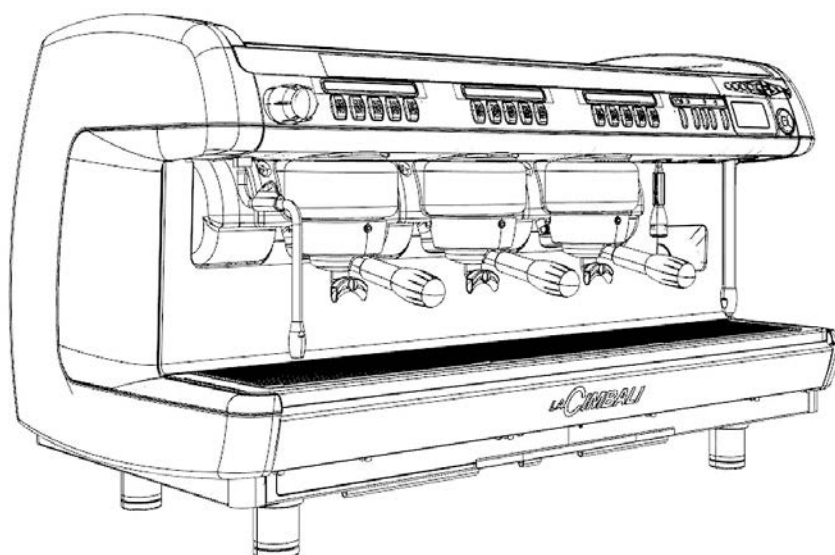




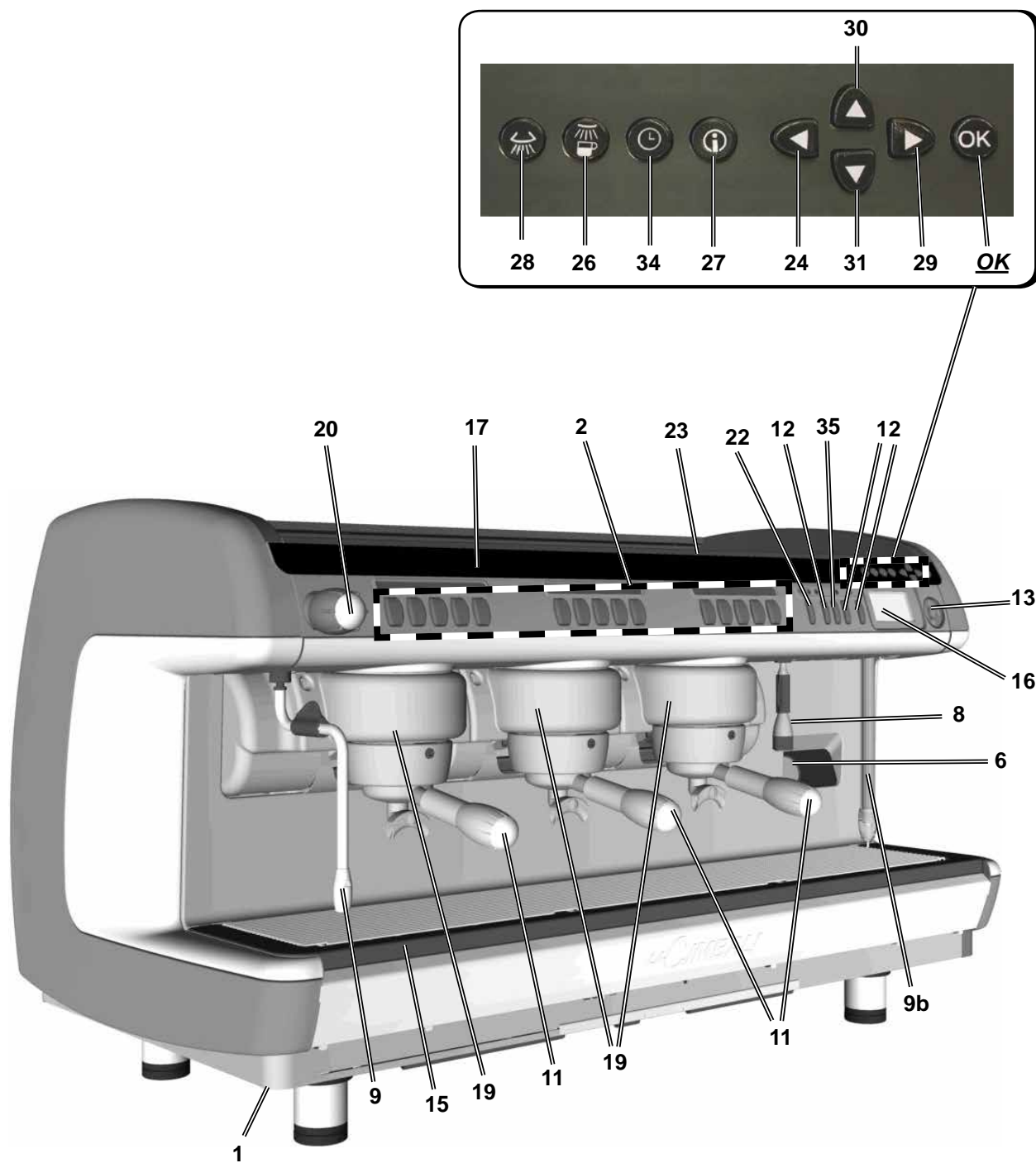
MANUALE DEL TECNICO
ENGINEER'S MANUAL
MANUEL DU TECHNICIEN
TECHNIKERHANDBUCH
MANUAL DEL TÉCNICO
MANUAL DO TÉCNICO

M39 GT R2






(rev. MT-M39GTR2-NO -1811)

M39 Dosatron GT R2



IT LEGENDA

- 1** Interruttore generale
- 2** Tastiera di selezione
- 6** Manometro pompa
- 8** Erogatore acqua calda
- 9** Tubo (lancia) vapore
- 9b** Tubo (lancia) Turbosteam Cold Touch (*)
- 11** Portafiltro
- 12** Pulsante acqua calda
- 13** Selettore Turbosteam
- 15** Bacinella appoggiatezze
- 16** Display grafico
- 17** Display pubblicitario (*)
- 20** Manopola erogazione vapore
- 22** Pulsante scaldatasse elettrico (*)
- 23** Piano scaldatasse (*)
- 24** Tasto  (uscire dalla programmazione / invalidazione dati immessi)
- 26** Tasto lavaggio circuito caffè
- 27** Tasto "i" (visualizzazione numero cicli)
- 29** Tasto  (entrare in programmazione / menù)
- 30** Tasto  (modificare parametri / orologio)
- 31** Tasto  (modificare parametri / orologio)
- 34** Tasto "PARAMETRI CLIENTE"
- 35** Tasto "STOP-CONTINUO" acqua calda
-  Pulsante attivazione / disattivazione resistenza caldaia - conferma dati immessi






I componenti - * - sono applicati solo in alcune configurazioni di prodotti.

DE LEGENDE

- 1** Hauptschalter
- 2** Wahltasten
- 6** Manometer Pumpe
- 8** Heißwasserausgabe
- 9** Dampfausgaberohr
- 9b** Dampfausgaberohr Turbosteam Cold Touch (*)
- 11** Filterhalter
- 12** Heißwasser-Drucktaste
- 13** Wahlschalter Turbosteam
- 15** Auffangschale
- 16** Graphisch Display
- 17** Werbedispla (*)
- 20** Drehknopf Dampfabgabe
- 22** Elektrischer Tassenwarmer schalter (*)
- 23** Tassenerwärmer (*)
- 24** Taste  (Absprung von Programmierung / Löschen der eingegebenen Daten)
- 26** Taste zum Durchspülen des Kaffeekreislaufs
- 27** Taste „i“ (Anzeige der Zyklus-Nr.)
- 29** Taste  (Zugriff zu Programmierung / Menü)
- 30** Taste  (Parameter / Uhrzeit ändern)
- 31** Taste  (Parameter / Uhrzeit ändern)
- 34** Taste „KUNDENPARAMETER“
- 35** Taste "STOP-KONTINUIERLICHE" Heißwasserabgabe
-  Taste zur Aktivierung / Deaktivierung des Heizelements Wasserkessel - Bestätigung der eingegebenen Daten

Bauteile - * - sind nur bei einigen Produkt-Konfigurationen angebracht

EN LEGEND

- 1** Main Switch
- 2** Selection panel
- 6** Pump Pressure Gauge
- 8** Hot water outlet
- 9** Steam pipe
- 9b** Turbosteam Cold Touch pipe (*)
- 11** Filter-Holder
- 12** Hot water button
- 13** Turbosteam selector
- 15** Tray
- 16** Graphical display
- 17** Ad display (*)
- 20** Steam supply knob
- 22** Electrical cup warmer button (*)
- 23** Cups warmer (*)
- 24**  key (to quit programming mode / cancel entered data)
- 26** Coffee circuit flushing key
- 27** "i" key (displays the number of cycles)
- 29**  key (to access programming mode / menu)
- 30**  key (to modify parameters / clock)
- 31**  key (to modify parameters / clock)
- 34** "CUSTOMER PARAMETERS" key
- 35** Hot water "STOP-CONTINUOUS" key
-  On / Off switch boiler resistance - confirm entered data



The components - * - are applied only in some produit configurations

ES LEYENDA

- 1** Interruptor general
- 2** Teclado de selección
- 6** Manómetro bomba
- 8** Erogador agua caliente
- 9** Tubo vapor
- 9b** Tubo (boquilla) Turbosteam Cold Touch (*)
- 11** Portafiltro
- 12** Botón erogación agua caliente
- 13** Selector turbosteam
- 15** Bandeja
- 16** Display gráfico
- 17** Display publicitario (*)
- 20** Empuñadura erogación vapor
- 22** Botón calienta-tazas eléctrico (*)
- 23** Calientatazas (*)
- 24** Tecla  (salir de la programación / invalidación datos introducidos)
- 26** Tecla lavado circuito café
- 27** Tecla "i" (visualización número ciclos)
- 29** Tecla  (entrar en programación / menú)
- 30** Tecla  (modificar parámetros / reloj)
- 31** Tecla  (modificar parámetros / reloj)
- 34** Tecla "PARAMETROS USUARIO"
- 35** Tecla "STOP-CONTINUO" agua caliente
-  Botón activación / desactivación resistencia caldera - confirmación datos introducidos






Los componentes - * - se aplican sólo en algunas configuraciones de productos

FR LEGENDE

- 1** Interrupteur général
- 2** Plaque à touches sélections
- 6** Manomètre pompe
- 8** Bec débit eau chaude
- 9** Tuyau de la vapeur
- 9b** Buse Turbosteam Cold Touch (*)
- 11** Porte-filtre
- 12** Bouton de l'eau chaude
- 13** Sélecteur Turbosteam
- 15** Bassinelle d'égouttoir
- 16** Ecran graphique
- 17** Ecran publicitaire (*)
- 20** Robinet de débit du vapeur
- 22** Touche chauffe-tasses électrique (*)
- 23** Chauffe-tasses (*)
- 24** Touches  (sortir de la programmation / données introduites non valables)
- 26** Touches de lavage du circuit café
- 27** Touches "i" (affiche nombre des cycles)
- 29** Touche  (entrer en programmation / menu)
- 30** Bouton  (modifier les paramètres / horloge)
- 31** Bouton  (modifier les paramètres / horloge)
- 34** Touche "PARAMÈTRES CLIENT"
- 35** Touche "STOP-CONTINU" eau chaude
-  Bouton poussoir d'activation / désactivation résistance chaudière - confirmation des données introduites

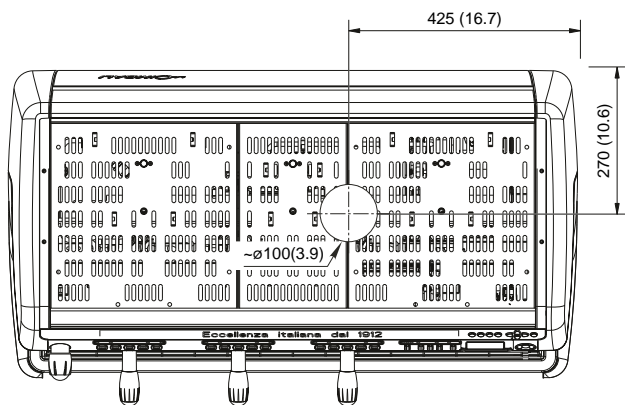
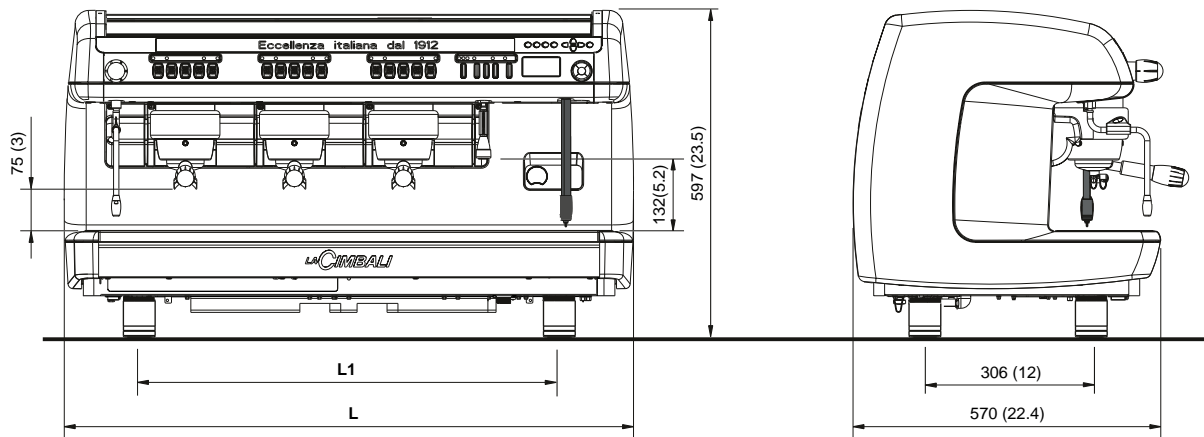
Les composants - * - sont montés seulement dans quelques configurations de produits

PT LEGENDA

- 1** Interruptor geral
- 2** Teclado de selecção
- 6** Manómetro da bomba
- 8** Distribuidor de água quente
- 9** Tubo do vapor
- 9b** Tubo do vapor Turbosteam Cold Touch (*)
- 11** Porta-filtro
- 12** Botão de erogação água quente
- 13** Selector turbosteam
- 15** Tabuleiro
- 16** Display gráfico
- 17** Mostrador publicitário (*)
- 20** Manipulo erogação do vapor
- 22** Botão esquentar-chavenas electrico (*)
- 23** Grelha para esquentar chavenas (*)
- 24** Tecla  (sair da programação / invalidação dos dados introduzidos)
- 26** Tecla de lavagem de circuito café
- 27** Tecla "i" (visualização do número de ciclos)
- 29** Tecla  (entrar na programação / menu)
- 30** Tecla  (modificar parâmetros / relógio)
- 31** Tecla  (modificar parâmetros / relógio)
- 34** Tecla "PARAMETROS CLIENTE"
- 35** Tecla "STOP-CONTÍNUO" água quente
-  Botão activação / desactivação resistência caldeira - confirmação dos dados introduzidos.

Os componentes - * - são aplicados só em algumas configurações de produtos.

	P_{max} [bar]	T_{max} [°C]	tipo di macchina Type of machine type de la machine Maschinentypen modelo de la machina tipo de la màquina	2 gruppi 2 units 2 groupes 2 gruppen 2 grupos 2 grupos	3 gruppi 3 units 3 groupes 3 gruppen 3 grupos 3 grupos
			Fluido - Fluid - Fluide Flüssig - Fluido - Fluido	Capacità - Capacity - Capacité Kapazität - Capacidad - Capacidade [L]	
Caldaia Service boiler Chaudière Heizkessel Caldera Caldeira	2 bar	133° C	acqua/vapore water/steam eau/vapeur wasser/dampf agua/vapor água/vapor	10	10
Scambiatore Heat exchanger Échangeur Wärmeaustauscher Intercambiador de calor Trocador de calor	12 bar	133° C	acqua water eau wasser agua água	0.18 - 0.25 x 2	0.18 - 0.25 x 2
Boiler caffè Coffee boiler Boiler café Boiler Kaffee Boiler café Boiler café	12 bar	160° C	acqua water eau wasser agua água	0.40 x 2	0.40 x 3



DIMENSIONS		
	2 gr.	3 gr.
L	mm	855
	inches	33.7
L1	mm	568
	inches	22.4
Weight	Kg	84
	pounds	185

MACHINE	POWER SUPPLY	INSTALLED POWER	LINE POWER	SUPPLY CABLE SECTION
2 GR.	380-415V3N 50/60Hz	6.0-7.0 kW	10A	5x1,5 mm ² or 5x2,5 mm ²
	220-240V3 50/60Hz		17A	4x2,5 mm ²
	220-240V 50/60Hz		30A	3x4 mm ² or 3x6 mm ²
3 GR.	380-415V3N 50/60Hz	6.7-8.0 kW	12A	5x1,5 mm ² or 5x2,5 mm ²
	220-240V3 50/60Hz		20A	4x2,5 mm ²
	220-240V 50/60Hz		34A	3x4 mm ² or 3x6 mm ²

SWITCH

- Omnipolar, 3mm opening contact distance
- Protection from leakage current with a value equal to 30mA

GROUNDING

- Required

HYDRAULIC CONNECTION

- \varnothing 3/8 gas

HYDRAULIC FEEDING PRESSURE

- 0 ÷ 6 bar (0.6 MPa)

WATER DISCHARGE

- \varnothing min. 50mm

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WARNING: Installation and disassembly must only be performed by qualified and authorized technicians.
Switch off the power to the machine before performing these steps.

Description display symbols

WATER LEVEL




This symbol indicates the boiler water level. During the loading phase, the bottom part of the icon blinks. When the optimum level is reached, the symbol looks like this: .

RESISTANCE



This symbol (dark inside) indicates that the resistance is activated and functioning.

When the boiler pressure reaches the set value, the icon looks like this  (light inside).

When the machine is in operation, the two icons



alternate on the display, indicating the presence of the electric heating.



This indicates that the heating resistance has been disabled.




Note: the customer cannot switch on or switch off the electric heating.

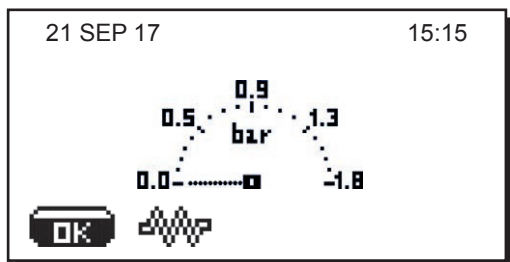
When the on/off function is programmed, the electric heating takes place automatically.


SEVICE BOILER PRESSURE



This symbol indicates the boiler pressure value.

If the  key is pressed for about 3", the pressure gauge will be displayed analogically. This will be shown on the display:




Press and hold down the  key for about 3 seconds to return to the regular display mode.



This symbol indicates that the machine is pre-heating or the boiler pressure has dropped below 0.5 bar.

If one of the STOP/continuous coffee" (C) keys is pressed, coffee will be served at the temperature reached at that moment. All of the other keys are disabled because the working pressure has not been reached.

While waiting for the machine to be ready for use, insert the filter holders in the units.

The machine has reached the set work pressure and temperature when the icon  disappears from the display.

Press a coffee selection key for each keypad to adjust the temperature between the group and filter holder.

TECHNICAL PROGRAMMING MENU



This symbol indicates that the technical programming menu can be accessed.

WI-FI



- This symbol appears on the display when the Wi-Fi module is in the machine;



- the icon indicates that the machine is communicating with a network.

BLUETOOTH

These symbols refer to Bluetooth communication:



- the icon indicates the presence of the Bluetooth module on the machine;



- the icon indicates that the machine is communicating with a Bluetooth grinder/dispenser.

USB



This symbol appears on the display when a USB pen drive is connected.

SD



This icon indicates the presence of an SD micro chip in the CPU board of the machine.

CONTROL OF THE FLOW (ONLY IF IN USE)

The appearance of this animated icon means that adjustments need to be made to the grinder/dispenser to tighten or loosen the grinding, to return coffee dispensing to the default parameters.

The icons that are shown are:



means that the grinding needs to be loosened. (flow of coffee is lower than the reference).

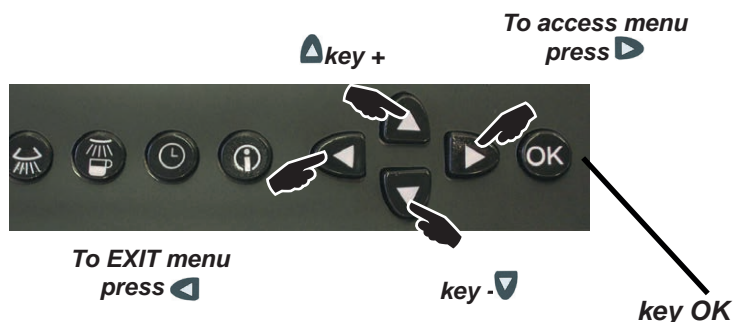


means that the grinding needs to be tightened. (flow of coffee is greater than the reference).

Note. The number next to the icon (1 or 2) indicates which grinder/dispenser needs adjusting. The icon appears on the display instead of the level symbol.

