

Technical training

Mycook
PROFESSIONAL





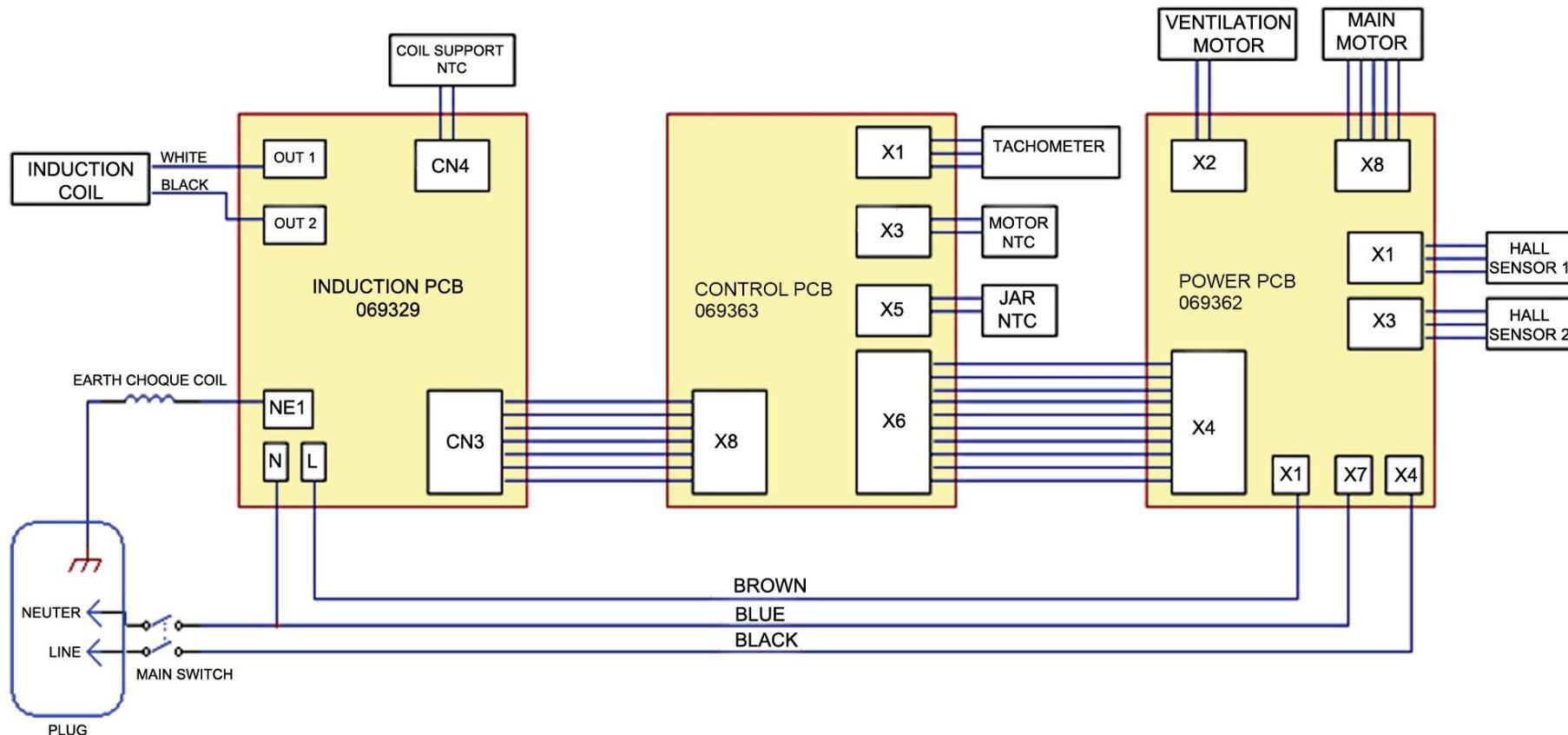
- 1. Block diagrams of the appliance
- 2. Components identification
- 3. Fault list and solutions
- 4. Checkings after reparation





