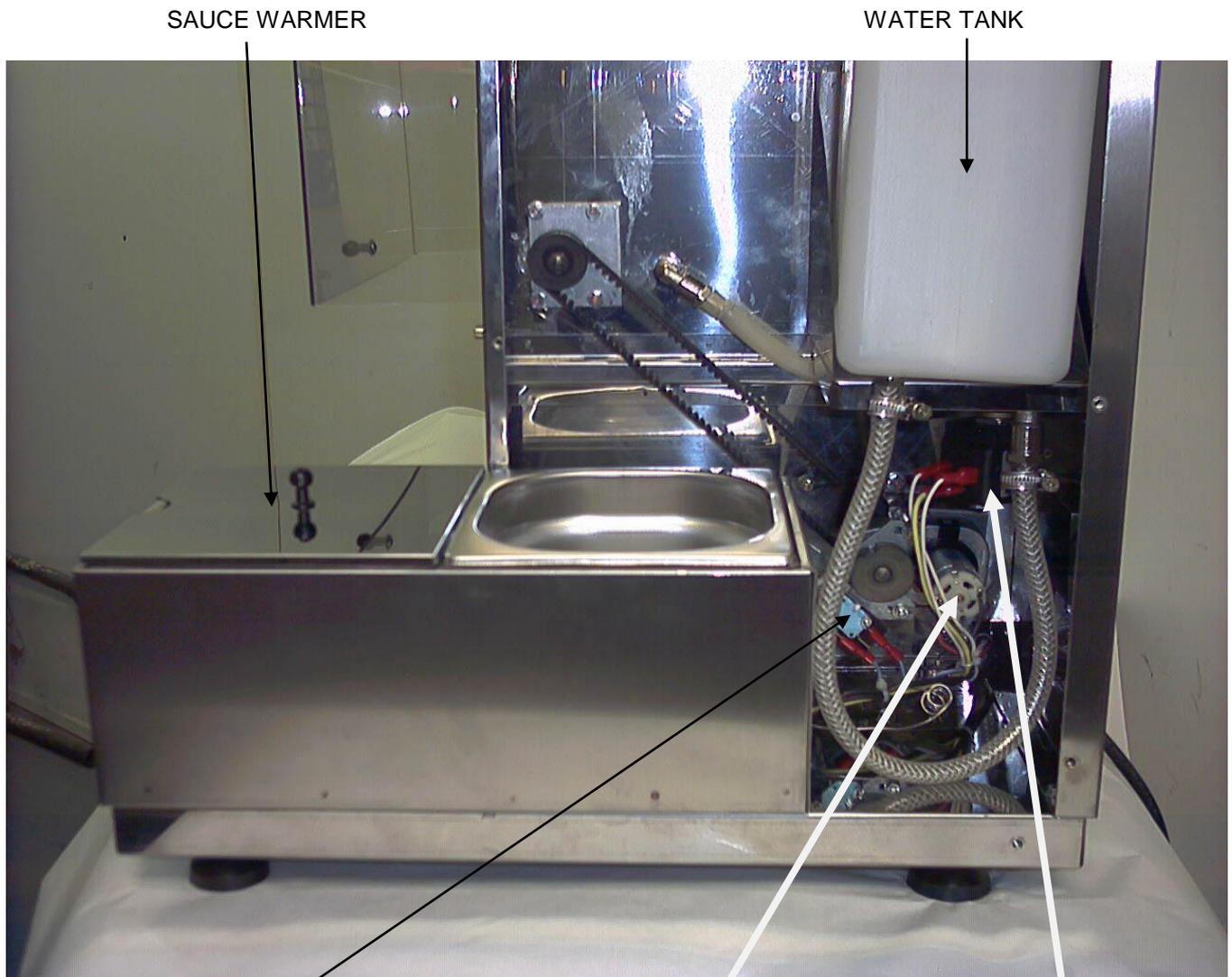
ELECTRONIC BOARD

SAUCES THERMOSTAT

MICROSWITCH

MOTOR OF THE LEFT BASKET

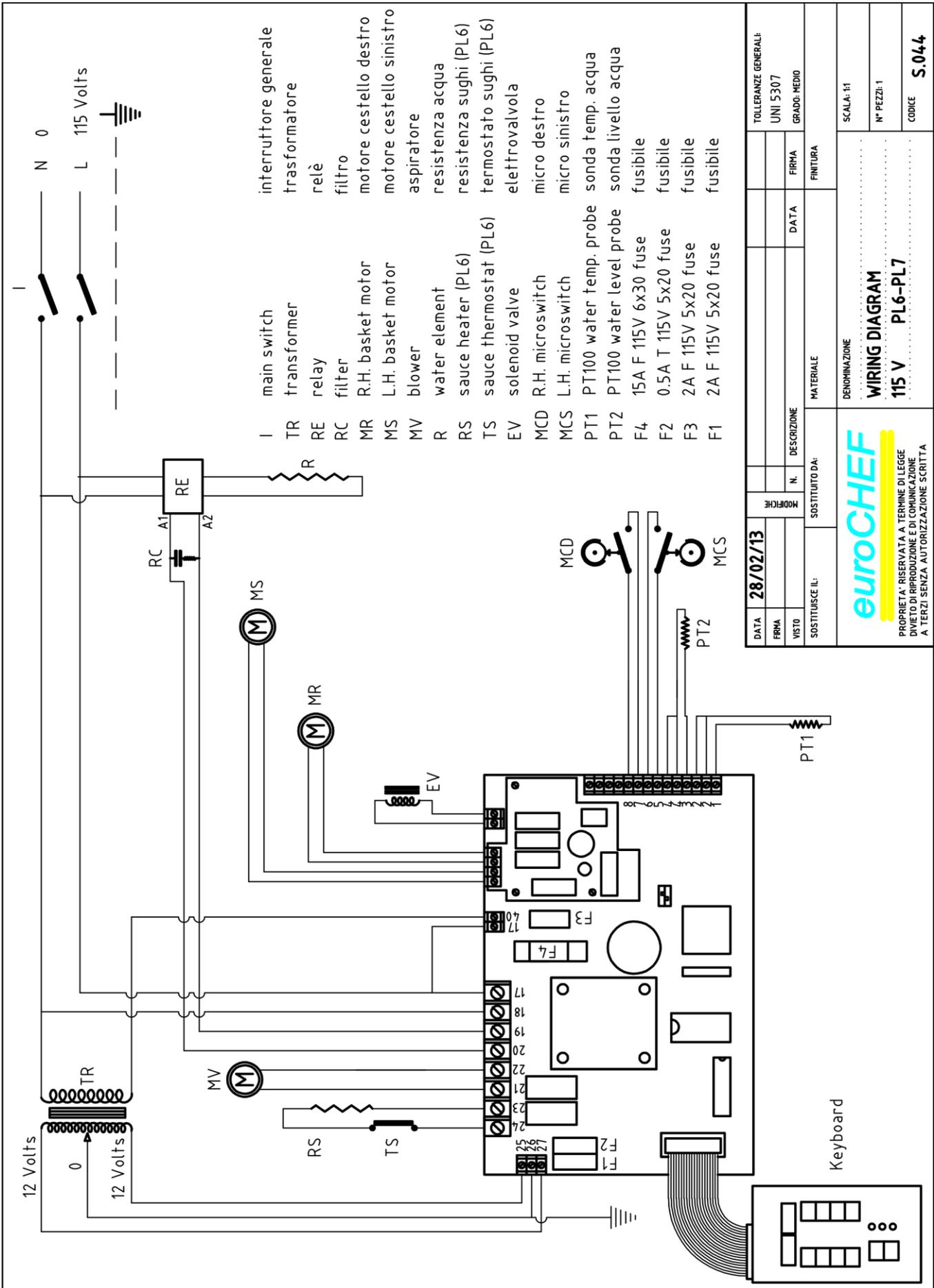
PICTURE C



MICROSWITCH

MOTOR OF THE RIGHT BASKET

SOLENOID VALVE



DATA	28/02/13	MODIFICHE				TOLLERANZE GENERALI:
FIRMA		N.	DESCRIZIONE	DATA	FIRMA	UNI 5307
VISTO		SOSTITUITO DA:				GRADO: MEDIO
SOSTITUISCE IL:		MATERIALE		FINITURA		
DENOMINAZIONE						
WIRING DIAGRAM						
115 V PL6-PL7						
SCALA: 1:1						
N° PEZZI: 1						
CODICE S.044						

euroCHEF
 PROPRIETÀ RISERVATA A TERMINE DI LEGGE
 DIVIETO DI RIPRODUZIONE E DI COMUNICAZIONE
 A TERZI SENZA AUTORIZZAZIONE SCRITTA