PROGRAMMING - ENGINEER MODE

1. Data flow chart - Technician programming



***TECHNICAL PROG.**
KEY MENU
SELF.LEARNING
CONFIGURATION
TESTING



KEY MENU

Press



Type



1 coffee

Water dose

Water

Grinder Sel.

Dispens.Time

TURBOSTEAM

Press



T Stop Steam

Emesion Level

SERVICE TIME



DATE AND TIME

ON time

OFF time

Day off

Energy Saving

Night. On

Night Off

WASH

Refill

ITALIANO

ENGLISH

FRANCAIS

DEUTSCH

NEDERLANDS

ESPAÑOL

PORTUGUÊS

漢語

РУССКИЙ

SELF.LEARNING

CONFIGURATION

Press



Boiler pressure



Low Power

Level sensib

MEASUREMENT UNITS

Drying

Time control

Buzzer

Customer prog.

Program. block.

Dispensing Stop

Paym system

WASHING OPTIONS

SOFTNER. REG.

Change W. Filter

MAINTENANCE

DATI IN/OUT

Standard data

COFFEE BOILER

Wifi

Bluetooth

BDS

Grinder Control

USB log

Archive reset

TESTING

Press



MANUAL COMMANDS



DATA MENU

Press



COUNTERS



KEY MENU

N° caffee..

N° water

N° steam

N° steam + air

N° tot. caffee

WASH ARCHIVE

REQUIRED

PERFORMED

ARCHIVE RINSING

MALFUNCT. ARCHIVE

Averages Archive

INFO

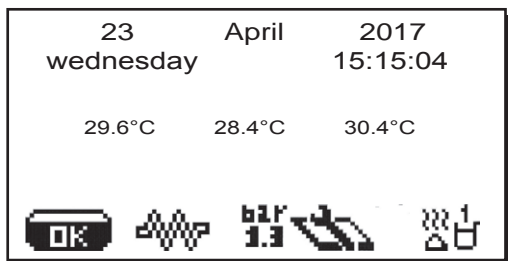
SERIAL N°

VERSION SW

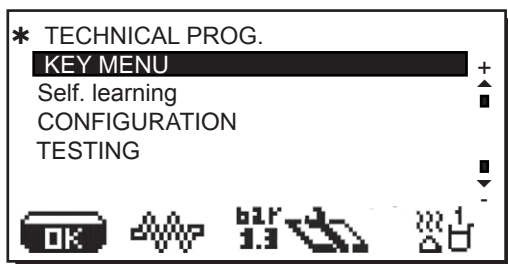
SETUP

DIP SETTINGS

2. Technical Programming Access

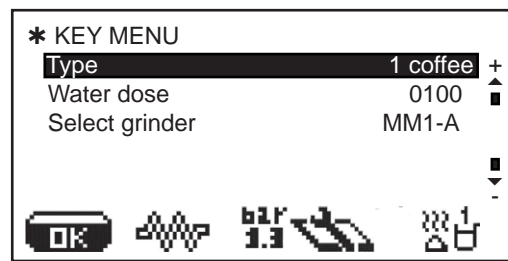


To enter programming, press the key and then **OK** for 3 seconds. The following message will appear on the display:

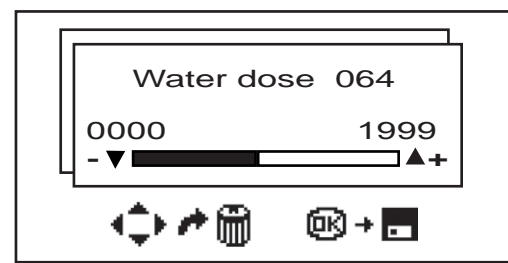


Display available menus: using the and keys, then press . **ACCESSING the menus:** position the cursor on the desired line using the and keys, then press (press a selection key in the case of the "KEY SELECTION" menu)

Changing menus and sub-menus: position the cursor on the desired line using the and keys and then press



Change the selection or value, again using the and keys
Note: when editing data, the cursor becomes "→", or a slider bar appears with the minimum and maximum values that can be set:



Exiting the programming panels: there are two options:
1) Confirm the changes by pressing **OK**
2) Exit the menu, leaving the data unchanged, by pressing

3. Electric heating

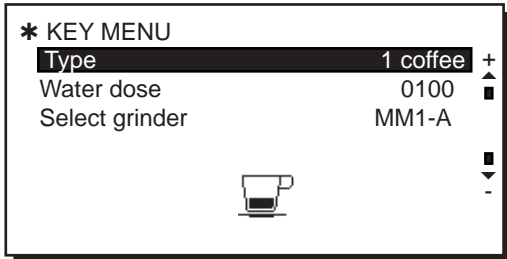
The technical staff can activate or deactivate the resistance (if the boiler resistance is disabled, automatic level control is inhibited).

Operate as follows:

- 1) Access the technical programming panels;
- 2) Press and hold the **OK** key for several seconds to activate/deactivate the resistance.

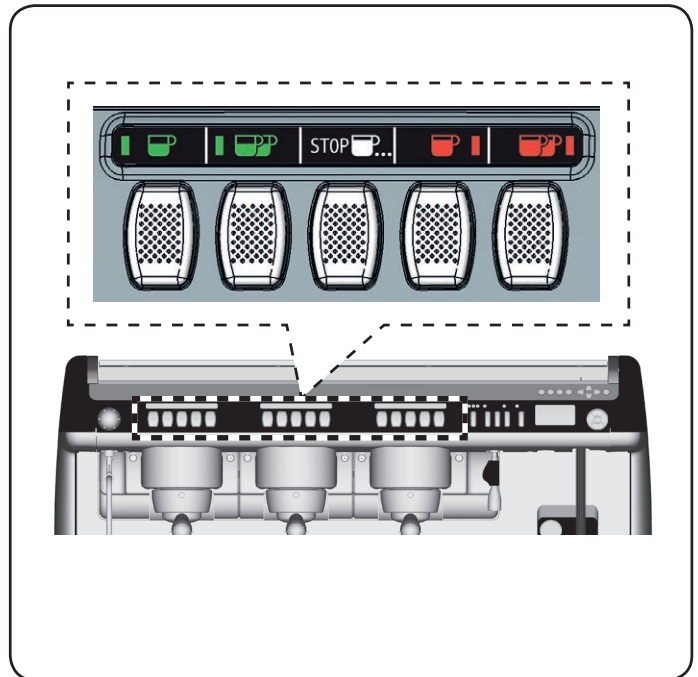
4. Key menu - Coffee selection

Press one of the coffee dispensing keys (the relative led will remain on, not flashing). The following message will appear on the display:



The coffee selection settings that can be changed are:

- **type** (key customisation, e.g. 3 espressos for 1 "short, normal, long", 3 espressos for 2 "short, normal, long", stop, disabled).
- **water dose** (volumetric dosing device impulses, 0 ÷ 1999 in steps of 1).
- **Select grinder**(grinding-machine customisation)
- **MM1-MM2** - Possibility of connecting from 1 to 2 grinders with the optional Bluetooth function.

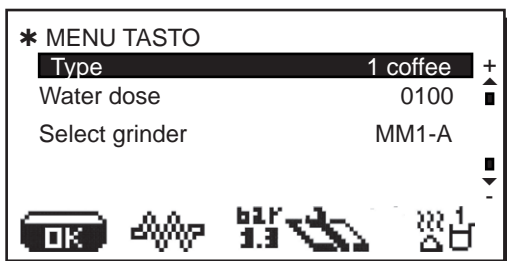


4.1 KEY Menu - Test Frame (Key "i")

After entering the programming menu, access the key menu by pressing one of the drink-dispensing keys (the associate LED remains lit); the following will be shown on the display:

Pushing the "i" key (27), dispensing occurs and the relative settings are displayed on the screen:

- (E.g. Group 2 Key)



Key menu - Coffee selection

								T	E	S	T						
						6	,	3	3		m	l	/	s		*	
	D	V		0	0	9	0			t	G		0	0	4	.	0
8	6	.	7	°C				8	7	.	5	°C				8	9
P		1	.	3	b	a	r					S	L		O	K	
R	C	1		O	F	F						E	v	c			O
R	C	2		O	F	F						T	V		0	6	5
																°	C

English

Key menu - Hot water selection

								T	E	S	T						
			t	E	a	c			0	0	2	.	4	s			
8	6	.	7	°C				8	7	.	5	°C				8	9
P		1	.	3	b	a	r					S	L		O	K	
R	C	1		O	F	F						E	v	c			O
R	C	2		O	F	F						T	V		0	6	5
																°	C

Key menu - Turbosteam selection

								T	E	S	T						
			t	E	t	s			0	2	5	.	9	s			
8	6	.	7	°C				8	7	.	5	°C				8	9
P		1	.	3	b	a	r					S	L		O	K	
R	C	1		O	F	F						E	v	c			O
R	C	2		O	F	F						T	V		0	6	5
																°	C

Key menu - Grinding Control Selection

English

								T	E	S	T									
						6	,	3	3		m	l	/	s		*				
	D	V		0	0	9	0			t	G		0	0	4	.	0	s		
8	6	.	7	°C				8	7	.	5	°C				8	9	.	9	°C
P		1	.	3	b	a	r					S	L		O	K				
R	C	1		O	F	F						E	v	c			O	F	F	
R	C	2		O	F	F						T	V		0	6	5	°C		

Legend

ml/s	Coffee dispensing flow (millilitres/seconds)
*	When * it appears, dispensing is taken into consideration by the grinding control function.
RC1÷RC2	Display services boiler resistance status (ON/OFF)
Evc	Solenoid valve charging boiler
P	Boiler Pressure, displayed in "bar" or "psi".
DV	Volumetric dosing device impulse count
TG	Coffee dispensing time
SL	Water level in boiler
TV	Steam temperature (Seil System Turbosteam not present, this parameter is not displayed)

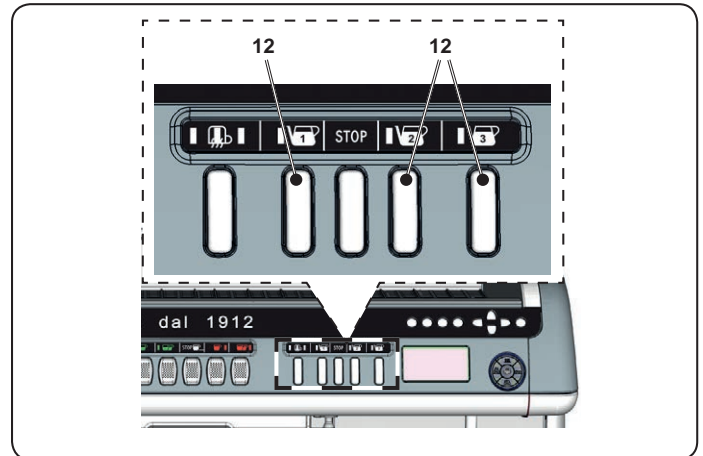
4.2 Key menu - Hot water selection

Press key (12) hot water dispensing; the display will show:



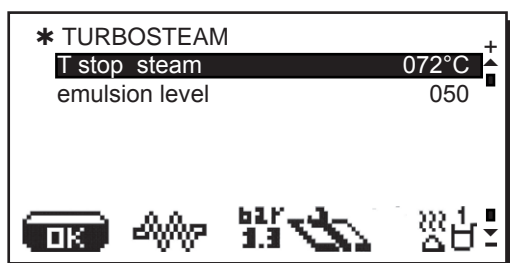
The hot water selection settings that can be changed are:

- water dispensing time (water dispensing time from 0 to 60 seconds).



4.3 Key Menu - Select Steam and Air

Press one of the Turbosteam (13) selector keys (TS1 ÷ TS4). The following will appear on the display:



The following parameters can be modified:

- **T stop steam** ("xxx°C" temperature for hot milk or frothed milk).

Setting options:

"0" setting:

- manual steam stop

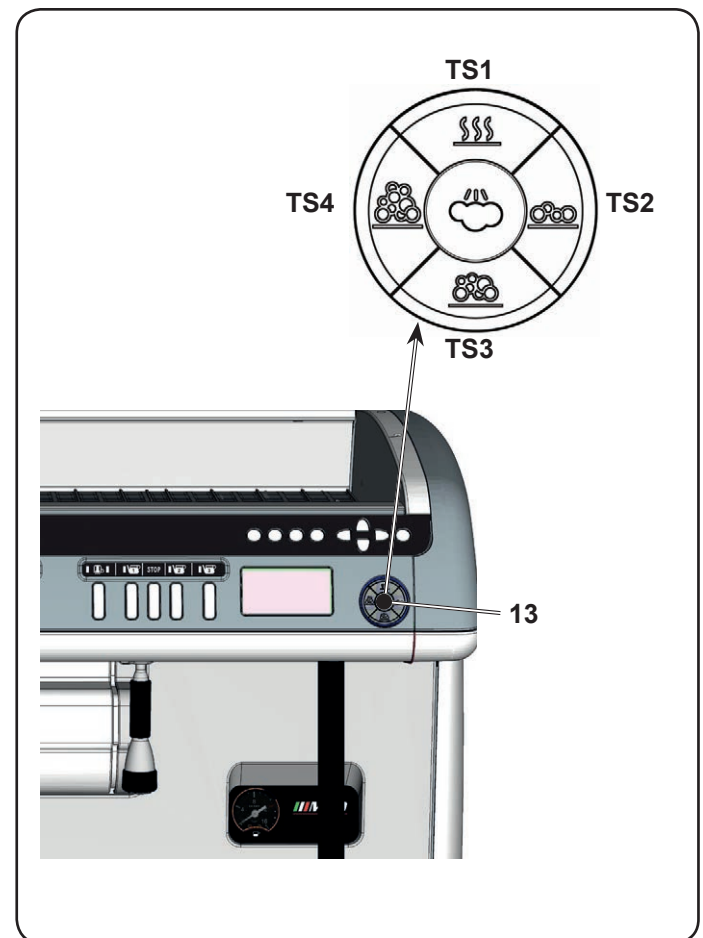
Any number between "40°C ÷ 85°C" (104°F ÷ 185°F)

- automatic steam stop

"OFF" setting:

- steam stop disabled

- **emulsion level** (a different emulsion level can be chosen for frothed milk: the value can be set between "0 ÷ 100", where 0 indicates no emulsion and 100 indicates continuous emulsion).

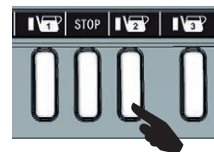
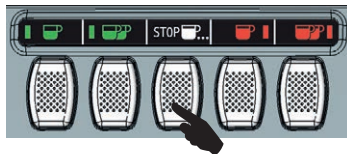


5. Programming measures using the "SELF-LEARNING" function

The water doses for coffee and the hot water doses can also be set using the "SELF-SETTING" function:

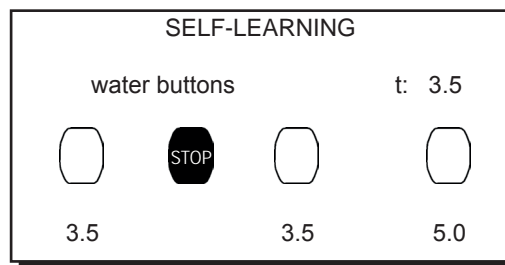
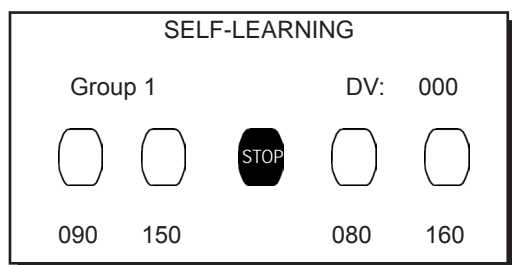
Hot water measures

- 1 - Press the button to be programmed and keep it pressed until the desired level is reached in the cup.



press and hold the STOP button for at least 8 seconds or until you hear a buzzer sound that will keep sounding throughout the programming. The menu below will appear on the display, showing the keys with the relative quantities for water for the coffee.

During this phase the time in seconds (top right of display) is increased; when the key is released, the setting reached is memorized and appears below the programmed key.

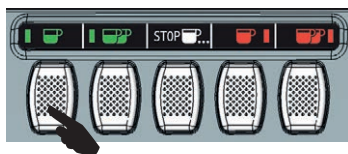


Coffee measures

- 1 - Fill the filter-holder with the required dosage of ground coffee and insert it in the dispenser unit.
- 2 - Put the cup or container under the filter-holder spouts and press the button to be programmed. Keep it pressed until the desired level is reached in the cup or container.

- 2 - Starting from step 1, continue programming, as desired, on all the water buttons.

When finished, press the STOP button. The buzzer will turn off, thus confirming that the programming has been completed.



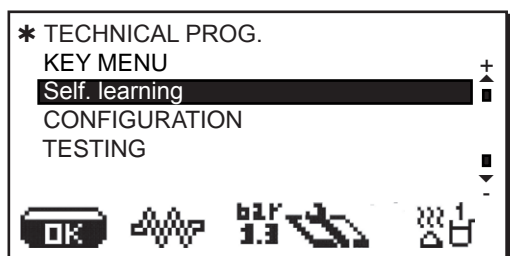
During this phase, the setting for the volumetric dosage pulses (top right of display) is increased. When the key is released, the setting reached is memorized and appears under the programmed key.

- 3 - Starting from step 1, continue programming, as desired, on all the coffee buttons.

5.1 Self. learning - Clone

Press the key .

Place the cup or cups underneath the filter-holder nozzles and press the key to be programmed, holding until the desired level is reached in the cup or cups. During this phase, the value of the impulses of the volumetric dosing device (top right on the display) is increased; when the key is released, the value reached is stored and appears on the display.



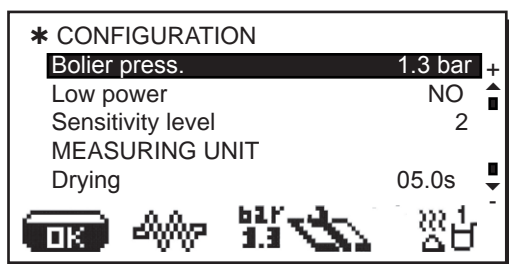
CLONE FUNCTION

This function allows coffee dose settings of the right group to be copied to all other groups.

Once programming of the right group is complete, push **OK**.

At the end of the procedure all the groups will have the same settings for the dispensing doses.

6. Configuration menu



Boiler pressure - indicates the pressure of the boiler; 0.6 to 1.6 bar (9 to 23 psi)

Low power - YES/NO

Sensitivity level - indicates the degree of sensitivity of the level probe, which then operates the filling of the boiler with water. For safety reasons, automatic level control of the boiler is disabled when the boiler resistance is turned off.

- Note: set a value of 1 if the machine is installed with very conductive water.

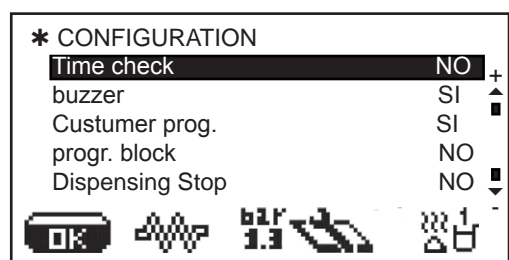
-Note: set a value of 3 if the water used is not very conductive (very soft).

MEASURING UNIT – includes 2 sub-menus

Temperature – can be set to °C Celsius centigrade or °F Fahrenheit degrees.

Pressure – can be set to bar or psi.

Drying - wafer drying time from 0 to 5 with steps of 0.1 seconds "if Drying kit is present".




Time check - view dispensing time on the display: YES/NO

Buzzer - enables/disables all audible signals when keys are pressed or messages are displayed: YES/NO.

Customer programming - Customer programming: YES/NO. By activating the (YES) function it is possible to provide the user with some extra functions:

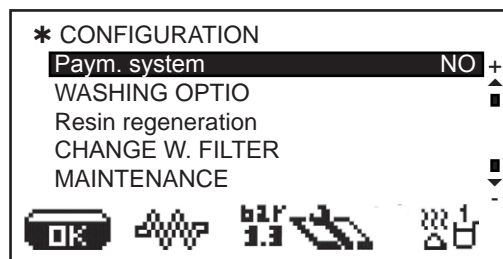
modification of the cup warmer level, turning the coffee boiler on/off, and activation of energy-saving mode.

Programming lock - Programming lock: YES/NO. By activating the (YES) function, all the keys that are part of the programming keypad, including the cup warmer key, are locked. Only the key sequence for technical access, the arrow key  to perform resin regen. and removal of the message "Carry out maintenance".

Stop dispensing: enabled - YES/NO.

YES: each dispensing key performs *start/stop*.


This means that pressing the same button during dispensing interrupts it



Payment system – permits configuration of payment system, when connected.

WASHING OPTIONS - See paragraph "Washing options" on the following pages.

6. Configuration menu

RESIN Regen. - includes the parameters for softner regeneration: litres of softner (between 0.1l and 25l), hardness (between 0 and 45°F). The decreasing resin efficiency level is also indicated. Once the softner regeneration has been performed, return to the main screen, press  for about 8 seconds to cancel the message.

Filter Replacement - On reaching the litre level set on the display a message is displayed which prompts replacement of the filter. For both functions, an efficiency percentage is displayed (Softener/Filter), descending from 100% to 0%.

MAINTENANCE - includes five items for setting maintenance parameters:

Max cycles - the number of cycles initially set: 40000.