- **1. BLOCK DIAGRAMS OF THE APPLIANCE**







○2. COMPONENTS IDENTIFICATION



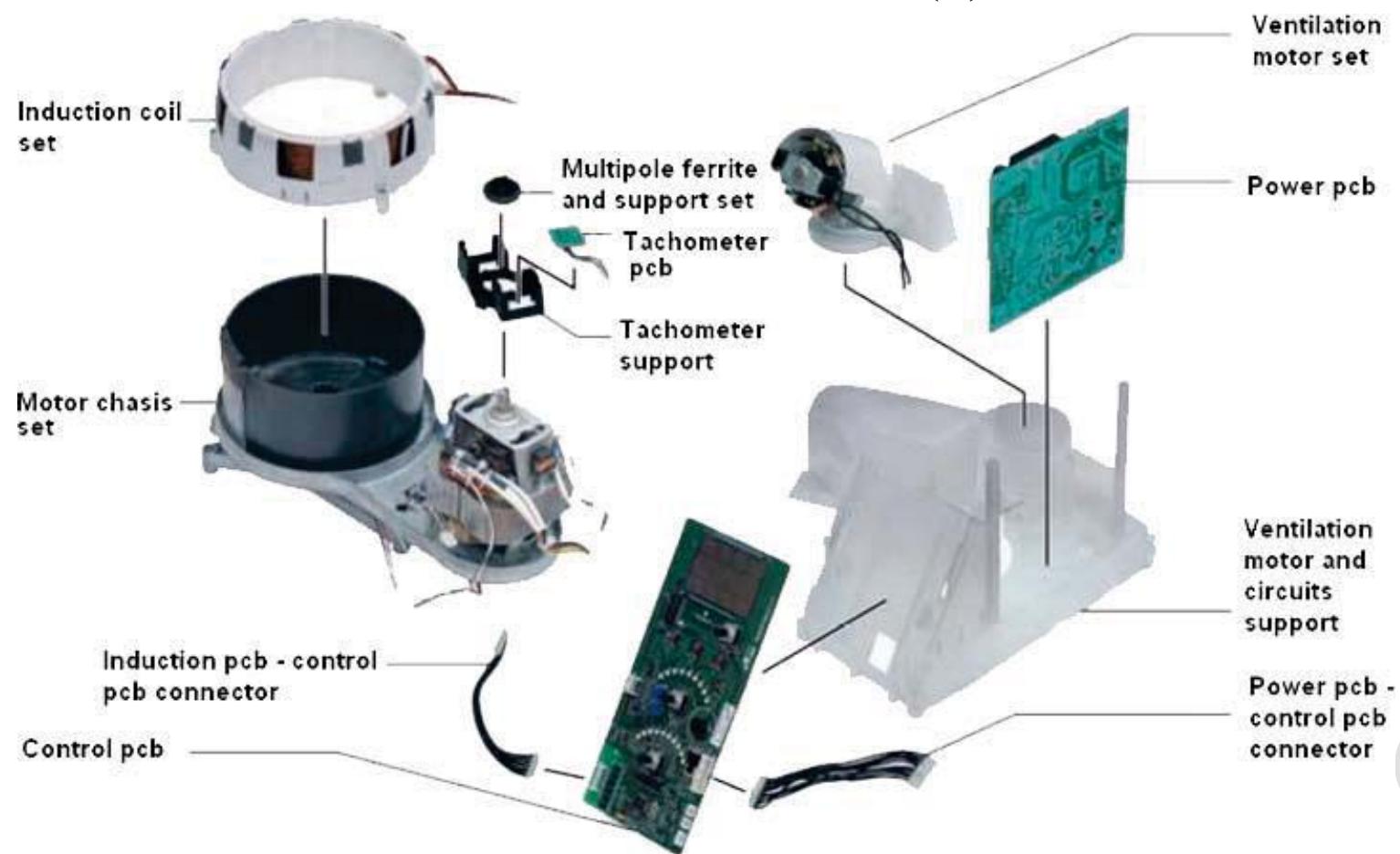


○ 2. COMPONENTS IDENTIFICATION(1)

