

*LA***CIMBALI**

M39 Dosatron TE

MANUALE DEL TECNICO

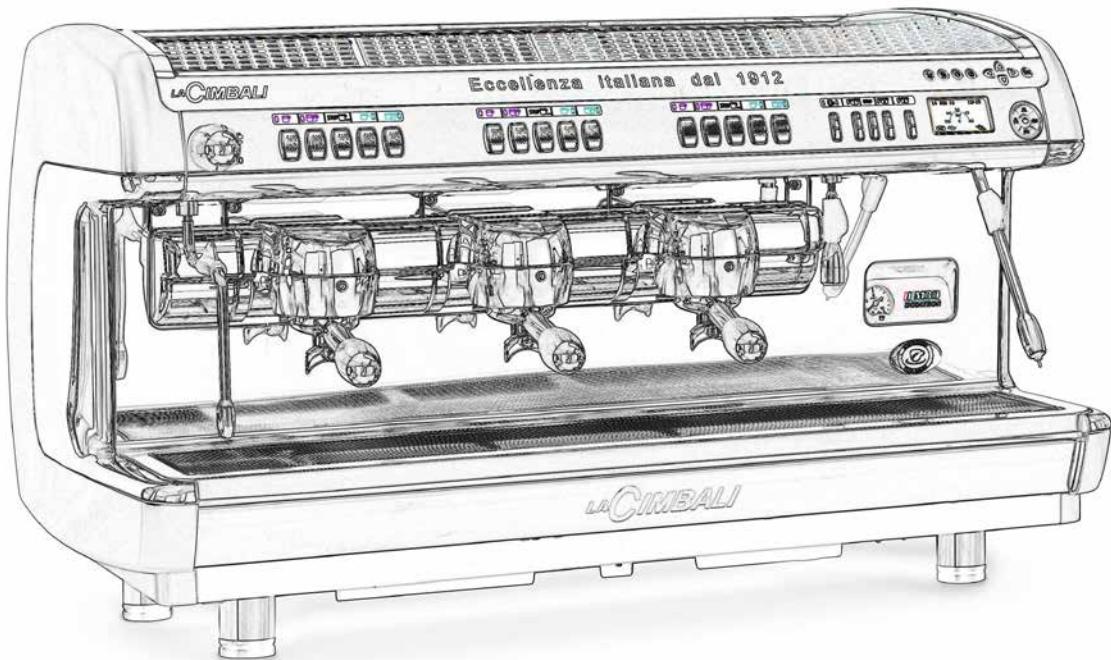
ENGINEER'S MANUAL

MANUEL DU TECHNICIEN

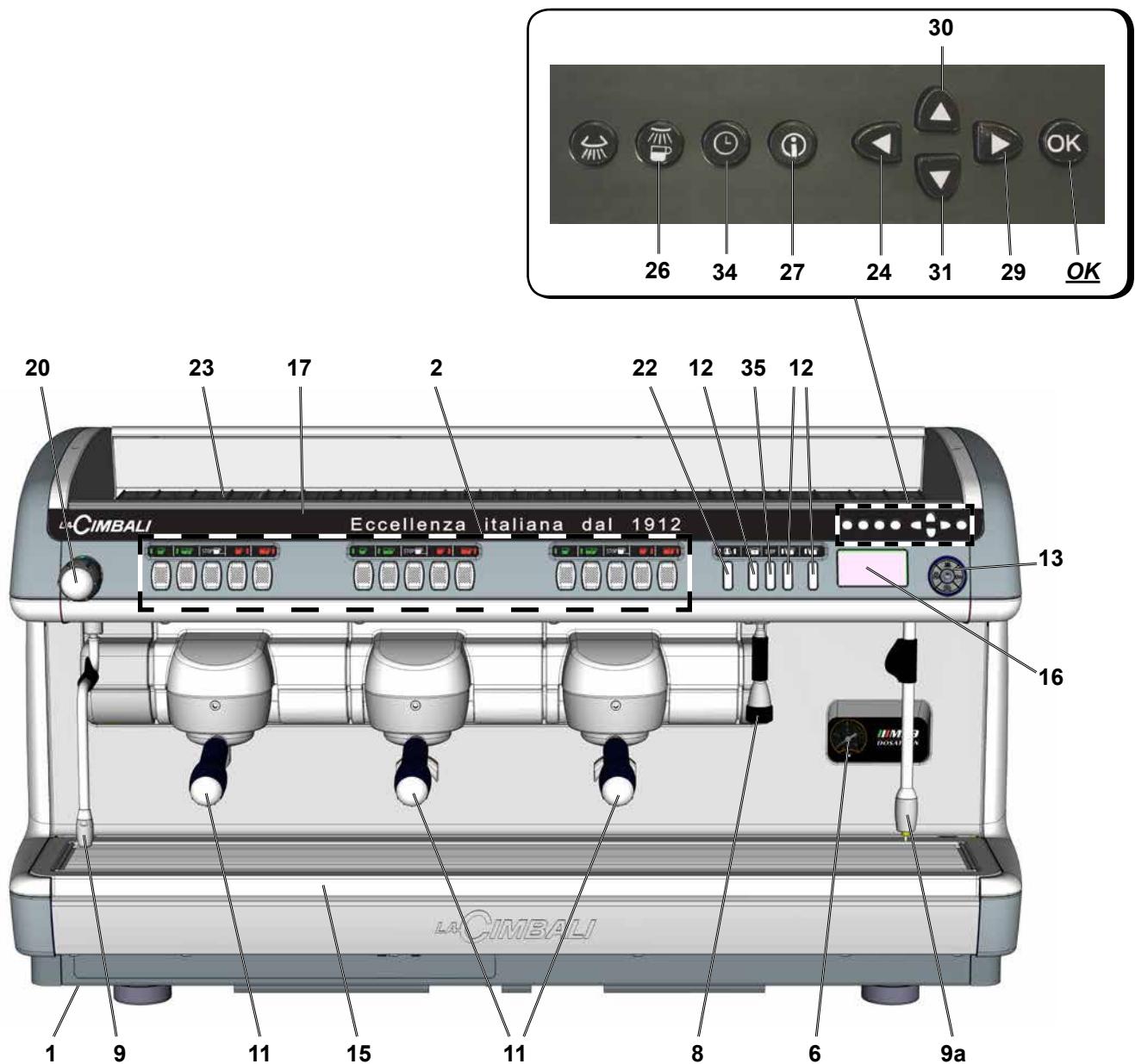
TECHNIKERHANDBUCH

MANUAL DEL TÉCNICO

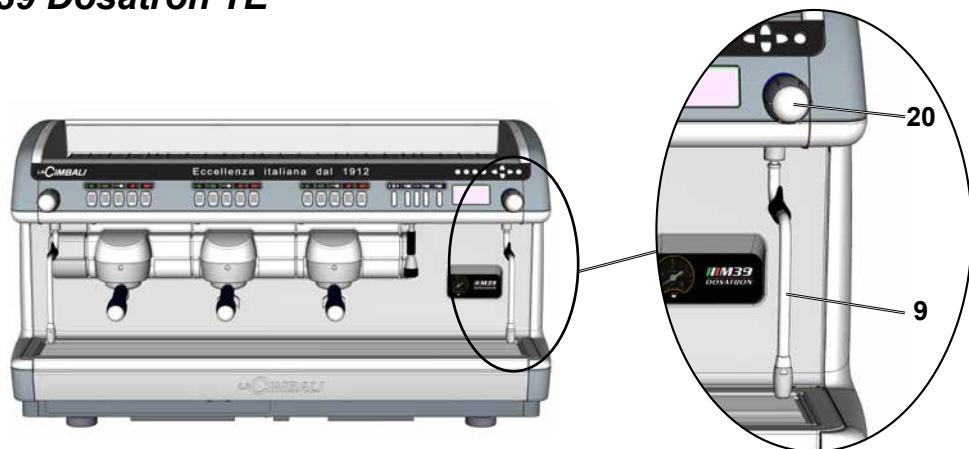
MANUAL DO TÉCNICO



M39 Dosatron TE TS



M39 Dosatron TE



IT LEGENDA

- 1** Interruttore generale
2 Tastiera di selezione
6 Manometro pompa
8 Erogatore acqua calda
9 Tubo (lancia) vapore
9a Tubo (lancia) Turbosteam
11 Portafiltro
12 Pulsante acqua calda
13 Selettore Turbosteam
15 Bacinella appoggiatezze
16 Display grafico
17 Display pubblicitario (*)
20 Manopola erogazione vapore
22 Pulsante scaldatazzze elettrico (*)
23 Piano scaldatazzze (*)
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
- OK** Pulsante conferma dati immessi
I componenti - * - sono applicati solo in alcune configurazioni di prodotti.