Max days - the number of days initially set: 185.

No. cycles - the number of cycles until the next maintenance activity.

No. days - the number of days until the next maintenance activity.

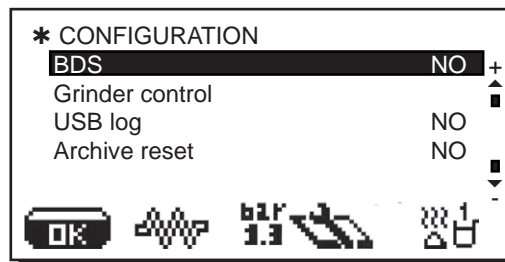
Reset - the choices are:

NO, countdown of the cycles and days until the next maintenance activity

YES, the number of cycles (40,000) and days (185) are reset

OFF, all controls related to scheduled maintenance and the "No. cycles" and "No. days" on the maintenance panel are deactivated.

Once the maintenance is performed, in order to eliminate the message it must be reset to technical mode.



BDS - see section "BDS Activation" in the pages that follow.

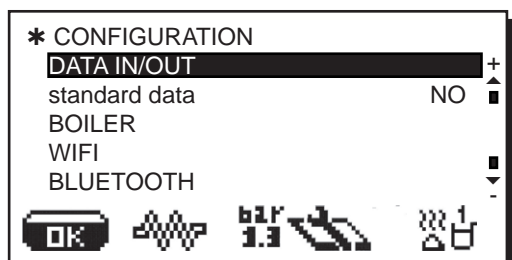
Grinder Control - The parameters that can be set are:

- **enabled** - MM1 - MM2

- **Regulation threshold** - see the section "Steps for Bluetooth Coffee Machine-Grinder/Dispenser Communication" in the pages that follow.

USB LOG - function for recording machine dispensing data on a USB drive, if inserted.

Reset archive - clears malfunctions (Wash Archive and Malfunctions Archive, Water Change and Averages Archive "only with Bluetooth activation") which occurred and were stored in the machine: YES/NO.



DATA IN/OUT - contains the items **IN**: transfer from USB drive to machine and **OUT**: from machine to USB drive.

Tx/Rx - to start the data transfer

Standard data - loads standard data: YES/NO.

Boiler - this parameter includes the entries for setting the temperature of the coffee boilers, values that can be set are 60 to 110°C (140 to 230°F) in steps of 0.5°C. In this menu there is also the possibility of programming an **offset** of temperature for the boilers which can be modified in a range of +/- 2°C. The standard setting is the current value of +1.5°C.

Wi-Fi Menu - see section "Wi-Fi Configuration" in the pages that follow.

Bluetooth Menu - see section "Bluetooth Connection" in the pages that follow

Service hours

Washing Groups

These are the washes where the time can be programmed, each of which contains two modifiable settings, including:

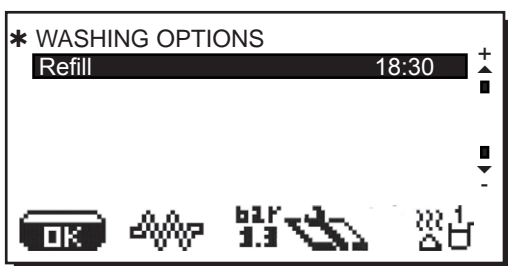
- **time**: the time that washing must take place.
The WASH can be deactivated by setting to OFF.
 - **block**: when the function is set (YES), if washing has not been performed within 60 minutes of the "PERFORM GROUP WASH" message being displayed, the machine is blocked, disabling all coffee-based selections.
- NOTE: missing wash will be stored in the "WASH ARCHIVE" as washes not performed.



Changing the water in the boiler

Changing the water in the boiler is a daily programmable change:

- **time**: the time that the change must take place.
THE WATER CHANGE feature can only be activated by the technician and is always set to OFF. It must first be activated and then under "WASHING OPTIONS" (in time panel) it can be changed, or it can be changed by the technician.

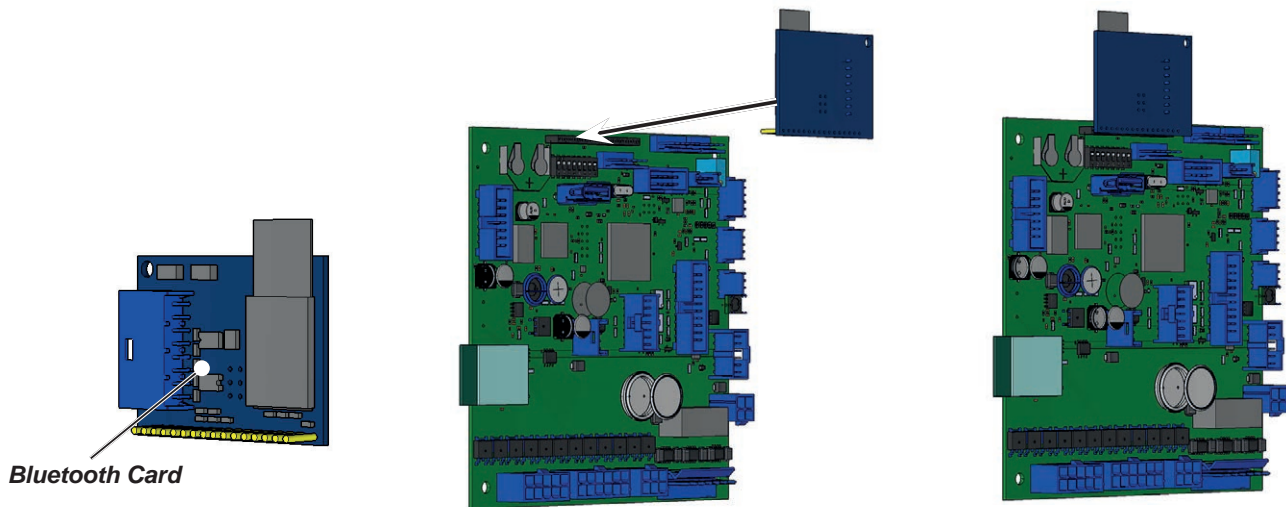


With "block" enabled, if the water change is not done within an hour, the machine prevents beverages from being dispensed. With request scheduled the user can only change the time the request appears.

WiFi configuration

Wi-Fi Menu - Configure the following Wi-Fi settings as shown below:

- **CONNECT** - to connect to the access point selected.
- **RSSI** - signal intensity:
Values less than -70 dB indicate poor coverage with probable difficulty in transmitting data.
- **IP** - Displays the IP address assigned to the machine by the wireless access point.
- **Net** - enter the name of the access point.
- **Security** - indicate the type of wireless network security:
Open: no protection;
WPA: wpa2-psk protection;
WEP: WEP 128 protection.
- **Key** - enter the password to access a protected Wi-Fi network (WPA or WEP)
- **URL** - enter listener.gruppocimbali.com.
- **Port** - enter 10000.
- **RESET** - To restore the parameters to the standard settings.
- **MAC** - Represents the Mac address of the WiFi module present in the machine. It is a parameter that is only displayed, cannot be changed.




Bluetooth Card

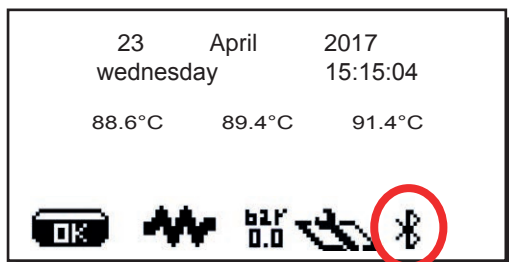
Bluetooth Menu - The parameters that can be set are:


- **MM1-MM2** - 1 to 2 grinders can be connected.
- **Search** - the machine will find all bluetooth devices within 10 m.
- **Reset** - cancels the connection with the associated device.




Note: during connection with bluetooth grinders/dispensers, the first one connected is set as MM1.

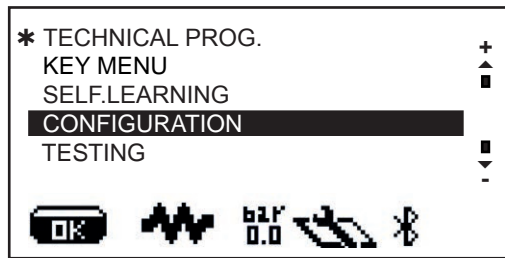
Procedure for Bluetooth connection with the machine-grinder unit

- 1 Turn the machine on; the initial menu appears on the display. The  symbol indicates that the machine can be linked to a Bluetooth device.

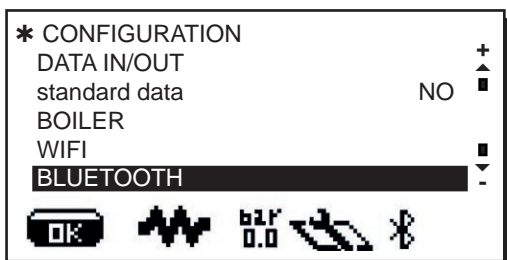



To enter TECHNICAL programming, press the  key and then **OK** for 3 seconds. The message in Point 2 will appear on the display.

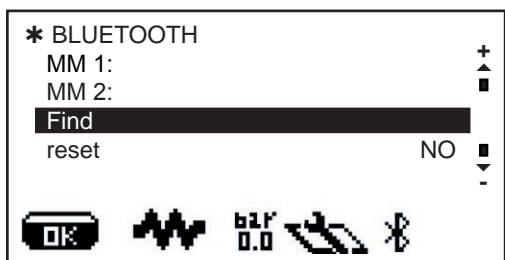
- 2 With the  and  keys, place the cursor on: "CONFIGURATION" in the machine Technical Prog. menu and press the  key:



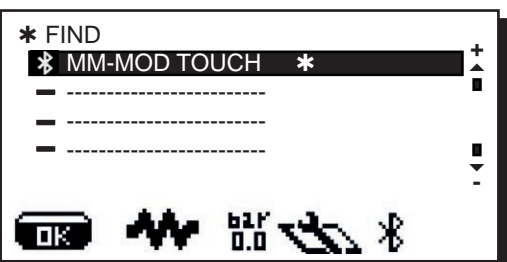
- 3 Position the cursor on the "BLUETOOTH" entry and press the  key:





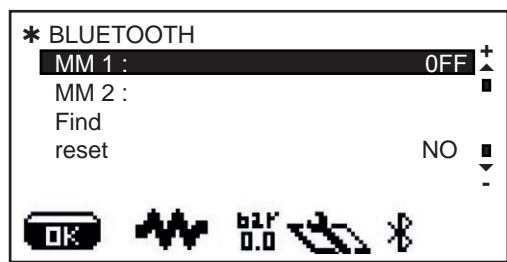
- 4 Position the cursor on the "Find" entry and press the  key:





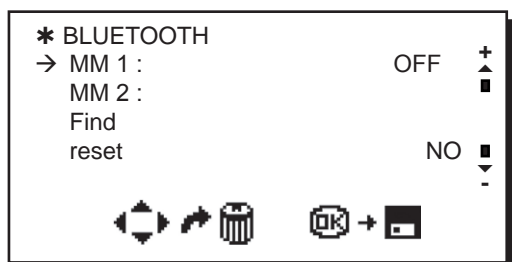
- 5 The machine will find all Bluetooth devices within 10 m. After confirmation of the device selected, an asterisk * will appear next to the grinder/dispenser line indicating that the Bluetooth connection has been made with the machine:




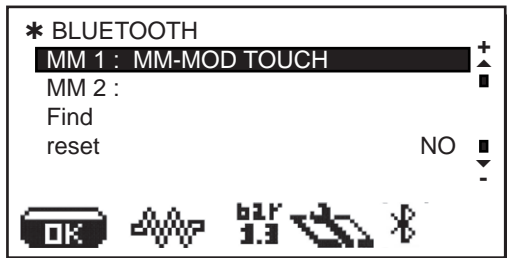
- 6 Return to the Bluetooth parameters by pressing the  key; place the cursor on the "MM 1" item and press the  key:








- 7 Using the  and  keys, move the arrow to the grinder selected, then press **OK** to confirm:





- 8 The icon  indicates that the machine and measure grinder are communicating.







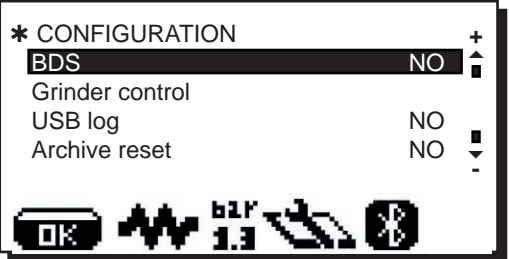
From version SW 047.00.H0 or later, the connection is made automatically and the symbol  appears at once on the device. It is no longer necessary to press a dispensing key if the configuration is correct. In the event of communication problems, the "COMMUNICATION FAILURE" message will appear on the display followed by the name of the disconnected grinder/dispenser. The message disappears automatically when the Bluetooth connection is restored. A common cause of this failure is the grinder/dispenser being turned off with the machine turned on.




-NOTE: Only for previous software versions. When a double coffee dispensing key is pressed, the  symbol on the machine's display becomes  while the  symbol on the grinder/dispenser display becomes  indicating successful wireless communication.

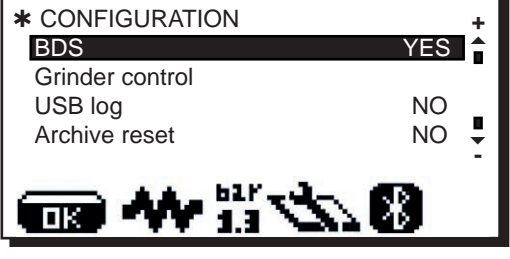
When the machine or grinder/dispenser are turned off, at the next power-on the  symbol appears on the display of the machine and the  symbol on the display of the grinder/dispenser.

BDS activation and sensor configuration

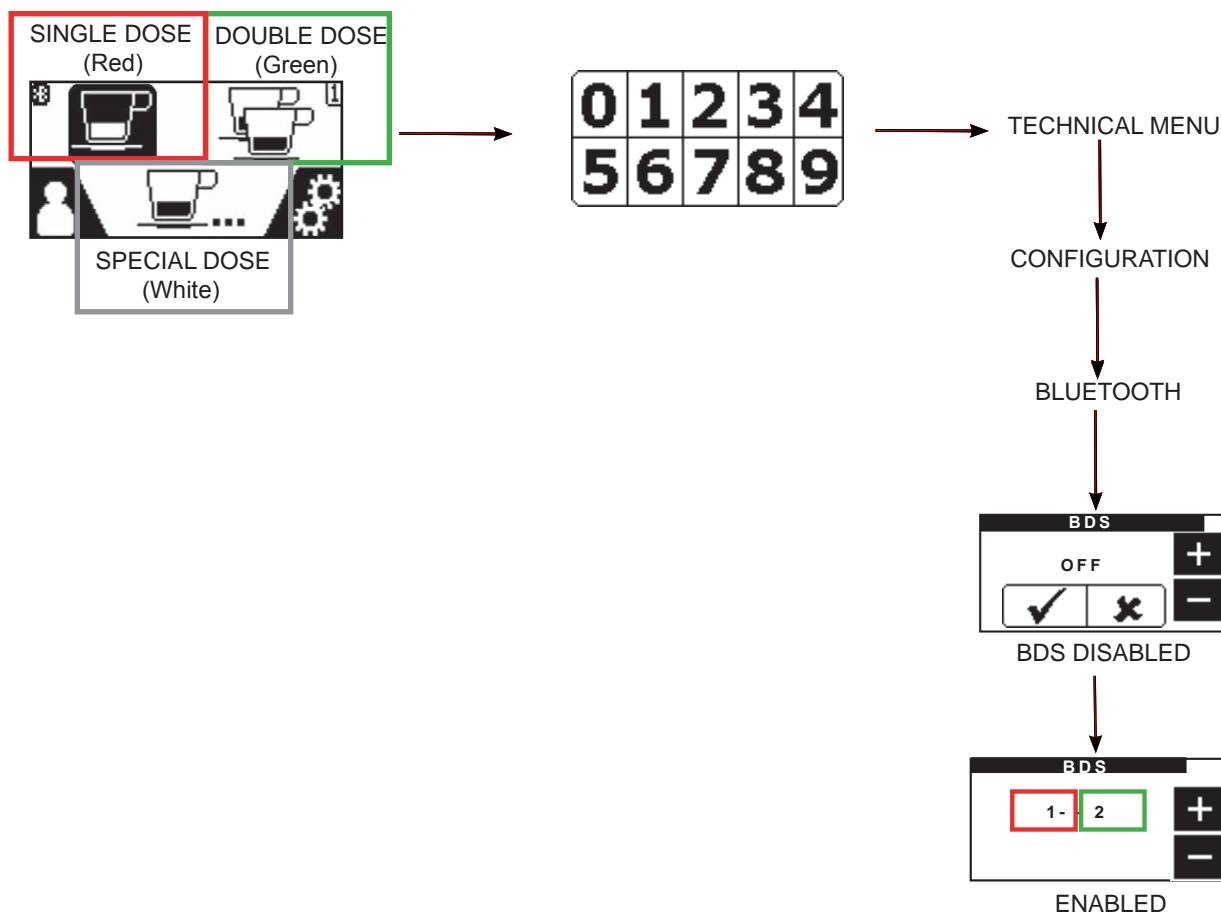
1 Return to the "CONFIGURATION" parameters by pressing the  key; using the  and  keys, move the cursor to "BDS" and press :



2 Use the  and  keys to indicate "YES" and then press the  key to confirm



All the TECHNICAL MENU items of the "Magnum Bluetooth" grinder/dispenser can be viewed only after the default technical code has been entered.

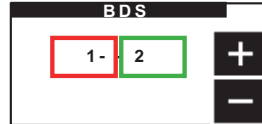
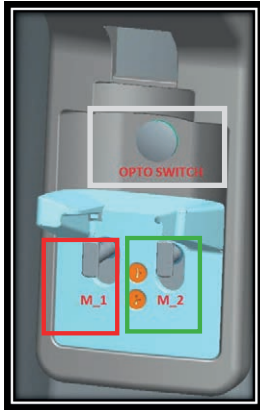


CONFIGURATION MAGNUM BLUETOOTH GRINDER/DISPENSER SENSORS

0: sensor disabled

1: single dose (Red)

2: double dose (Green)



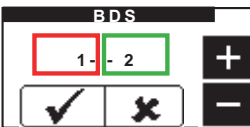
SINGLE DOSE
(Red)



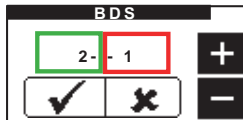
DOUBLE DOSE
(Green)



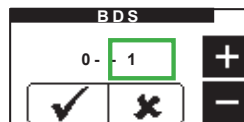
SPECIAL DOSE
(White)



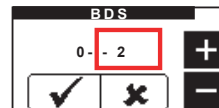
Single dose – Left sensor (Red)
Double dose – Right sensor (Green)



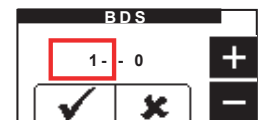
Double dose – Left sensor (Green)
Single dose – Right sensor (Red)



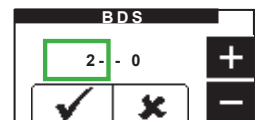
Left sensor disabled
Double dose – Right sensor (Green)



Single dose – Left sensor (Red)
Right sensor disabled



Single dose – Left sensor (Red)
Right sensor disabled



Double dose – Left sensor (Green)
Right sensor disabled

Setting recipes and connections with grinder/dispenser

-NOTE: POSSIBILITY TO CONNECT ALSO WITH GRINDER/DISPENSER 2

The filter holder-key and machine association logic is the following:

1-A or 2-A = activation of the first actuator (filter-holder with single delivery spout)

1-B or 2-B = activation of the second actuator (filter-holder with double delivery spout)

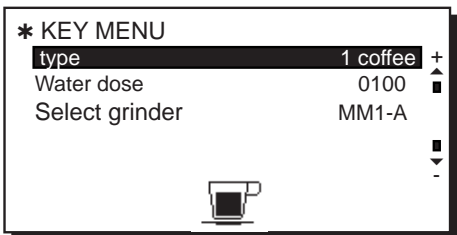
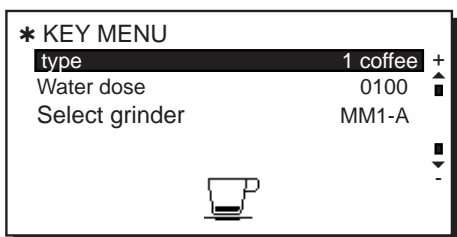
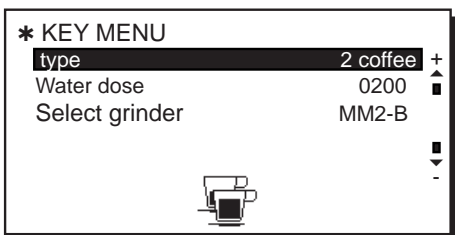
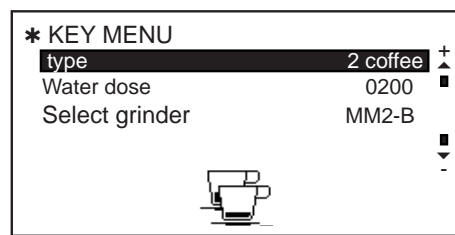
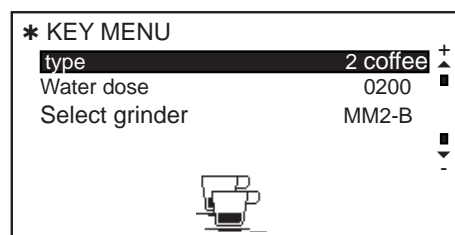
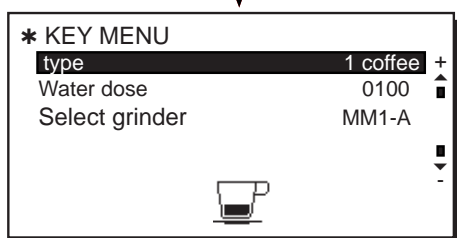
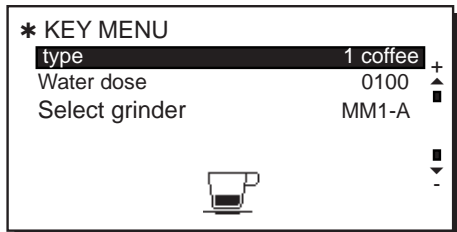
1-C or 2-C = activation of the third actuator with filter-holder with dedicated filter

With the number **1** the first grinder/dispenser **MM1** is identified

With the number **2** the second grinder/dispenser **MM2** is identified

With the letters **A-B and C** the filter-holders are identified

GRINDER/DISPENSER 1



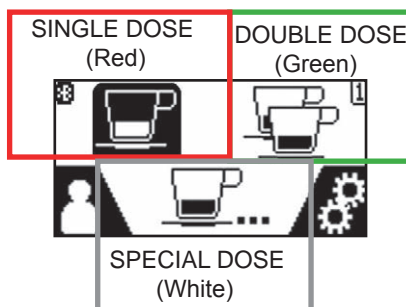
← MEDIUM →

← SHORT →

← LONG →

Every button on the machine can be configured based on the type and the relative grinder/dispenser. Not all types can be used with the BDS system. The possible choices are:

- Single type
 - Short
 - Medium -> SINGLE DOSE (Red)
 - Long -> SPECIAL DOSE (White)
- Double type
 - Short
 - Medium -> DOUBLE DOSE (Green)
 - Long



BDS system enabled.