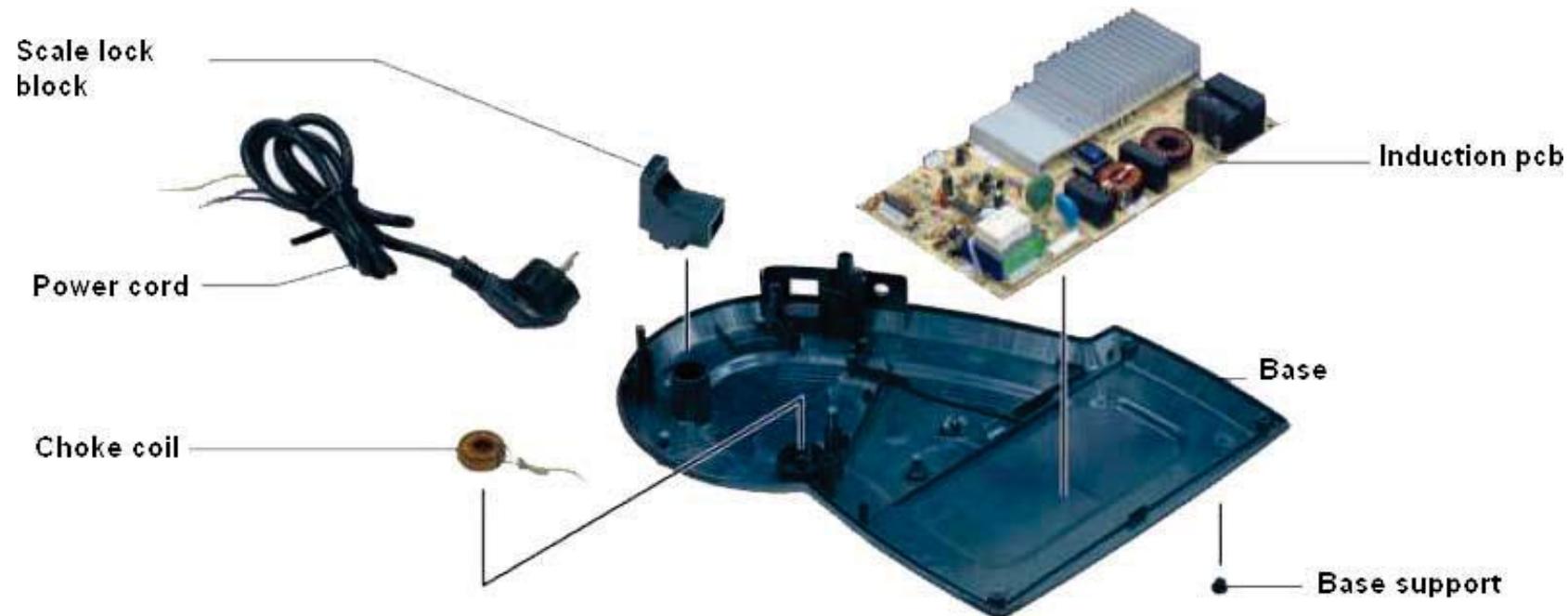




○ 2. COMPONENTS IDENTIFICATION(2)



○ 2. COMPONENTS IDENTIFICATION(3)





○ 2. COMPONENTS IDENTIFICATION(4)





○ 2. COMPONENTS IDENTIFICATION(5)





○3. FAULT LIST AND SOLUTIONS





○ 3. FAULT LIST AND SOLUTIONS(1)

FAULT	DESCRIPTION	CAUSE	SOLUTION
ERROR 1	Problem with jug NTC sensor (X5) Cod. 369217000	Check the right connection of jug NTC sensor with CONTROL PCB	Connect properly jug NTC sensor
		Jug NTC sensor faulty	Change jug NTC sensor



○ 3. FAULT LIST AND SOLUTIONS(2)