EN LEGEND

- 1** Main Switch
2 Selection panel
6 Pump Pressure Gauge
8 Hot water outlet
9 Steam pipe
9a Turbosteam 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 Cup warmer tray (*)
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

OK Button to confirm data entered
The components - * - are fitted in some product configurations only.

FR LEGENDE

- 1** Interrupteur général
2 Plaque à touches sélections
6 Manomètre pompe
8 Bec débit eau chaude
9 Tuyau de la vapeur
9a Tuyau Turbosteam
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 programation / données introduites non valables)
26 Touches de lavage du circuit café
27 Touches "I" (affiche nombre des cycles)
29 Touches ▶(entrer en programation/menu)
30 Bouton ▲ (modifier les paramètres / horloge)
31 Bouton ▼ (modifier les paramètres / horloge)
34 Touche "PARAMÉTRES CLIENT"
35 Touche "STOP-CONTINU" eau chaude

OK Bouton de confirmation des informations saisies
Les composants - * - ne sont appliqués que sur certaines configurations de produits.

DE LEGENDE

- 1** Hauptschalter
2 Wahlstellen
6 Manometer Pumpe
8 Heißwasserausgabe
9 Dampfausgaberohr
9a Dampfausgaberohr Turbosteam
11 Filterhalter
12 Heißwasser-Drucktaste
13 Wahlschalter Turbosteam
15 Auffangschale
16 Grafikdisplay
17 Werbedisplay (*)
20 Drehknopf Dampfabgabe
22 Schalter elektrischer Tassenvorwärmert (*)
23 Fläche zur Tassenvorwärmung (*)
24 Taste ▶(Verlassen der Programmierung / Löschen der eingegebenen Daten)
26 Taste zum Durchspülendes Kaffeekreislaufs
27 Taste „I“ (Anzeige der Zyklus-Nr.)
29 Taste ▶(Zugriff auf Programmierung/Menü)
30 Taste ▲(Parameter / Uhrzeit ändern)
31 Taste ▼(Parameter / Uhrzeit ändern)
34 Taste „KUNDENPARAMETER“
35 Taste „STOP-KONTINUIERLICHE“ Heißwasserabgabe
- OK** Taste zum Bestätigen der eingegebenen Daten
Die mit - * - gekennzeichneten Bauteile sind nur in bestimmten Modellen installiert.

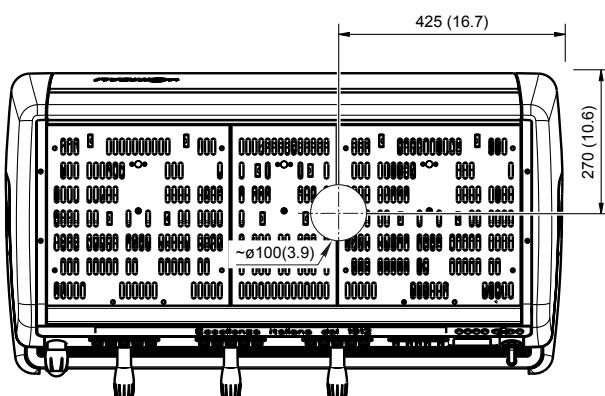
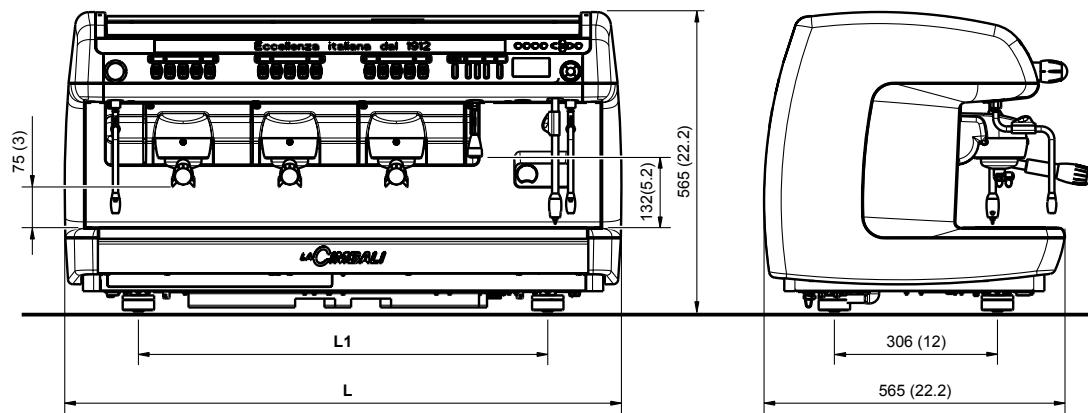
ES LEYENDA