Dispensing disabled (LED off) NOTE: Start/Stop key is always active.



Dose grinding and dispensing activated (LED on)



Dispensing will remain active for 2 minutes. During this time, the grinder/dispenser used will be blocked and therefore unable to grind a second dose of coffee.

The grinder/dispenser will automatically release when the enabled key is pressed or when the two minutes of waiting time have elapsed.



Grinder control parameters configuration

- 1 Position the cursor on the "GRINDER CONTROL" entry in the machine configuration menu and press the **▶** key:

```
* CONFIGURATION
Grinder control
RELOAD COFFEE
USB log YES
Archive reset NO
```



Grinder Control-1

Grinder Control-2

The parameters that can be set are:



: not in use



: manual grinder control (for grinder/dispensers with no bluetooth connection option).



: automatic grinder control (bluetooth connection with grinder/dispenser).

Note: For proper operation of the grinder control system, keys of the same type (for example singular ones relative to grinder/dispenser 1) programmed with the same pressure and time parameters, in all the phases of the profile.

- 2

```
* GRINDER CONTROL
MM1
MM2
```



Position the cursor on the item "MM1" of the machine and press the **▶** key.

- 3

```
* MM1
Enabled -
reset NO
reg. threshold 10%
Q ref. 1B 3.90 ml/s
Q ref. 1A 3.50 ml/s
```



- : not in use

- 4

```
* MM1
Enabled ✓
reset NO
reg. threshold 10%
Q ref. 1B 3.90 ml/s
Q ref. 1A 3.50 ml/s
```



✓ : manual grinder control (for grinder/dispensers with no bluetooth connection option).

- 5

```
* MM1
Enabled *
reset NO
reg. threshold 10%
Q ref. 1B 3.90 ml/s
Q ref. 1A 3.50 ml/s
```



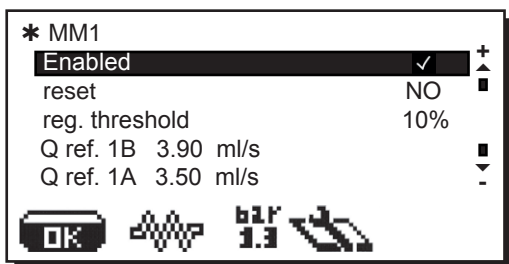
* : automatic grinder control (bluetooth connection with grinder/dispenser).

The parameters can be modified manually using the keys **◀ ▶**.

After completing operations confirm the values by pressing the key **OK** or exit and leave the previous data using the key **◀**.

Grinder control parameters configuration

 : manual grinder control (for grinder/dispensers with no bluetooth connection option).



1. disable grinder control, if in use.
2. set and calibrate the machine and grinder/dispenser as desired.
3. dispense into the test square all the types of beverages to be used (double coffee, single coffee and any special blend - third key).
4. write down the satisfactory flow values of the coffees for each of the possible three types of beverage.
5. go to the grinder control panel and perform reset.
6. set the flow values for each of the beverages.
7. enable grinder control.

Note: Set the Q.ref of double coffees first for proper functioning of grinder control.

The appearance of this animated icon means that adjustments need to be made to the grinder/dispenser to tighten or loosen the grinding, to return coffee dispensing to the default parameters.

The icons that are shown are:




means that the grinding needs to be loosened.
(flow of coffee is lower than the reference).

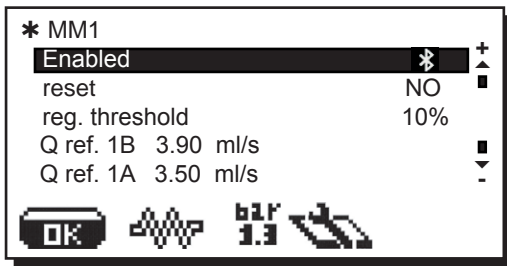


means that the grinding needs to be tightened.
(flow of coffee is greater than the reference).

Note. The number next to the icon (1 or 2) indicates which grinder/dispenser needs adjusting.
The icon appears on the display instead of the level symbol.

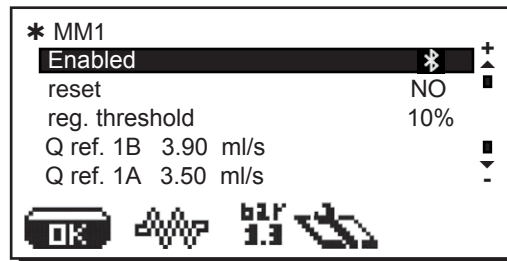
Grinder control parameters configuration

 : Method 1: manual setting of Qref.



1. disable grinder control, if in use.
2. connect the machine to the grinder/dispenser via bluetooth and enable dialogue in the manner already in use.
3. set and calibrate the machine and grinder/dispenser as desired.
4. dispense into the test square all the types of beverages to be used (double coffee, single coffee and any special blend - third magnum key on demand).
5. write down the satisfactory flow values of the coffees for each of the possible three types of beverage.
6. go to the grinder control panel and perform reset.
7. set the flow values for each of the beverages.
8. enable grinder control.

 : Method 2: setting of Qref in fully self-learning mode.



1. Disable grinder control, if in use.
2. Connect the machine to the grinder/dispenser via bluetooth and enable dialogue in the manner already in use.
3. Programme and calibrate the machine and grinder/dispenser as desired, dispensing the beverages until a satisfactory cup result is achieved.
4. Go to the grinder control panel and perform reset.
5. Enable grinder control.
6. Exit programming.
7. Dispense double coffees (5 or more) until the message Qref OK appears on the services display (with audible sound).
8. Dispense single coffees (5 or more) until the message Qref OK appears on the services display (with audible signal).
9. Dispense any special blend coffees (5 or more) until the message Qref OK appears on the services display (with audible sound).
10. Enter programming and check that the Qref values set are present.

Repeat the entire procedure for the second grinder/dispenser if present.

The machine is ready to work with the grinder control on. In the event of problems, dispensing can be performed in the test square with the grinder control in use to see if the symbol * is present beside the flow. Remember that dispensing is deemed valid only if it lasts more than 10 seconds.

Other symbols are used in the test square:

> if the flow is too high compared to the reference, above the upper limit

< if the flow is too low compared to the reference, below the lower limit

* flow within the acceptable range


- dispensing too brief (at least 8 s but less than 10 s)

(3) number of remaining coffees to be dispensed and deducted from the count

Grinder control parameters configuration

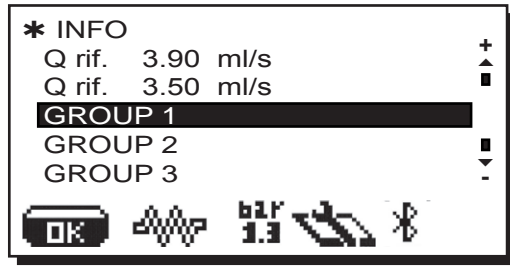
INFO : grinder control.

1



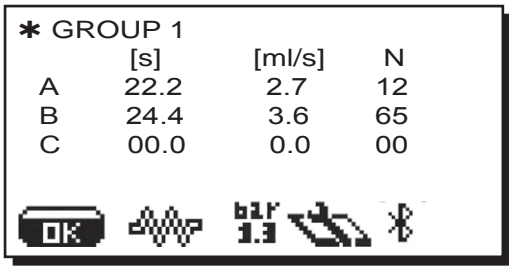
Position the cursor on the item "INFO" of the machine and press the ► key.

2



Pressing the ► key at the line "GROUP 1", the display will show:

3



	[s]	[ml/s]	N
A	22.2	2.7	12
B	24.4	3.6	65
C	00.0	0.0	00

Example of information on the flows of each single dispensing sent to the Plat-One platform via WIFI.
(A/B) GR 1 single coffee and one double,
(C) the filter holder is not used for special coffees.

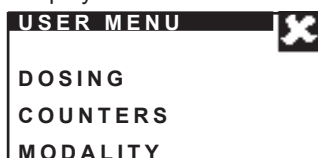
Dose time variation relative to the Magnum Bluetooth grinder/dispenser

To increase or decrease the measure-time operate as follows:

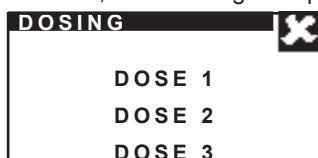
- 1) press the  icon from the main screen:



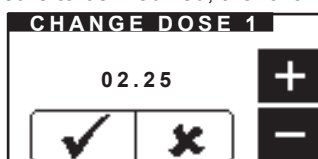
- 2) The following is displayed:





- 3) press the *DOSING* item; the following is displayed:




- 4) select the measure to be modified; the following is displayed:






Change the value by the “+” and “-” icons; confirm the entered value by the  icon or press the  icon to leave it unchanged.

The measure-number correspondence is the following:

DOSE 1 for the single measure  ;

DOSE 2 for the double measure  ;

* DOSE 3 for the continuous measure 



Note: single-measure's  and continuous measure  grinding time variation in user mode is ± 25 hundredths of second ($0 \div 1/4$ second).


Double-measure's  grinding time variation in user mode is ± 50 hundredths of second ($0 \div 1/2$ second).

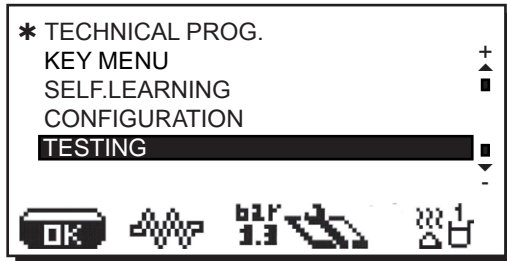
* Grinding in continuous mode, if equal to zero (DOSE 3 = 0), can only be modified by the technician.


7. Manual control panel

To access the manual control panels, position the cursor on the line "Testing" using the  and  keys

MANUAL CONTROLS - allows the components to be activated manually using the  and  keys





When you press , the following message appears on the display:



When the  key is pressed again, the box below appears on the display:

Panel 1

G	R	1						G	R	2							G	R	3		
0	0	0	0					0	0	0	0						0	0	0	0	
8	6	.	7	°C				8	7	.	5	°C					8	9	.	9	°C
P		1	.	3	b	a	r			S	L		O	K			0	0	7	%	
R	C	1		O	N					E	v	c					O	F	F		
R	C	2		O	N					T	V		0	6	5	°C					
	±		→				▶			→			X	X	X	:					

- Pressing  or  displays the various components;
- Pressing  selects the component to active and takes you to the next panel M2;
- Pressing  exits manual mode.

Panel 2

English

G	R	1						G	R	2							G	R	3		
0	0	0	0					0	0	0	0						0	0	0	0	
8	6	.	7	°C				8	7	.	5	°C					8	9	.	9	°C
P		1	.	3	b	a	r			S	L		O	K			0	0	7	%	
R	C	1		O	N					E	v	c					O	F	F		
R	C	2		O	N					T	V		0	6	5	°	C				
	±		→			◀			→		X	X	X	:		O	N				

- Pressing ▲ or ▼ activates the components:
if they have a direction, use ▲ or ▼ to alternate ("+" Left/"- Right).
- Pressing ◀ takes you back to panel M1.

Panel

G	R	1						G	R	2							G	R	3		
0	0	0	0					0	0	0	0						0	0	0	0	
8	6	.	7	°C				8	7	.	5	°C					8	9	.	9	°C
P		1	.	3	b	a	r			S	L		O	K			0	0	7	%	
R	C	1		O	N					E	v	c					O	F	F		
R	C	2		O	N					T	V		0	6	5	°	C				
	±		→			◀			→		X	X	X	:		O	F	F			

Level signal:

- Nominal operating range: from 7 to 53% (approximately) (E.g. 8% level OK; 50% no water, level probe uncovered)
- Other values -> signal anomaly, check wiring and connections

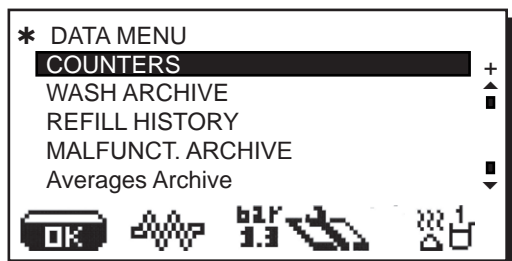
Legend

Below are the symbols used to define the components that can be accessed for movement:

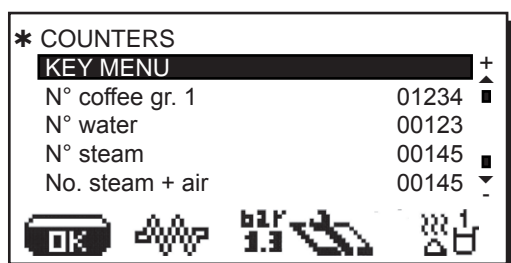
RC	Boiler resistance	MP	Pump Motor
Evc	Boiler load solenoid valve	Em	Anti-backflow solenoid valve
P	Boiler pressure	Mc	Autosteam compressor motor
SL	Boiler water level	Ets	Autosteam solenoid valve
TV	Steam temperature (if the Turbosteam system is not present, this parameter is not displayed)	Evc	Charge-boiler solenoid valve
		Eaf	Cold-water solenoid valve
		Eac	Water solenoid valve
		G1÷G3	Dispense-coffee solenoid valve

8. DATA menu: COUNTERS

To enter the data menu, press the ◀ key and then press the “i” (27) key; the following is displayed:



When positioning the cursor on the line “COUNTERS” and press the ▲ and ▼ keys, and then press the ▶ key, the following is displayed:



The counters can be reset by positioning the cursor over the specific item, pressing the ▶ key and then the ▲ or ▼ keys; press **OK** to confirm the reset.

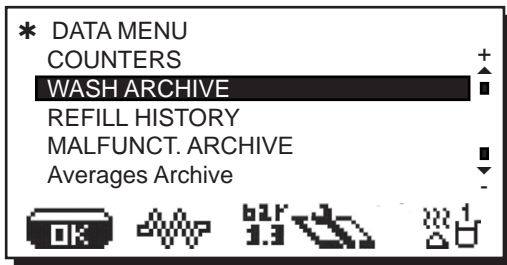
Note: the settings that cannot be cleared are:
- **tot. coffee**

The settings that are counted are:

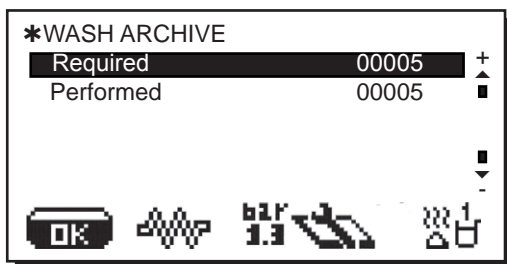
- **select key** (single selection counters)
- **coffee** (number of coffee-based beverages);
- **water** - (number of times water dispensed);
- **steam** (number of times steam dispensed with steam key);
- **steam + air** - (number of times steam and air dispensed with the Turbosteam key);
- **tot. coffee** (total number of coffee-based beverages).

The line “No. coffee” appears as many times as the number of groups of the machine.

8.1 DATA menu: Wash Archive

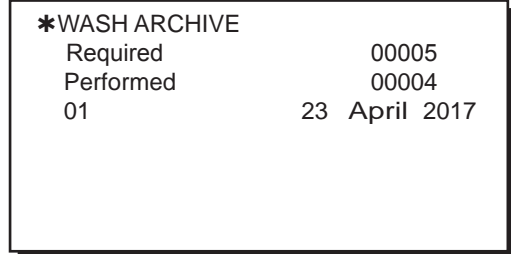


Pressing the **▶** key at the line "Wash archive", shows the display:



For Wash, the settings that can be displayed are:

- **Requested**: indicates the number of washes that were requested by the machine.
- **Performed**: indicates the number of washes that were performed within the timeout of 60 minutes.

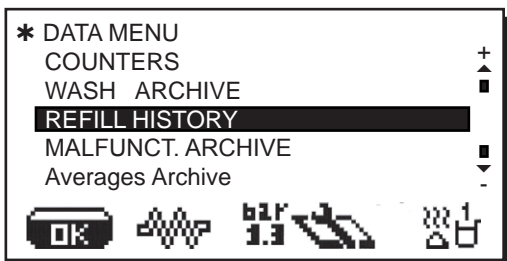


Note: if the requested washes are not performed before the timeout, the list with the last 10 missed washes, numbered and dated, can be viewed under "Performed".

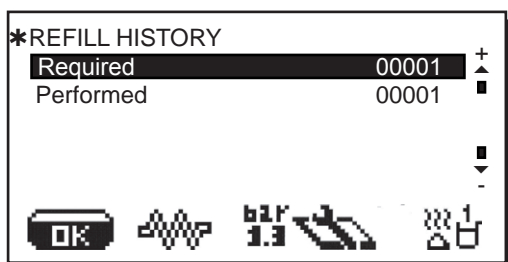
The first line refers to the most recent data. (There is no wash archive 2-3).

Scroll down the list of any missed washes using the **▲** and **▼** keys and then press the **◀** key to go to another menu.

8.2 DATA menu: Refill History

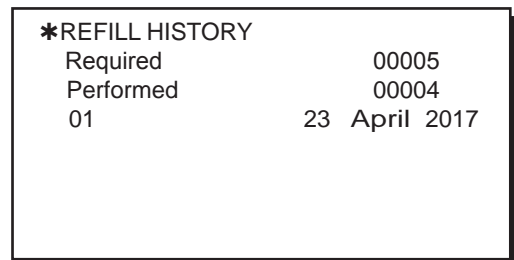


When you press the **▶** key at the line "Refill History", the display shows:



The Refill parameters that can be displayed are:

- **Requested**: indicates the number of Refills that were requested by the machine.
- **Performed**: indicates the number of Refills that were performed within the 60' timeout period.



NOTE: if the requested Refills are not performed before the timeout, the list with the last 10 missed Refills, numbered and dated, can be viewed under "Performed".

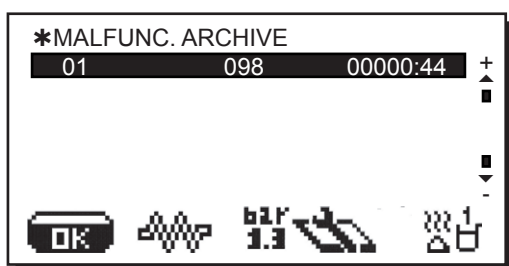
The first line refers to the most recent data.

Scroll down the list of any missed Refills using the **▲** and **▼** keys, and then press the **◀** key to go to another menu.

8.3 DATA menu: MALFUNCTIONS ARCHIVE



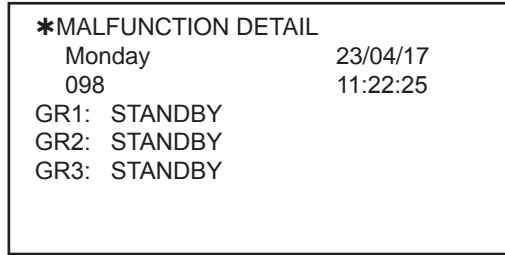
When you press the ► key at the line “Malfunctions Archive”, the display shows:



The digits after the “malfunction code” indicate the time elapsed since the last recorded malfunction, in hours and minutes.