FAULT	DESCRIPTION	CAUSE	SOLUTION
ERROR 2	Problem with motor NTC sensor (X3)	Check the right connection of motor NTC sensor with CONTROL PCB	Connect properly motor NTC sensor
		Motor NTC sensor faulty	Change motor NTC sensor

NOTE: Motor NTC is integrated in the motor, in case of fail you must change the motor cod. 082466000



○ 3. FAULT LIST AND SOLUTIONS(3)

FAULT	DESCRIPTION	CAUSE	SOLUTION
ERROR 3	Case motor runs	Check the right connection of tachometer with CONTROL PCB (X1)	Connect properly tachometer
		Tachometer pcb faulty (wire isn't well soldered with pcb pad)	Change tachometer Cod. 069403000
		Check the right placing of multipole ferrite set in its motor support	Place properly multipole ferrite set in its motor support
		Lid of jug detection signal faulty	* See ERROR 11
	Case motor doesn't run	Check the right connection of main motor in POWER PCB	Connect properly motor connector in POWER PCB
		Main motor faulty (i.e. carbon brushes finished, commutator broken)	Change main motor Cod. 082466000



○ 3. FAULT LIST AND SOLUTIONS(4)

FAULT	DESCRIPTION	CAUSE	SOLUTION
ERROR 5	Main motor overtemperature	Motor temperature higher than limit	Cool main motor



○ 3. FAULT LIST AND SOLUTIONS(5)

FAULT	DESCRIPTION	CAUSE	SOLUTION
ERROR 6	Induction heating can't start	Check connection of INDUCTION PCB with supply voltage	Connect properly L and N terminals of INDUCTION PCB
		Check right connection of INDUCTION PCB with CONTROL PCB	Connect properly INDUCTION PCB with CONTROL PCB
		Check right polarity of OUT1 and OUT 2 terminals of coil set with INDUCTION PCB	Connect properly coil set with POWER PCB
		Faulty in CONTROL PCB (i.e. optoelectronic component)	Change CONTROL PCB Cod.069363000
	Induction power heating isn't steady	Verify induction heating power (1000W)	Adjust induction power (1000W) heating by jeans of VR1 potentiometer in INDUCTION PCB



○ 3. FAULT LIST AND SOLUTIONS(6)

FAULT	DESCRIPTION	CAUSE	SOLUTION
ERROR 7	INDUCTION PCB error	Check connection of INDUCTION PCB with supply voltage	Connect properly L and N terminals of INDUCTION PCB
		Check right polarity of OUT1 and OUT 2 terminals of coil set with INDUCTION PCB	Connect properly coil set with POWER PCB
		Check right connection of INDUCTION PCB with CONTROL PCB	Connect properly INDUCTION PCB with CONTROL PCB
		Check right connection of coil NTC sensor with INDUCTION PCB	Connect properly coil NTC sensor with INDUCTION PCB
		Coil NTC sensor faulty (i.e. due to vibrations after a wrong placing)	Change coil NTC sensor Cod. 069328000
		INDUCTION PCB faulty(i.e. shortcircuit, faulty component, ESD problem)	Change INDUCTION PCB Cod. 069329000



○ 3. FAULT LIST AND SOLUTIONS(7)

FAULT	DESCRIPTION	CAUSE	SOLUTION
ERROR 8	Overtemperature in induction IGBT	Induction IGBT temperature higher than limit	Stop induction heating function and cool
		Verify properly working of ventilation motor	Connect properly or change ventilation motor Cod. 374770000



○ 3. FAULT LIST AND SOLUTIONS(8)

FAULT	DESCRIPTION	CAUSE	SOLUTION
ERROR 9	Overtemperature in induction coil	Coil temperature higher than limit	Stop induction heating function and cool
		Faulty in INDUCTION PCB (i.e.ESD problem)	Change INDUCTION PCB Cod. 069329000
		Faulty in CONTROL PCB (i.e. optoelectronic component faulty)	Change CONTROL PCB Cod. 069363000