Pressing the ► key is again takes you to a detailed display that shows:

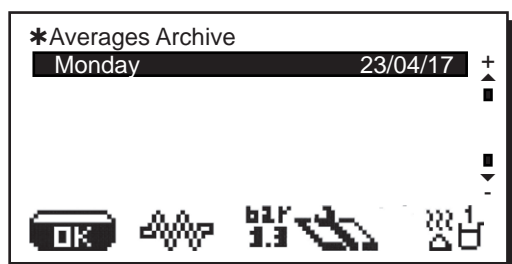
- day and time when the malfunction occurred
- condition of each group at the time of the malfunction.



8.4 DATA menu: Averages Archive

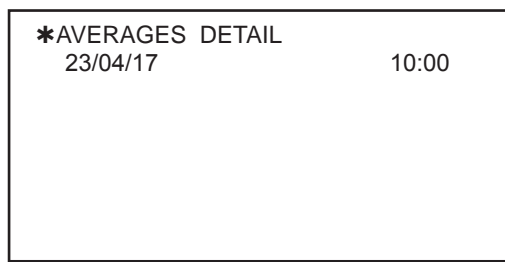


When you press the ► key at the line “Averages Archive”, the display shows:

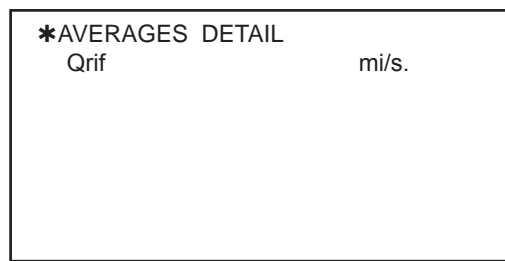


Pressing the ► key is again takes you to a detailed display that shows:

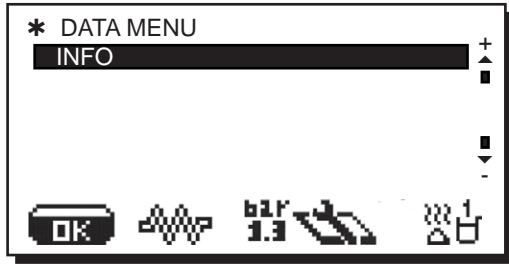
- day and time on which the daily check was made.



The related settings (Q ref.) - Flow rate expressed in ml/s (0.1 to 10). The indicative reference value for espresso coffee - 25 cc dispensed in 25 seconds - is 3.0 ml/s. (Q ref measured and Q ref set, reference data for 1 to 2 grinders)



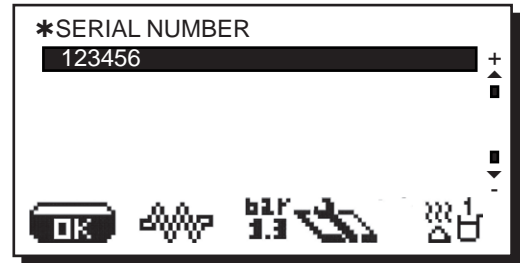
8.5 DATA menu: INFO



Serial number

Positioning the cursor on the line "INFO" and pressing the and keys, and then pressing the key, the following is displayed:

Pressing the key on the line "serial number", the display shows.

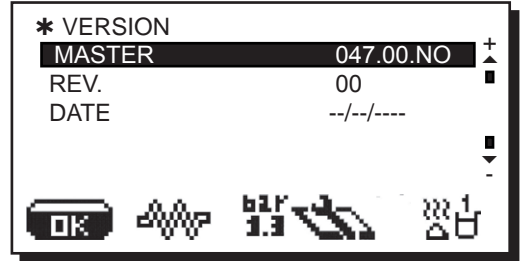
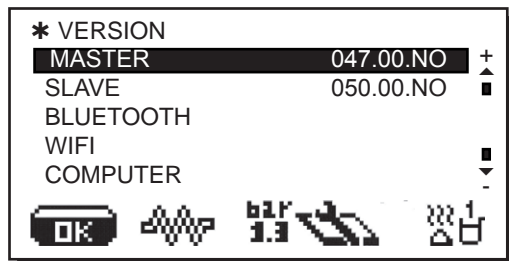


Version

The submenus under "Version" show the memory versions:

- Master;
- Slave;
- Bluetooth;
- WIFI;
- Computer;
- Barcode.

For some settings, pressing the key on the lines, data on the revision and the date of the memory is also displayed in addition to the version.



Setup

The settings entered during the Standard Data entry step are displayed under "Setup":

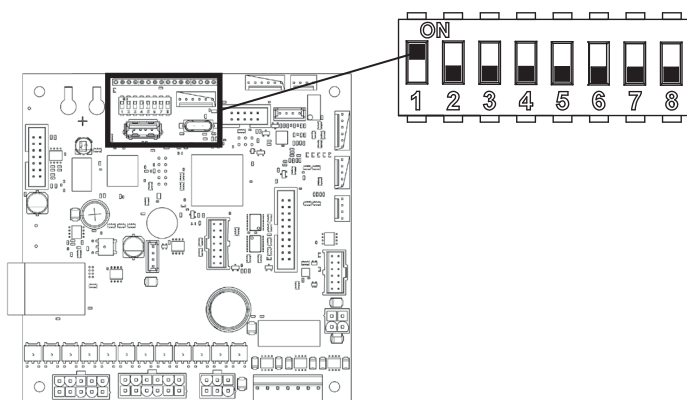
STANDARD DATA
 --→ 2, 3 GR
 --→ BOILER (YES / NO)
 --→ TS (YES / NO)

Entering Standard Data

Before performing this operation, turn off the machine and set CPU board **DIP switch 1** to **ON**, and then turn the machine on.

During Standard Data entry, several parameters are to be set based on the model and type of the machine:

- **TYPE**: 2, 3 groups;
- **BOILER** YES/NO;
- **TURBOSTEAM** YES/NO;



Using the keys **Δ** and **▽** choose the settings and then press the **►** key to confirm the entry.

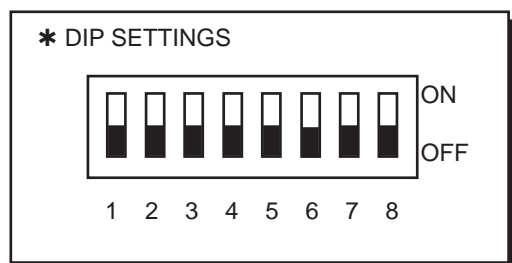
At the end of the operation, turn the machine off and reset CPU board **DIP switch 1** to **OFF**.

Then:

- turn the machine on again
- set the date and time and, if necessary, the desired language
- reset the maintenance parameters, if desired (see "Configuration Menu - Maintenance")
- Reset the archive.
- Press and hold **OK** for several seconds to activate/deactivate resistance.

Dip settings

Under the item "DIP settings", the following DIP switch positions are displayed:



Under standard conditions, the DIP switches are set to OFF.

- DIP 1 = OFF - ON standard data entry
- DIP 2 = OFF
- DIP 3 = OFF - ON technical key simulation
- DIP 4 = OFF - ON access to accounting functions
- DIP 5 = OFF - ON enabling of key sequence for programming entry
- DIP 6 = OFF
- DIP 7 = OFF
- DIP 8 = OFF



For more details, please see the technical manual in the section "Settings - CPU DIP switches".

Update from USB pen drive

1

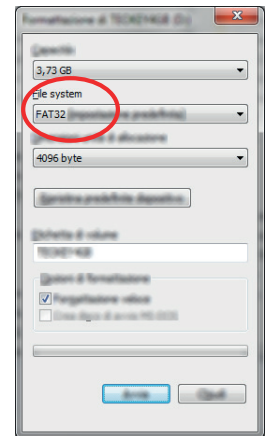
PRELIMINARY OPERATIONS

Format a USB Pen Drive using the **FAT32** format. If using Windows, use the predefined formatting settings as shown in the image.

Copy the update files (CPU  ).




NOTE: do not turn off the machine or remove the USB Pen Drive until the update has been completed. If using a USB Pen Drive operating LED, this is shown by the LED flashing.



2

PRELIMINARY OPERATION: Recognizing of USB support



With the machine running, insert the USB Pen Drive containing the update files into the USB port. The  icon will appear on the display to indicate that the storage device has been recognised.

29 October 2017
wednesday 15:18:12
88.6°C 89.4°C 91.4°C



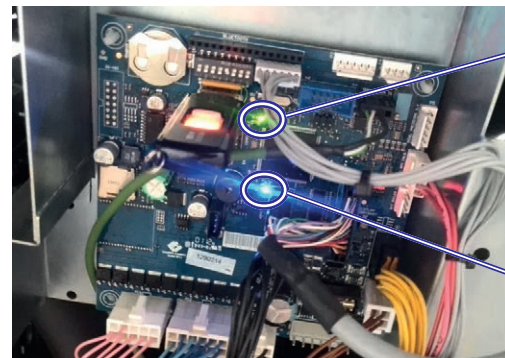
3

STARTING THE SOFTWARE UPDATE

Turn the machine off leaving the USB Pen Drive inserted. With the subsequent restart, the copying of the 2 update files begins from the USB Pen Drive to the CPU board memory.  

NOTE: during copying of the files, the display of the machine remains on but with no indication, for a variable period of time (from 10 seconds to 1 minute). Therefore, it is necessary to consult the status of the LEDs, which should be as indicated below:

- GREEN CPU board LED: on steady
- BLUE CPU board LED: flashing
- Pen Drive operating LED: flashing (running)



4

When the files have been copied from the USB support to the memory of the CPU board, the display comes on and the following message appears:

BOOT 3.5
UPDATING.. 015%

The actual updating phase begins. For the entire duration of this phase, the buzzer sounds intermittently (200 ms ON).

LED status during the update:

- GREEN CPU board LED: flashing;
- BLUE CPU board LED: flashing, with varying frequency depending on the frequency of communication between the master CPU and slave CPU;
- Pen Drive operating LED: flashing (running).



NOTE: on machines with **BOOT VERSION PREVIOUS TO 3.5**, the status of the LEDs during the update is as follows:

- GREEN CPU board LED: flashing
- BLUE CPU board LED: off
- Pen Drive operating LED: on steady (not running).

5

The update of the CPU board lasts few minutes and ends when the buzzer emits prolonged intermittent signals (2sec ON / 10sec OFF).

Status of the LED when update is completed:

- *GREEN CPU board LED: flashing*
- *BLUE CPU board LED: flashing*
- *Pen Drive operating LED: on steady (not running)*

The following message will appear on the display:

BOOT 3.5
UPDATING SUCCESS

6



NOTE: for machines with BOOT 3.3 or later, the request for the input of the standard information occurs without the positioning of the DIP 1 to ON.

Switch off the machine and remove the USB support.

Position the DIP 1 to ON on the CPU board.

Restart the machine and enter the standard information requested.

7

Turn the machine off and reposition DIP 1 to OFF on the CPU board.

With the restart, it will be necessary to update the machine information and reactivate the resistance.

1 January 2001
Monday 12:00:16

STANDARD DATA



9. Check-control messages

English

MALFUN CODE	DESCRIPTION	POSSIBLE CAUSES	VERIFICATIONS and SOLUTIONS
020	USB power-supply malfunction	<ul style="list-style-type: none"> • USB-port current-consumption too high 	<ul style="list-style-type: none"> • Check the status of the USB port and its connections in order to identify possible causes of excessive consumption (e.g. short-circuit). • Once the cause of the malfunction is fixed the USB port should restore itself automatically and return to normal operation. • If the problem persists, replace the CPU board.
(x)21*	Group boiler pressure sensor x out of range (x = 1, 2, 3, 4) Note: Group 1 is to the far left.	<ul style="list-style-type: none"> • Sensor failure • Card failure 	<ul style="list-style-type: none"> • Check cabling • Replace the sensor • Replace the card
023	AC 24V power supply malfunction	<ul style="list-style-type: none"> • The glass fuse on the CPU board is likely broken. 	<ul style="list-style-type: none"> • Replace the fuse.
024	Clock malfunction	<ul style="list-style-type: none"> • Contacts oxidised. • Dead battery. • Clock blocked. 	<ul style="list-style-type: none"> • Clean the contacts on the battery. • Measure the voltage of the battery (3 V DC) and, if necessary, replace it. • If the battery is OK try, with the machine turned off, to remove it from the board and wait 2-3 minutes. Then reinsert the battery and check that the clock is working properly.
025*	No power: group, EV, milk pump	<ul style="list-style-type: none"> • Voltage drop in the power supply 	<ul style="list-style-type: none"> • Check if CPU card has power. • Check power supply unit (protection) • Check cabling
029 *	LCD display not connected (applies only to machines other than Emblem R and M100)	<ul style="list-style-type: none"> • Break in cabling. • Display fault. 	<ul style="list-style-type: none"> • Check cabling
030	Slave micro processor malfunction		<ul style="list-style-type: none"> • If the problem persists, replace the Newton board.
041*	Milk pump motor overcurrent	<ul style="list-style-type: none"> • Consequence of applied force • Rotor blocked • Pump motor faulty 	<ul style="list-style-type: none"> • Check wiring. • Check whether the circuit or pump is clogged. • Replace the pump.
051	Temperature sensor signal out of range	<ul style="list-style-type: none"> • Sensor failure • Card failure 	<ul style="list-style-type: none"> • Check cabling • Replace the sensor • Replace the card
(x)51*	Group boiler temperature sensor x out of range (x = 1, 2, 3, 4) Note: Group 1 is to the far left.	<ul style="list-style-type: none"> • Thermocouple disconnected • Sensor failure 	<ul style="list-style-type: none"> • Check cabling • Replace the sensor
052	Boiler heating timeout - 45 minutes	<ul style="list-style-type: none"> • The safety thermocouple has been triggered • The resistance is interrupted (cabling defect) • The Triac card is malfunctioning 	<ul style="list-style-type: none"> • Check if the safety thermostat has been triggered, and reset it if necessary • Check if there are interruptions or detached fastons on the cabling • Check that the boiler resistance is not interrupted and replace it if necessary • Replace the Triac card

MALFUN CODE	DESCRIPTION	POSSIBLE CAUSES	VERIFICATIONS and SOLUTIONS
(x)52*	Group x boiler heating timeout - 20 minutes (x = 1, 2, 3, 4) Note: Group 1 is to the far left.	<ul style="list-style-type: none"> The group x boiler safety thermostat has been triggered The resistance is interrupted (cabling defect). Triac board fault 	<ul style="list-style-type: none"> Check if the safety thermostat of the group x boiler has been triggered, and reset it if necessary Check if there are interruptions or detached fastons on the cabling Check that the group x boiler resistance is not interrupted and replace it if necessary Replace Triac board
053*	Steam thermocouple out of range	<ul style="list-style-type: none"> Thermocuple disconnected Wrong configuration during standard data insertion. 	<ul style="list-style-type: none"> Enter in the programming mode and insert the correct standard data.. Check connections. Replace the steam temperature probe.
058	Boiler overpressure alarm	<ul style="list-style-type: none"> Resistanc always powered. Temperature sensor out of range. 	<ul style="list-style-type: none"> Check cabling Replace the sensor
059	Boiler: Refill timeout - 15 minutes	<ul style="list-style-type: none"> No water Refill EV failure Wiring interrupted Card failure. 	<ul style="list-style-type: none"> Check water is supplied from the main line. Replace the refill EV. Check cabling. Replace the card.
060	Boiler-level signal errors.	<ul style="list-style-type: none"> Electrical fault. Leakage to earth. 	<ul style="list-style-type: none"> Check wiring. Check, by activating the components individually on the manual control panel, that the level signal does not show any anomalies (%).
062	Coffees dispensed for MM1 with flow under the limit (3 consecutive coffees dispensed)	<ul style="list-style-type: none"> coffee filter blocked coffee type changed qref calibration wrong grind too fine, excessive dose ground 	<ul style="list-style-type: none"> wash the group clean/replace the coffee filter use a coarser grind calibrate the machine correctly on the basis of the coffee/recipe
063	Coffees dispensed referred to MM1 with flow over the limit (3 consecutive coffees dispensed)	<ul style="list-style-type: none"> coffee type changed qref calibration wrong grinding too coarse grinder/dispenser blocked, insufficient dose of ground coffee 	<ul style="list-style-type: none"> check that there are no external elements in the grinders check that the measure grinder is working (pick-up current and fuses) use a finer grind calibrate the machine correctly on the basis of the coffee/recipe
064	Coffees dispensed referred to MM2 with flow under the limit (3 consecutive coffees dispensed)	<ul style="list-style-type: none"> coffee filter blocked coffee type changed qref calibration wrong grind too fine, excessive dose ground 	<ul style="list-style-type: none"> wash the group clean/replace the coffee filter use a coarser grind calibrate the machine correctly on the basis of the coffee/recipe
065	Coffees dispensed referred to MM2 with flow over the limit (3 consecutive coffees dispensed)	<ul style="list-style-type: none"> coffee type changed qref calibration wrong grinding too coarse grinder/dispenser blocked, insufficient dose of ground coffee 	<ul style="list-style-type: none"> check that there are no external elements in the grinders check that the measure grinder is working (pick-up current and fuses) use a finer grind calibrate the machine correctly on the basis of the coffee/recipe

MALFUN CODE	DESCRIPTION	POSSIBLE CAUSES	VERIFICATIONS and SOLUTIONS
(x)66	Error in the group that is dispensing. (x = 1, 2, 3, 4) Note: Group 1 is to the far left.		<ul style="list-style-type: none"> • Check water is supplied from the main line. • Check there are no fitting obstructions or leakage. • Check flowmeter electrical connections. • Replace the broken flowmeter. • Replace the broken board.
(x)70	Measure-grinder adjustment: Bluetooth set up by the technician. (x = 1, 2) MM1 > 170; MM2 > 270		Event only archived and not displayed on the display during normal machine operation.
082	Temporary communication problem with the keyboards/ TFT display.		<ul style="list-style-type: none"> • Check the insulation. • Check the wiring and connections.
083	Services key communication error	<ul style="list-style-type: none"> • Incorrect keyboard configuration (if applicable). • Wiring interrupted • Card failure. 	<ul style="list-style-type: none"> • Check that the dip switches are correctly configured on the key board (if applicable). • Check cabling • Replace key board
(x)83*	Group x (x = 1, 2, 3, 4) keypad communication error Note: Group 1 is to the far left. Communication error with light-module board (RGB) x = 5 or light/turbo-steam board.	<ul style="list-style-type: none"> • Incorrect keyboard configuration (if applicable). • Wiring interrupted • Card failure. 	<ul style="list-style-type: none"> • Check that the dip switches are correctly configured on the key board (if applicable). • Check cabling • Replace key board
(x)85*	Bluetooth communication error (x = 1, 2) MM1 > 185; MM2 > 285	<ul style="list-style-type: none"> • Incorrect association with measure grinder. • Measure grinder turned off. 	<ul style="list-style-type: none"> • Turn on the grinder. • Repeat device association.
089	NVM RAM data integrity error	<ul style="list-style-type: none"> • Incorrect association with measure grinder. • Measure grinder turned off. 	Turn the machine off and on again. If the error persists, replace the CPU board. Check the condition of the clock battery.
091*	No tank during milk washing cycle	Data integrity error in non-volatile RAM memory of the CPU board.	<ul style="list-style-type: none"> • Check the correct operation of the tank presence sensor on the manual control panel. • Check the wiring.
092	Request water softener resin regeneration	<ul style="list-style-type: none"> • Removal of tank during the wash. • Tank presence sensor faulty. 	<ul style="list-style-type: none"> • Softener maintenance.
093	Request replacement water filter		<ul style="list-style-type: none"> • Replace the water-softner filter
096	Maintenance needed		<ul style="list-style-type: none"> • The machine has displayed the message to warn the user that maintenance must be performed. Carry out maintenance operations.

MALFUN CODE	DESCRIPTION	POSSIBLE CAUSES	VERIFICATIONS and SOLUTIONS
097*	Reset standard password	• Action desired by the user by entering the special code (applicable only for machines with TFT display).	
098	Historical malfunctions and wash 1 reset	• Initialisation malfunction history (and washing history for machines without TFT display)	• Event only archived and not displayed on the display during normal machine operation.
099	Default data input		
282	Keypad reset operation carried out by CPU board due to repeated communication problems.		<ul style="list-style-type: none"> • Check the insulation. • Check the wiring and connections.

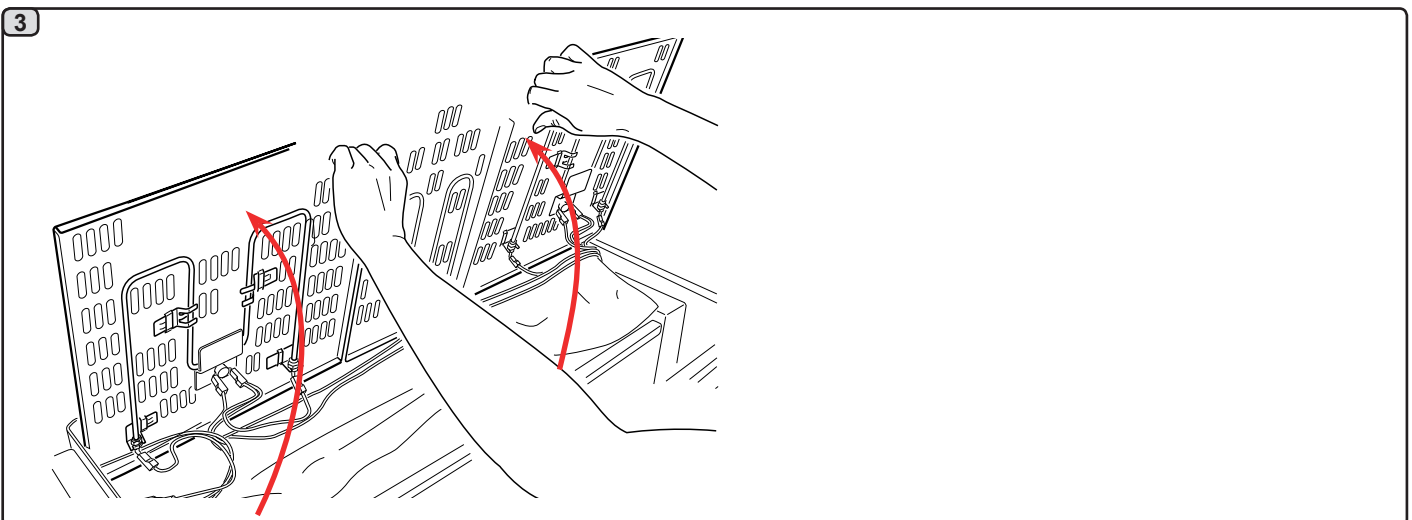
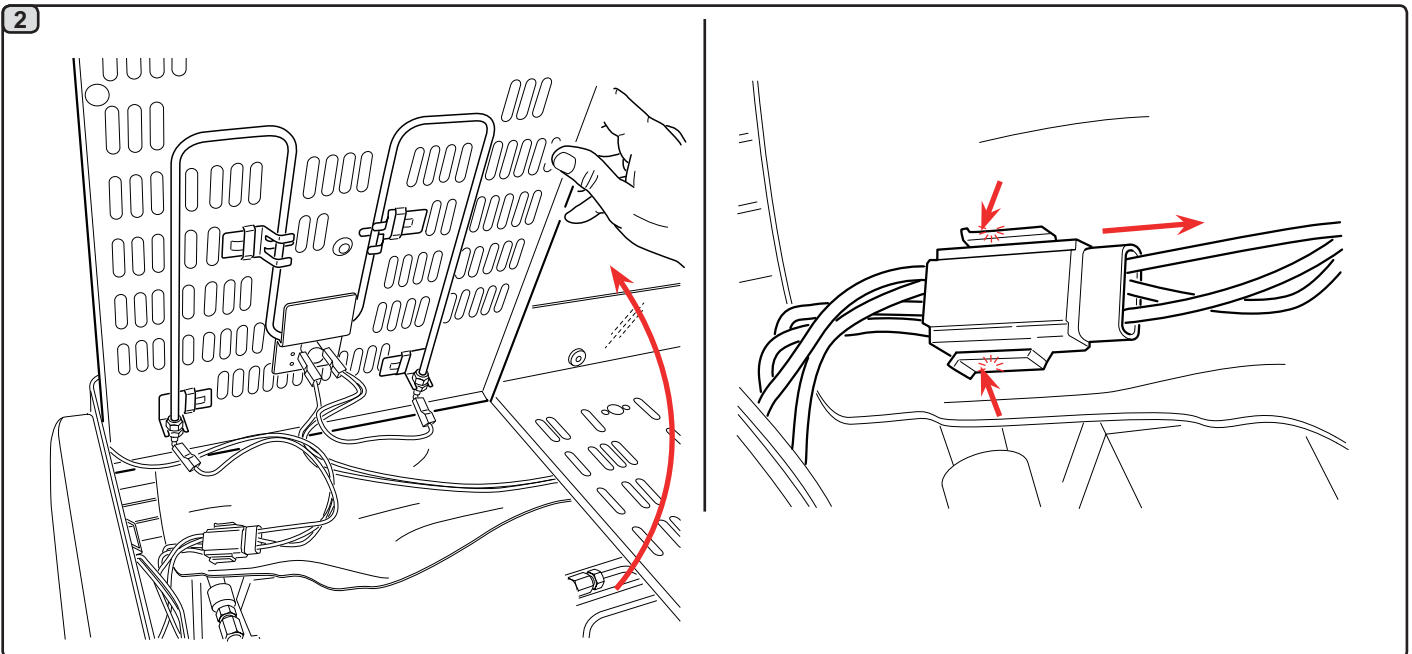
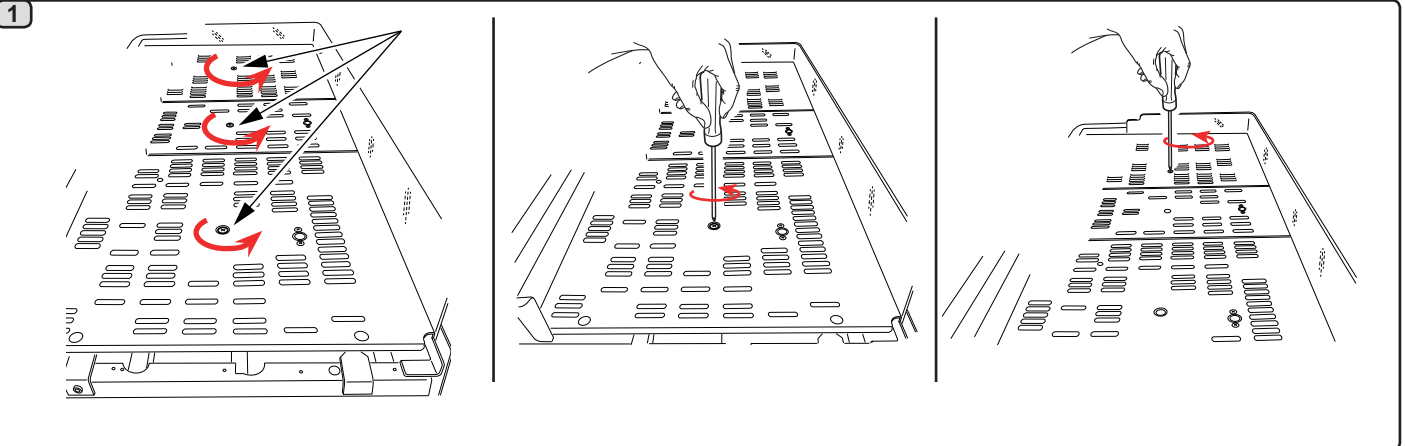
Faults - * - appear only in some produit configurations.

DISASSEMBLY AND SETTING

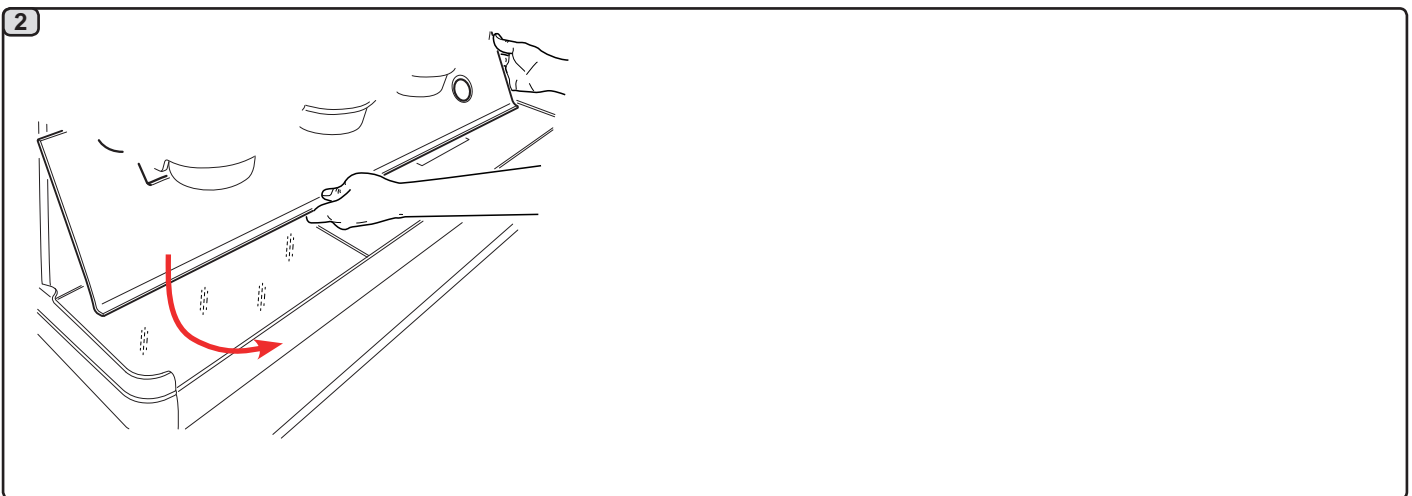
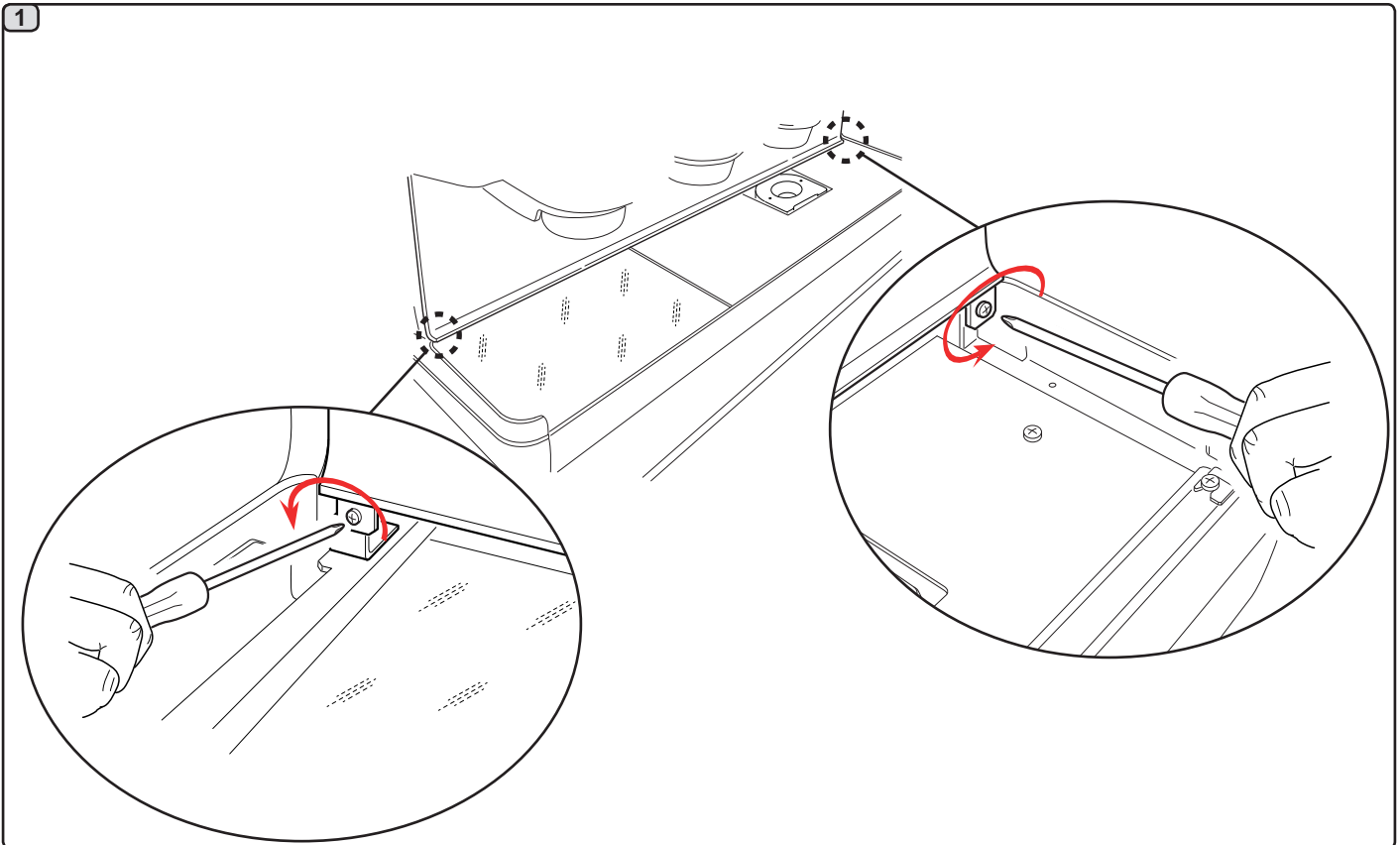
ALL OPERATIONS MUST BE PERFORMED WITH THE MACHINE OFF.

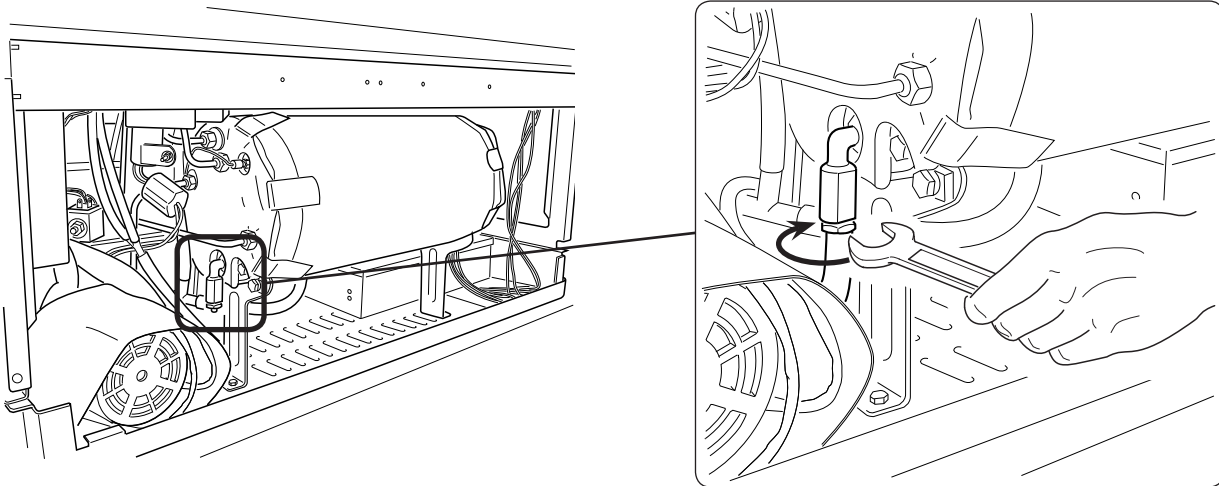
10. Cup Warmer

English



11. Stainless steel front panel

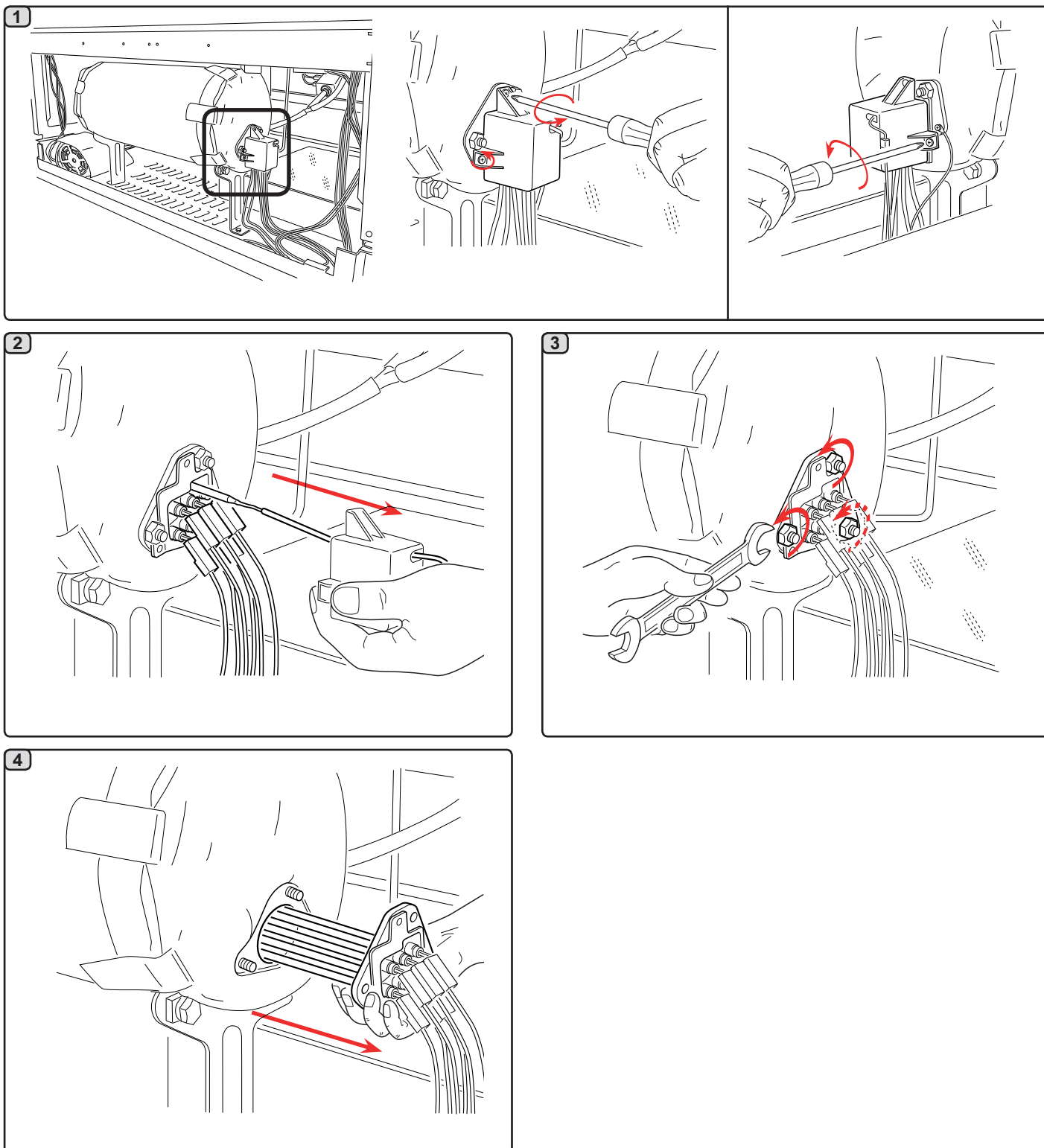


12. Draining the boiler water**English**

Slip a tube on the drain fitting and turn the nut in the direction indicated in the future.