○ 3. FAULT LIST AND SOLUTIONS(9)

FAULT	DESCRIPTION	CAUSE	SOLUTION
ERROR 11	Lid of jug signal detector wrong when motor running	Jug out of place when speed is selected (i.e. due to vibrations).	Place properly jug (safety system)
		Lid out of place	Place properly lid into jug (safety system)
		Faulty magnet into jug or jug out of dimensions	Change jug



○ 3. FAULT LIST AND SOLUTIONS(10)

FAULT	DESCRIPTION	CAUSE	SOLUTION
JUG CAN'T BE DETECTED (lack of jug icon is ON)	Lid of jug signal detector wrong after speed selection	Check right placing of lid into jug	Place properly lid into jug (safety system)
		Check right placing of magnet into jug	Place properly magnets into jug
		Check right connection of Hall detector in POWER PCB	Place properly hall detector in POWER PCB
		Hall detector pcb faulty (i.e. wire doesn't soldered on pcb pad)	Change hall detector pcb Cod. 069327000
		Faulty magnet into jug or jug out of dimensions	Change jug



○ 3. FAULT LIST AND SOLUTIONS(11)

FAULT	DESCRIPTION	CAUSE	SOLUTION
APPLIANCE CAN'T BE SWITCHED ON	Display or leads icons aren't shown	Check right connection of power cord terminals with rocker switch	Connect properly power cord terminals with rocker switch
		Faulty rocker switch	Change rocker switch
		Check right connection of POWER PCB terminals to voltage	Connect properly POWER PCB terminals to voltage
		Check right connection of CONTROL PCB with POWER PCB	Connect properly CONTROL PCB with POWER PCB
		Problem with power to control pcb connector (changed or faulty wire)	Change power to control pcb connector
		Check POWER PCB fuse	Change POWER PCB or POWER PCB fuse
	If happens after motor runs	POWER PCB faulty (fuse faulty or with wrong valuet, F1 of 1,25A instead of 8A)	Change POWER PCB or POWER PCB fuse Cod. 069362000



○ 3. FAULT LIST AND SOLUTIONS(12)

FAULT	DESCRIPTION	CAUSE	SOLUTION
VENTILATION MOTOR RUNNING ALL TIME	Faulty ventilation motor running	Shortcircuit in CONTROL PCB (X3)	Change CONTROL PCB Cod. 069363000
		Faulty POWER PCB (faulty optotriac component ISO1 or ISO 2)	Change POWER PCB Cod. 069362000
		Faulty POWER PCB (faulty optotriac component ISO1 or ISO 2)	Change POWER PCB Cod. 069362000
		Check right connection of ventilation motor with POWER PCB	Connect properly ventilation motor with POWER PCB
VENTILATION MOTOR DOESN'T RUN	Ventilation motor doesn't run	Faulty ventilation motor (i.e. carbon brushes finished, commutator broken)	Change ventilation motor Cod. 374770000



○ 3. FAULT LIST AND SOLUTIONS(13)

FAULT	DESCRIPTION	CAUSE	SOLUTION
FAULTY MOTOR SPEED REGULATION	At low speed motor speed isn't the specified	Faulty POWER PCB (faulty optotriac component ISO1 or ISO 2)	Change POWER PCB Cod. 069362000
	Motor running at max speed	POWER PCB faulty (i.e.problem with shortcircuit in triac)	Change POWER PCB Cod. 069362000



○ 3. FAULT LIST AND SOLUTIONS(14)

FAULT	DESCRIPTION	CAUSE	SOLUTION
DIFERENTIAL SWITCH ACTS	Leakage current to earth	Check wires status (wrong connection of conductor to chassis (earth))	Change wire
		Check motor status (Coil winding connect to stator laminator, faulty insulation)	Change motor Cod. 082466000



○ 3. FAULT LIST AND SOLUTIONS(15)