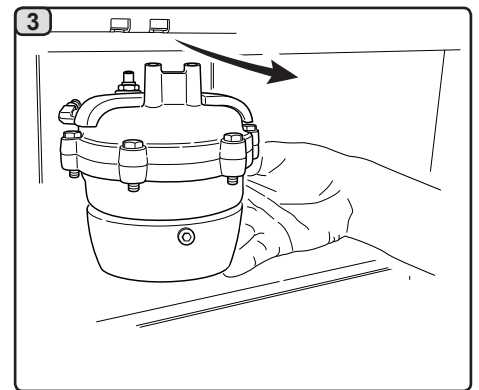
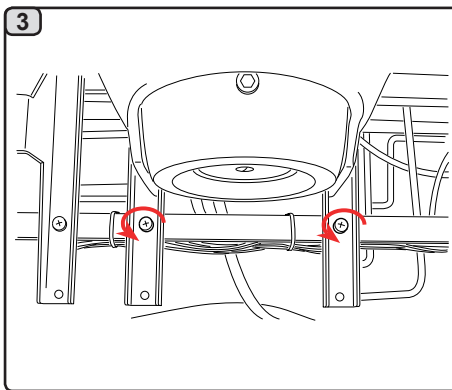
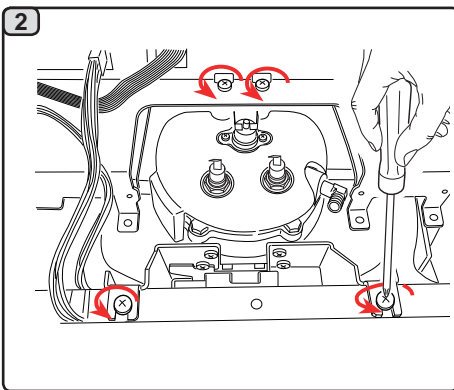
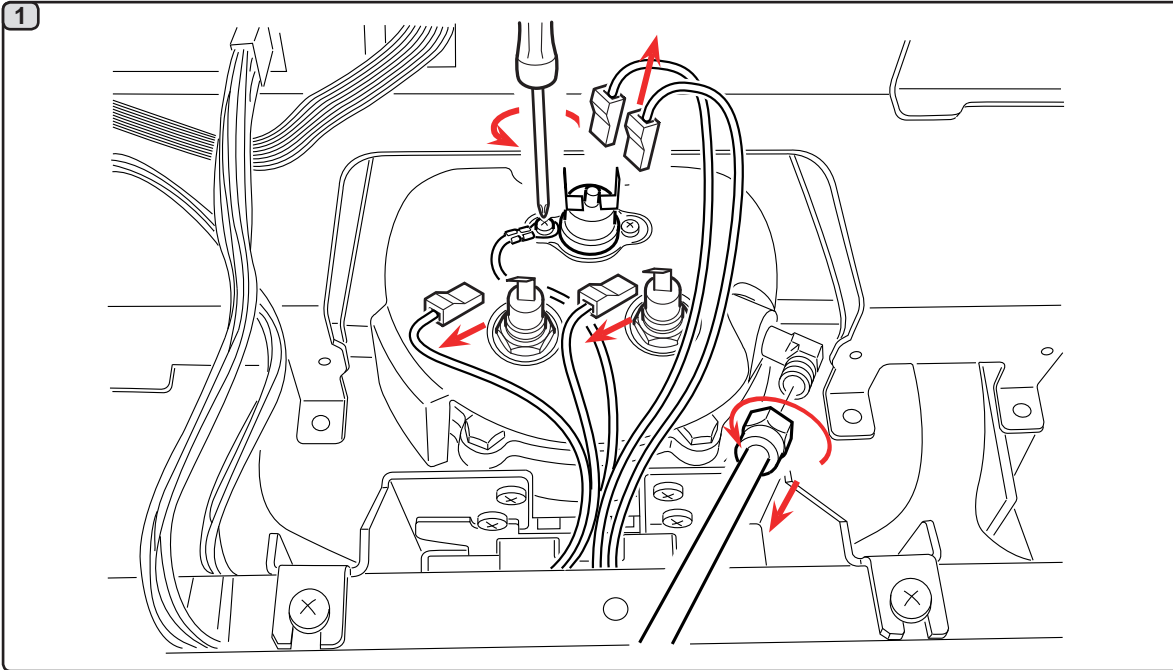
13. Removing the boiler heating element

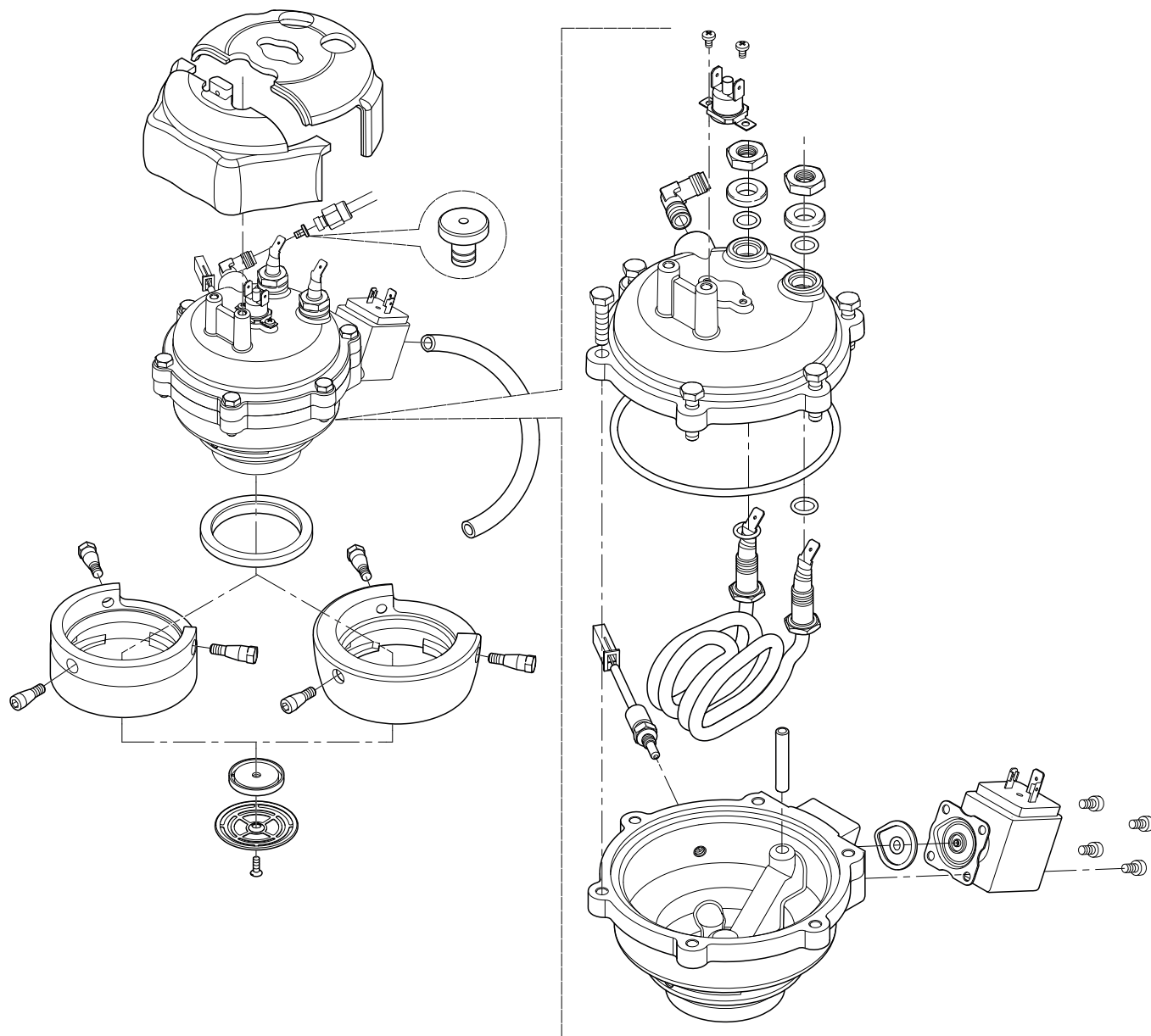
Remove the resistance only after emptying the boiler.



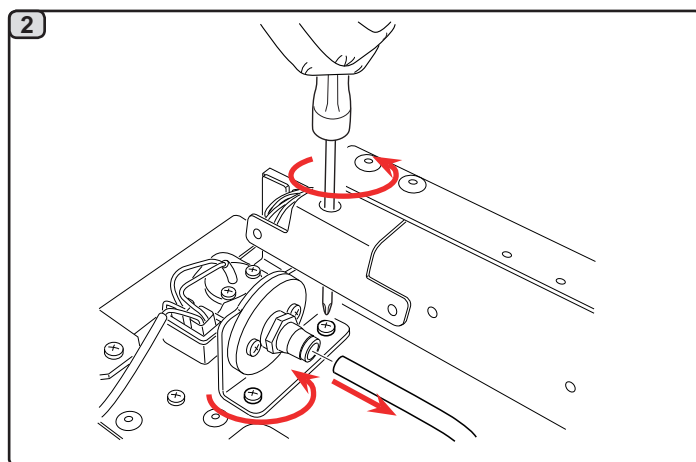
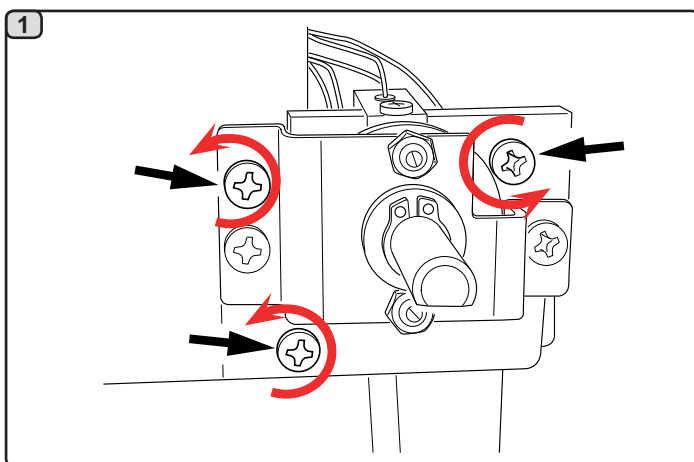
14. Coffee boiler

English

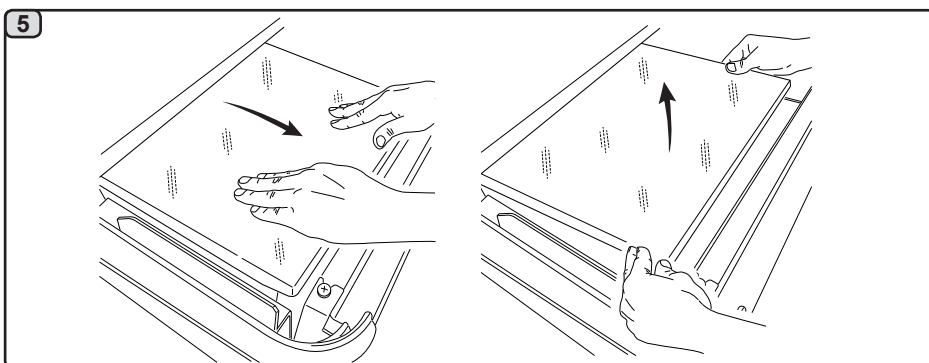
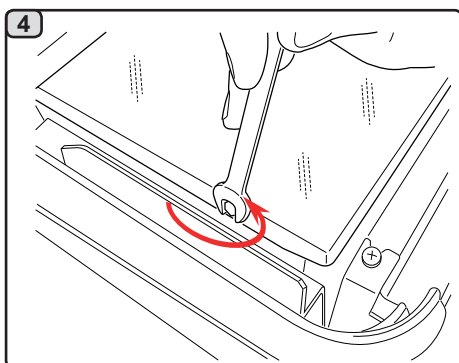
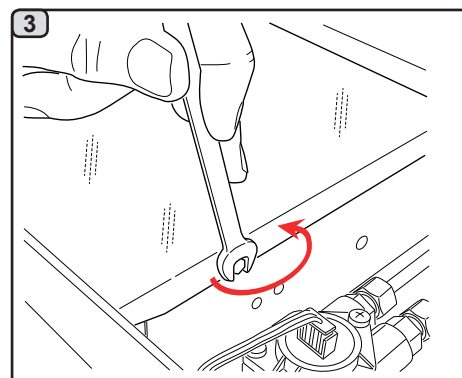
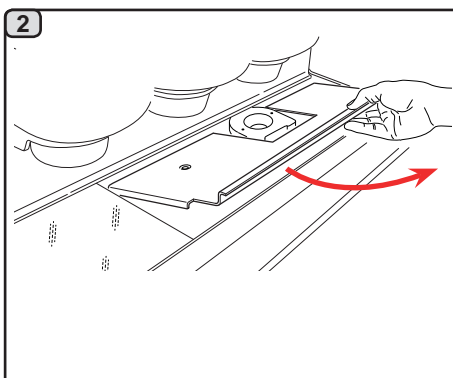
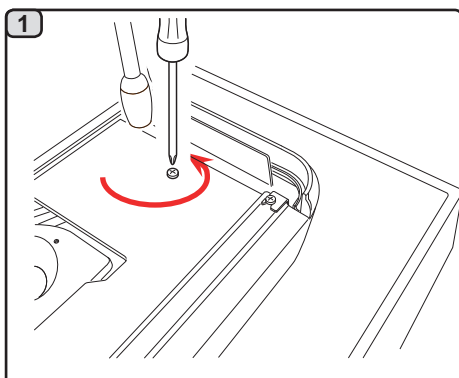




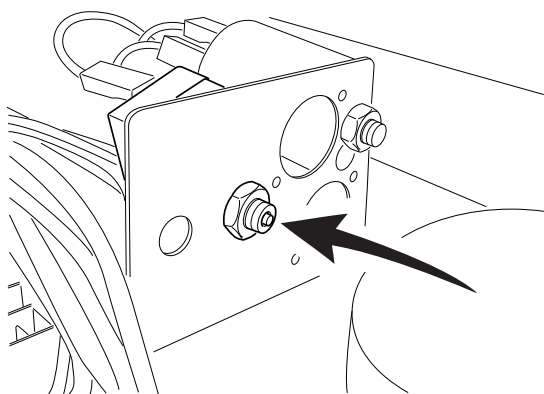
15. Turbosteam control and lance



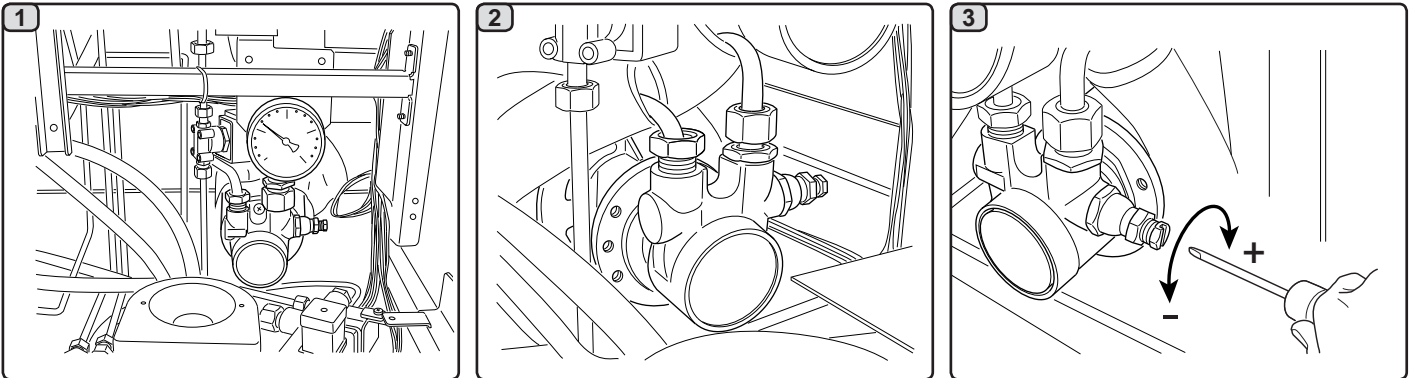
16. Junction Box



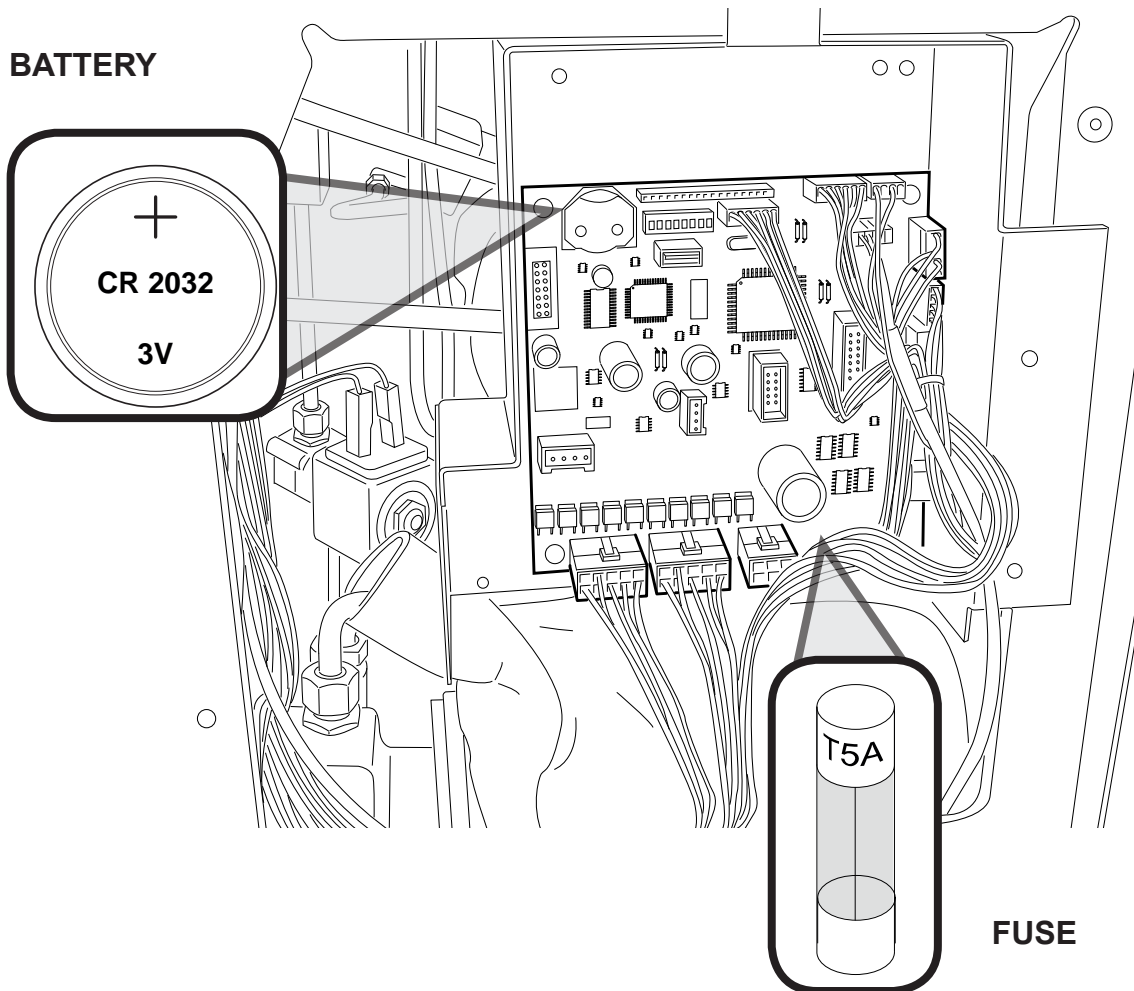
17. Safety thermostat



18. Peristaltic pump



19. Battery - Fuse



Regolazioni - Setting - Reglages - Einstellungen - Regulaciones - Regulações

Chiudere il rubinetto di alimentazione idrica.

Close the water tap.

Fermer le robinet d'alimentation hydrique.

Sperren sie den hahn zur wasserversorgung ab.

Cerrar el grifo de alimentación hídrica.

Fechar a torneira de alimentação hídrica.

IT REGOLAZIONE DELLA TEMPERATURA DELL'ACQUA CALDA

Per variare la temperatura, dell'acqua sostituire l'ugello (A) da 0,6 montato, con quello da 0,8 in dotazione.

EN ADJUSTMENT OF HOT WATER TEMPERATURE

Per variare la temperatura, dell'acqua sostituire l'ugello (A) da 0,6 montato, con quello da 0,8 in dotazione.

FR REGLAGE DE LA TEMPERATURE DE L'EAU CHAUDE

Per variare la temperatura, dell'acqua sostituire l'ugello (A) da 0,6 montato, con quello da 0,8 in dotazione.

DE REGELUNG DER HEISSWASSTERTEMPERATUR

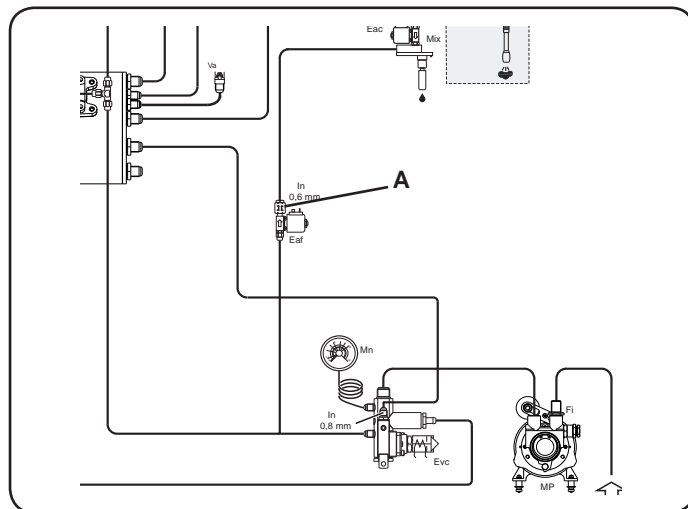
Per variare la temperatura, dell'acqua sostituire l'ugello (A) da 0,6 montato, con quello da 0,8 in dotazione.

ES REGULACIÓN DE LA TEMPERATURA DEL AGUA CALIENTE

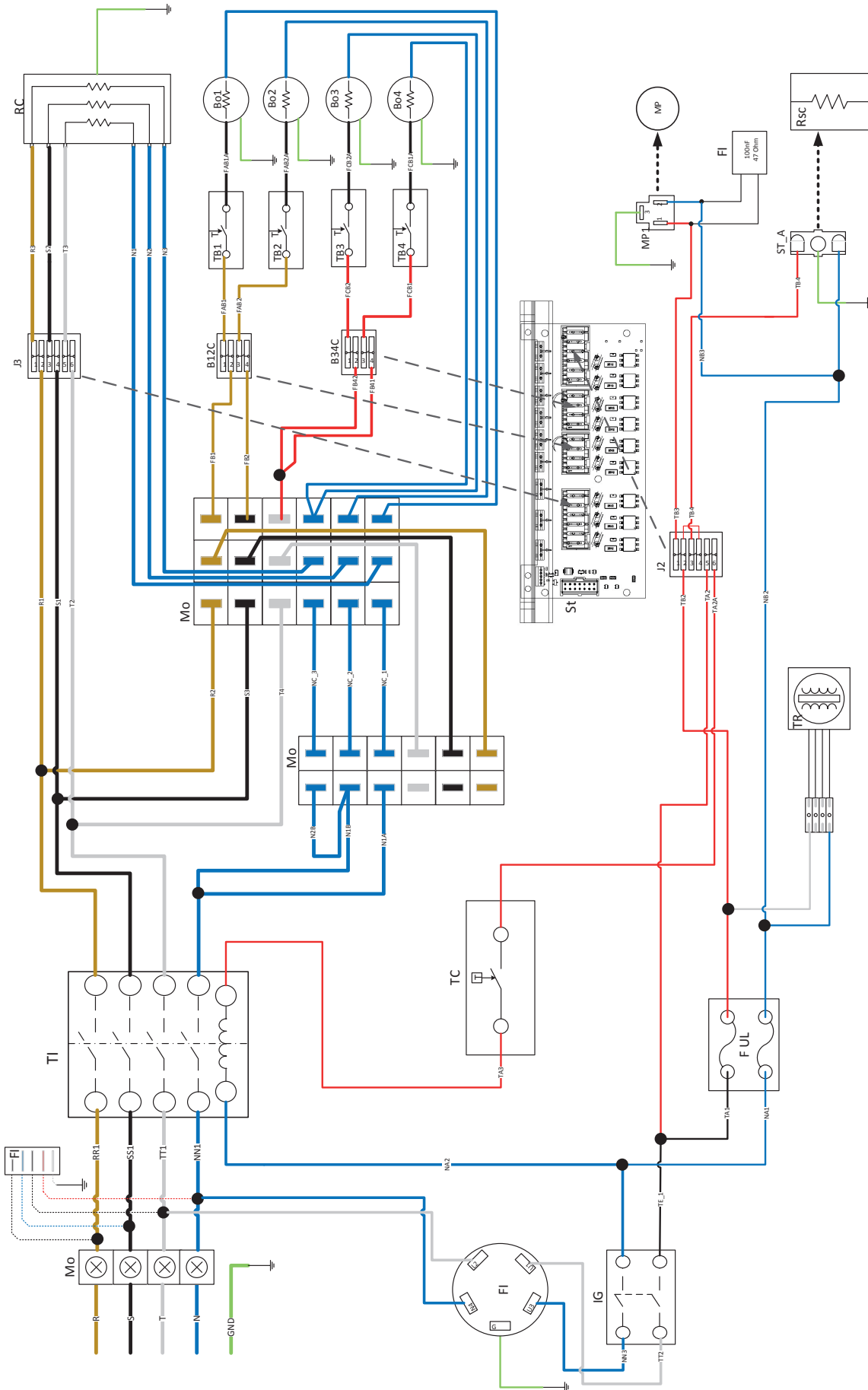
Per variare la temperatura, dell'acqua sostituire l'ugello (A) da 0,6 montato, con quello da 0,8 in dotazione.