FAULT	DESCRIPTION	CAUSE	SOLUTION
THERMAL MAGNETIC SWITCH ACTS	Shortcircuit between conductors	Check switch terminals	Change switch or connect properly power cord terminals
		Check wires status (wrong connection of conductors between them)	Change wire
		INDUCTION PCB faulty (Shortcircuit in IGBT transistor or rectifier)	Change INDUCTION PCB Cod. 069329000



○ 3. FAULT LIST AND SOLUTIONS(16)

FAULT	DESCRIPTION	CAUSE	SOLUTION
INDUCTION HEATING ALWAYS IN ON	Wrong function of power induction heating	Faulty INDUCTION PCI (problem with optoelectronic component ACTIVA_IND)	Change CONTROL PCB Cod. 069363000



○ 3. FAULT LIST AND SOLUTIONS(17)

FAULT	DESCRIPTION	CAUSE	SOLUTION
INDUCTION ON/OFF	Unsteady heating close to selected temperature	Unsteady heating close to selected temperature. Temperature signal with noise Verify C24 (1uF) in CONTROL PCB	Change CONTROL PCB Cod. 069363000



○ 3. FAULT LIST AND SOLUTIONS(18)

FAULT	DESCRIPTION	CAUSE	SOLUTION
DIELECTRICAL STRENGTH PROBLEM	Not pass dielectrical strength test	Problem with motor insulation	Change motor Cod. 082466000



○ 3. FAULT LIST AND SOLUTIONS(19)

FAULT	DESCRIPTION	CAUSE	SOLUTION
FAULTY CONTROL PCB	Different defects in control pcb	Faulty display (lack of icons, leds problems)	Change CONTROL PCB Cod. 069363000
		Faulty microprocessor (shortcircuit, ESD problem)	
		Lack of connectors	
		Wrong placing of connectors	



○ 3. FAULT LIST AND SOLUTIONS(20)

FAULT	DESCRIPTION	CAUSE	SOLUTION
MOTOR RUNS WITHOUT CORRECT LID PLACING	Motor can run without jug or without lid of jug	Shortcircuit in hall detector	Change hall detector pcb Cod. 069327000
		Faulty POWER PCB (shorcircuit in transistors)	Change POWER PCB Cod. 069362000



○ 3. FAULT LIST AND SOLUTIONS(20)

FAULT	DESCRIPTION	CAUSE	SOLUTION
MOTOR RUNS WITHOUT CORRECT LID PLACING	Motor can run without jug or without lid of jug	Shortcircuit in hall detector	Change hall detector pcb Cod. 069327000
		Faulty POWER PCB (shorcircuit in transistors)	Change POWER PCB Cod. 069362000



○4. CHECKINGS





- 4.1 MOTOR PERFORMANCE (1)

- BLADE SPEED TABLE:

Speed	Rpm
2	100
3	375
4	775
5	1000
6	2000
7	4000
8	6000
9	7500
10	8500



○ 4.1 MOTOR PERFORMANCE (2)

- Stand-by Current consumption at **230 V**, between **0,25** and **0,35W**.
- At **230V**, select position **10**, speed between **8000** and **9000** rpm (target 8500), current consumption between **0,9** and **1,2A** after running the motor during 1min.
- At **230V**, select position **5**, speed between **950** and **1050** rpm (target 1000), current consumption between **0,6** and **0,9A**
- At **230V**, select position **2**, speed between **90** and **110** rpm (target 100), current consumption between **0,5** and **0,75A**. Verify the steady turn of the blades.



○ 4.2 TEMPERATURE PERFORMANCE

- Current consumption at 230V and speed 2, between 4,4 and 4,9A.
- Fill 1L water at 20°C and connect at 230V. The max temperature reached must be between 80 and 88°C under the following conditions (Time: 30min, Target Temperature: 80°C, Speed: 2).
- At 3 minutes of the induction heating stop, select temperature of: 90°C, the peak temperature must be between 90 and 98°C.
- At 3 minutes of the induction heating stop, select temperature of: 100°C, the peak temperature must be between 95 and 100°C.
- Check: After this above mentioned test, No colour changes on the jug.