PT REGULAÇÃO DA TEMPERATURA DA ÁGUA QUENTE

Per variare la temperatura, dell'acqua sostituire l'ugello (A) da 0,6 montato, con quello da 0,8 in dotazione.

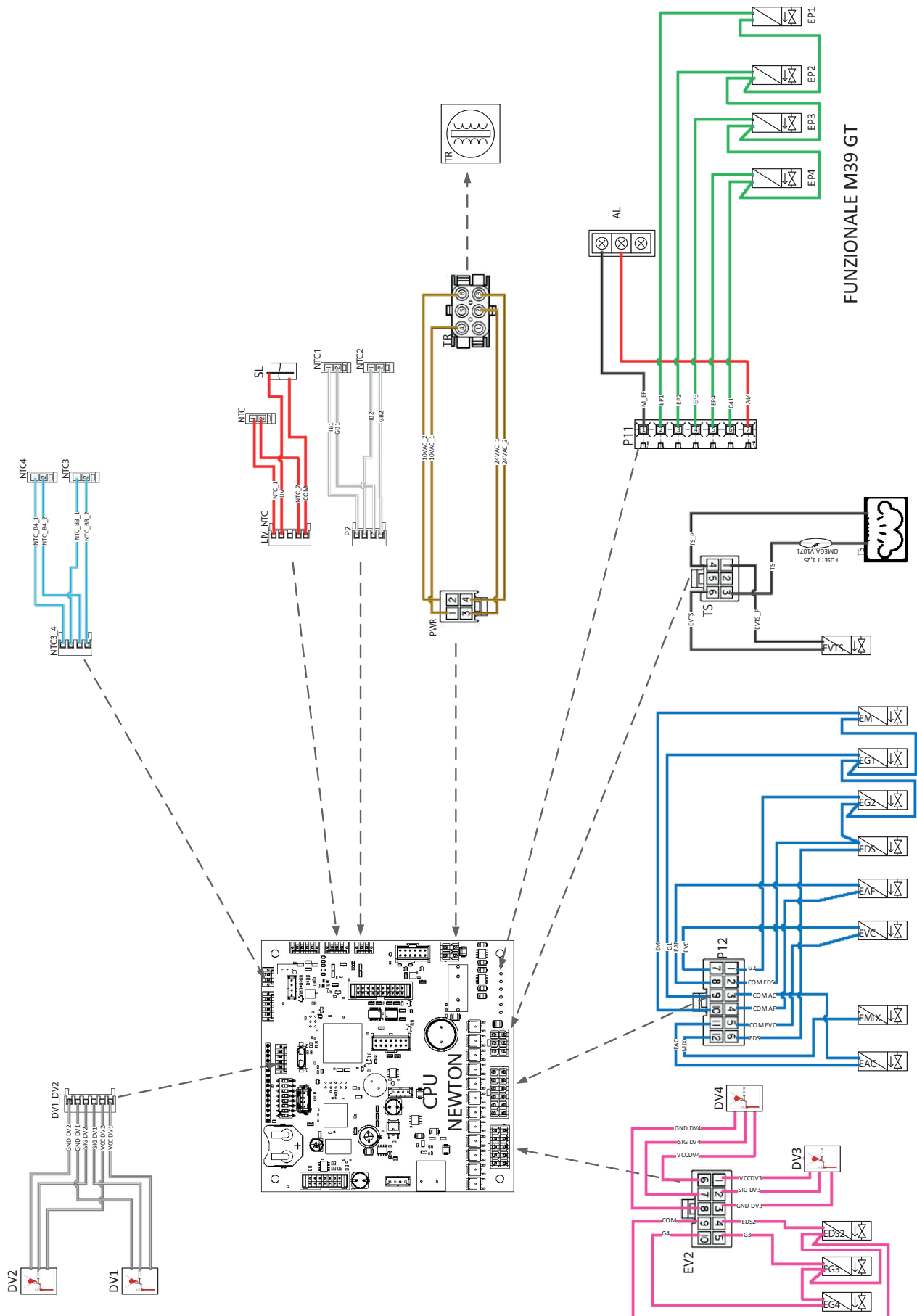


Schema elettrico - Wiring diagram - Schéma électrique -
Elektrischer Schaltplan - Esquema electrico - Esquema eléctrico

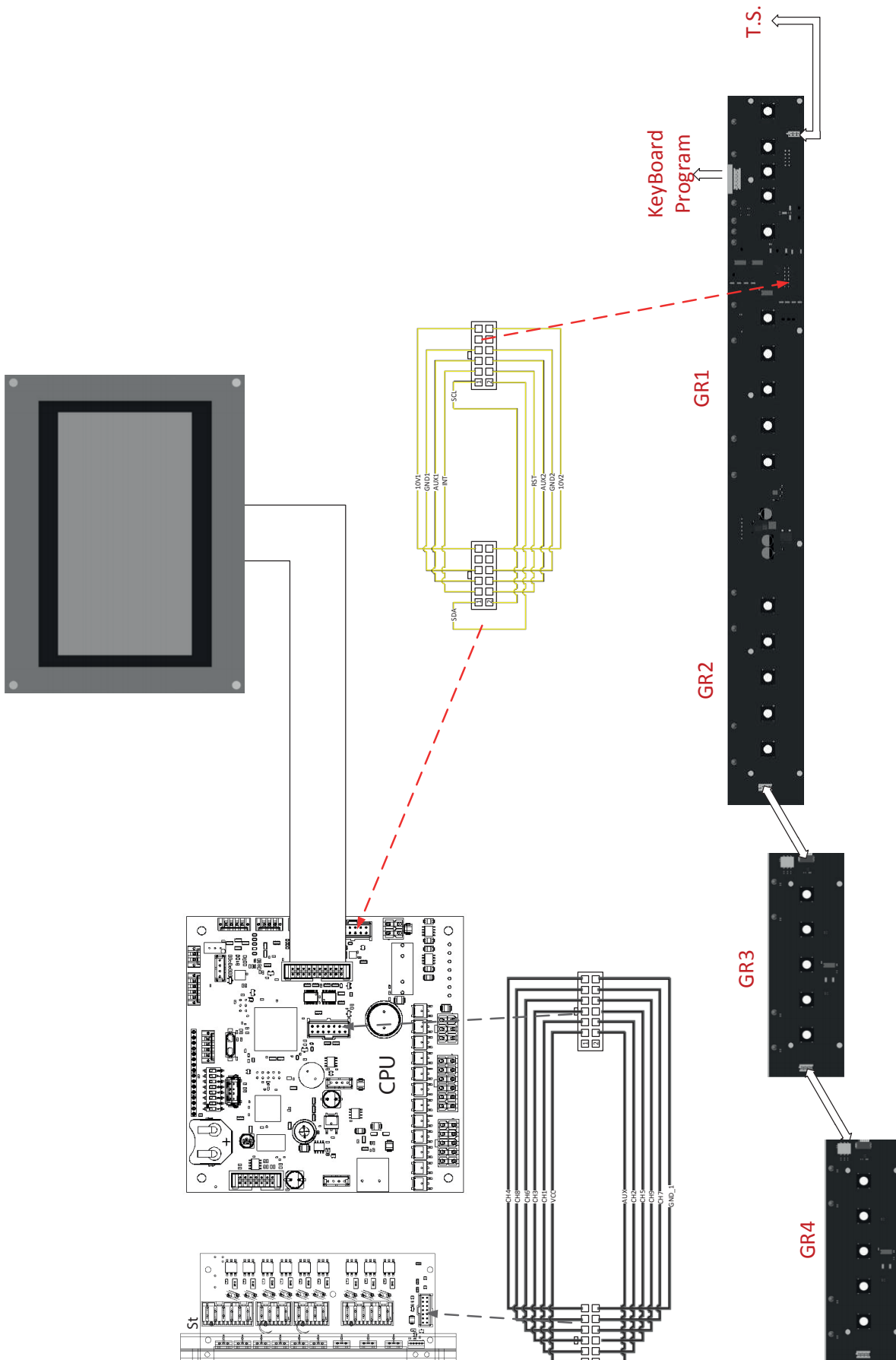


FUNZIONALE M39 GT - AT

Schema elettrico - Wiring diagram - Schéma électrique -
Elektrischer Schaltplan - Esquema electrico - Esquema eléctrico



Schema elettrico - Wiring diagram - Schéma électrique -
Elektrischer Schaltplan - Esquema electrico - Esquema eléctrico



FUNZIONALE M39 GT

English

**Legenda schema elettrico - Wiring diagram key - Légende du schéma électrique -
Legende Schaltplan - Leyenda de esquema eléctrico - Legenda esquema elétrico**

English

IT Legenda

Bo.. = Boiler
DV.. = Contatore volumetrico
Fi = Filtro
IG = Interruttore generale
Mo = Morsettiera
MP = Motore pompa
RB... = Resistenza boiler caffè
RC = Resistenza caldaia
Rsc = Resistenza scaldatazze
St = Scheda triac
TC = Termostato di sicurezza caldaia servizi
TB... = Termostato di sicurezza boiler caffè
TI = Teleruttore
TR = Trasformatore
TS = Turbosteam

EN Legend

Bo.. = Boiler
DV.. = Flowmeter
Fi = Filter
IG = Main switch
Mo = Terminal strip
MP = Piston motor
RB... = Boiler heating element
RC = Service-boiler heating element
Rsc = Cup-heater heating element
St = Triacs board
TC = Service-boiler supply security thermostat
TB... = Boiler security thermostat
TI = Remote-control switch
TR = Transformer
TS = Turbosteam

FR Legende

Bo.. = Boiler
DV.. = Compteur volumétrique
Fi = Filter
IG = Interrupteur général
Mo = Bornier
MP = Moteur piston
RB... = Résistance Chauffe-eau
RC = Résistance Chaudière services
Rsc = Résistance chauffe-tasses
St = Carte triac
TC = Thermostat de sécurité Chaudière services
TB... = Thermostat de sécurité Chauffe-eau
TI = Contacteur
TR = Transformateur
TS = Turbosteam

DE Legende

Bo.. = Boiler
DV.. = Volumenzähler
Fi = Filter
IG = IHauptschalter
Mo = Klemmleiste
MP = Kolbenmotor
RB... = Widerstand Boiler
RC = Widerstand Heizkessel
Rsc = Heizwiderstand Tassenwärmer
St = Triac-Platine
TC = Heizkessel-Sicherheitsthermostat
TB... = Boiler-Sicherheitsthermostat
TI = Schütz
TR = Transformator
TS = Turbosteam

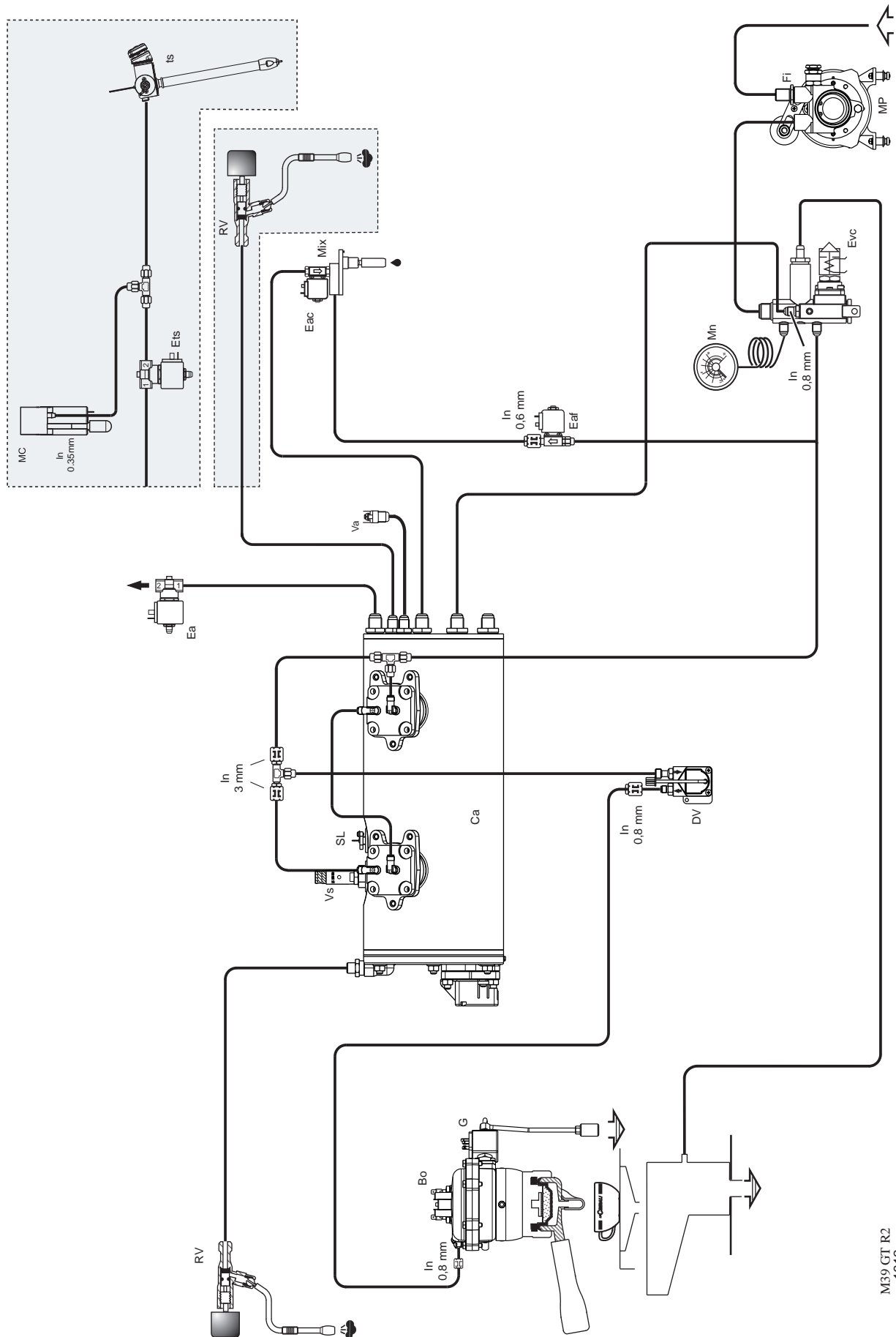
ES Leyenda

Bo.. = Boiler
DV.. = Contador volumétrico
Fi = Filtro
IG = Interruptor general
Mo = Bornera
MP = Motor pistón
RB... = Resistencia calentador
RC = Resistencia caldera servicios
Rsc = Resistencia caliente-tazas
St = Tarjeta triac
TC = Termostato de seguridad caldera servicios
TB... = Termostato de seguridad calentador
TI = Telerruptor
TR = Transformador
TS = Turbosteam

PT Legenda

Bo.. = Boiler
DV.. = Contador volumétrico
Fi = Filtro
IG = Interruptor geral
Mo = Placa de junções
MP = Motor do pistão
RB... = Resistência do boiler
RC = Resistência da caldeira de serviços
Rsc = Resistência do aquecedor de chávenas
St = Placa triac
TC = Termóstato de segurança da caldeira de serviços
TB... = Termóstato de segurança do boiler
TI = Telerruptor
TR = Transformador
TS = Turbosteam

**Circuito idraulico - Hydraulic circuit - Circuit hydraulique
Hydraulikplan - Circuito hidraulico - Circuito hidráulico**



M39 GT R2
1612

**Legenda schema idraulico - Hydraulic diagram Legend - Legende du schema hydraulique
- Legende zu wasserkreis - Leyenda esquema hidraulico - Legenda esquema hidráulico**

IT Legenda

Bo = Boiler
Ca = Caldaia
DV = Dosatore volumetrico
Ea = Elettrovalvola antirisucchio
Eac = Elettrovalvola acqua calda
Eaf = Elettrovalvola acqua fredda
Ets = Elettrovalvola turbosteam
Evc = Elettrovalvola carico caldaia
Fi = Filtro pompa
G = Elettrovalvola caffè
In = Iniettore
MC = Motore compressore
Mix = Miscelatore acqua
Mn = Manometro
MP = Pompa volumetrica/ Motore pompa
RV = Rubinetto vapore
SL = Sonda livello caldaia
ts = Selettore turbosteam
Va = Valvola antirisucchio
Vs = Valvola di sicurezza caldaia

EN Legend

Bo = Boiler
Ca = Boiler
DV = Volumetric meter (flowmeter)
Ea = Anti-suction solenoid valve
Eac = Hot water solenoid valve
Eaf = Cold water solenoid valve
Ets = Turbosteam solenoid valve
Evc = Service boiler water inlet solenoid valve
Fi = Pump filter
G = Coffee solenoid valve
In = Injector
MC = Compressore motor
Mix = Water mixer
Mn = Pressure gauge
MP = Volumetric pump/ Motor pump
RV = Steam tap
SL = Boiler level probe
ts = Turbosteam selector
Va = Anti-suction valve
Vs = Boiler safety valve

FR Legende

Bo = Chauffe-eau
Ca = Chaudière
DV = Doseur volumétrique
Ea = Electrovanne fausse pression
Eac = Electrovanne eau chaude
Eaf = Electrovanne eau froide
Ets = Electrovanne turbosteam
Evc = Electrovanne de remplissage chaudière
Fi = Filtre pompe
G = Electrovanne du café
In = Injecteur
MC = Moteur compresseur
Mix = Mélangeur eau
Mn = Manomètre
MP = Pompe volumétrique/ Moteur pompe
RV = Robinet vapeur
SL = Sonde de niveau de la chaudière
ts = Sélecteur turbosteam
Va = Clapet fausse pression
Vs = Soupape de sécurité chaudière

DE Legende

Bo = Boiler
Ca = Kessel
DV = Mengenzähler
Ea = Rücksaugschutz Magnetventil
Eac = Heißwasser-Magnetventil
Eaf = Magnetventil Kaltwasser
Ets = Magnetventil turbosteam
Evc = Wasserzugabe-Magnetventil
Fi = Filter Pumpe
G = Kaffee-Magnetventil
In = Düse
MC = Motor Kompressor
Mix = Wassermischer
Mn = Manometer
MP = Volumetrische Pumpe/ Pumpenmotor
RV = Dampfhahn
SL = Sonde-Kesselwasserniveau
ts = Wahlschalter Turbosteam
Va = Rücksaugschutzventil
Vs = Heizkessel-Sicherheitsventil

ES Leyenda

Bo = Calentador
Ca = Caldeira
DV = Dosificador volumétrico
Ea = Electroválvula antisucción
Eac = Electroválvula agua caliente
Eaf = Electroválvula agua fría
Ets = Electroválvula turbosteam
Evc = Electroválvula carga caldera
Fi = Filtro bomba
G = Electroválvula café
In = Inyector
MC = Motor compresor
Mix = Economizador
Mn = Manómetro
MP = Bomba volumétrica/ Motor bomba
RV = Grifo vapor
SL = Sonda nivel
ts = Selector turbosteam
Va = Válvula antisucción
Vs = Válvula de seguridad caldera

PT Legenda

Bo = Boiler
Ca = Caldeira
DV = Doseador volumétrico
Ea = Electroválvula antisucción
Eac = Electroválvula água quente
Eaf = Electroválvula água fria
Ets = Electroválvula turbosteam
Evc = Electroválvula carregamento caldeira
Fi = Filtro bomba
G = Elètroválvula café
In = Injetor
MC = Motor compressor
Mix = Misturador
Mn = Manômetro
MP = Bomba volumétrica/ Motor da bomba
RV = Torneira do vapor
SL = Sonda nível
ts = Selector turbosteam
Va = Válvula andisucção
Vs = Válvula segurança de mola

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