- 1** Interruptor general
2 Teclado de selección
6 Manómetro bomba
8 Erogador agua caliente
9 Tubo vapor
9a Tubo vapor Turbosteam
11 Portafiltro
12 Botón erogación agua caliente
13 Selector turbosteam
15 Bandeja
16 Display gráfico
17 Display publicitario (*)
20 Empuñadura erogación vapor
22 Botón caliente-tazas electrico (*)
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
- OK** Botón para confirmar los datos introducidos
Los componentes - * - solo pueden aplicarse en algunas configuraciones de productos.

PT LEGENDA

- 1** Interruptor geral
2 Teclado de selecção
6 Manómetro da bomba
8 Distribuidor de água quente
9 Tubo do vapor
9a Tubo do vapor Turbosteam
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 esquenta-chavenas electrico (*)
23 Grelha para esquentar chávenas (*)
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
- OK** Botão confirmação dados inseridos
Os componentes - * - são aplicados apenas em algumas configurações de produtos.

| PED / DESP | P _{max} [bar] | T _{max} [°C] | tipo di macchina type of machine type de la machine Maschinentyp modelo de la máquina tipo de la máquina | 2 gruppi 2 groups 2 groupes 2 Einheiten 2 grupos 2 grupos | 3 gruppi 3 groups 3 groupes 3 Einheiten 3 grupos 3 grupos | 4 gruppi 4 groups 4 groupes 4 Einheiten 4 grupos 4 grupos |
|---|-----------------------------|----------------------------|---|--|--|--|
| | | | Fluido - Fluid - Fluide Flüssigkeit - Fluido - Fluido | Capacità - Capacity - Capacité [L] Fassungsvermögen - Capacidad - Capacidad | | |
| Caldaia Service boiler Chaudière Heizkessel Caldera Caldeira | 2 bar | 133° C | acqua/vapore water/steam eau/vapeur Wasser/Dampf agua/vapor áqua/vapor | 5 - 11 | 15 | 20 |
| Scambiatore Heat exchanger Échangeur de chaleur Wärmeaustauscher Intercambiador de calor Permutador de calor | 12 bar | 133° C | acqua water eau Wasser agua áqua | 0.18 - 0.25 x 2 | 0.18 - 0.25 x 3 | 0.18 - 0.25 x 4 |



| DIMENSIONS | | | |
|---------------------|-------------|--------------|--------------|
| | 2 gr. | 3 gr. | 4 gr. |
| L mm inches | 855 33.7 | 1055 41.5 | 1255 49.4 |
| L1 mm inches | 568 22.4 | 768 30.2 | 968 38.1 |
| Weight Kg pounds | 86 190 | 104 229 | 125 276 |

| MACHINE | POWER SUPPLY | INSTALLED POWER | LINE POWER | SUPPLY CABLE SECTION |
|---------|--------------------|--------------------------|-------------------------|--|
| 2 GR. | 380-415V3N 50/60Hz | 4.2-5.0 kW | 9A | 5x1,5 mm ² or 5x2,5 mm ² |
| | 220-240V3 50/60Hz | | 12A | 4x2,5 mm ² |
| | 220-240V 50/60Hz | 4.2-5.0 kW or 3.0-3.5 kW | 21A (power reduced 13A) | 3x4 mm ² or 3x6 mm ² |
| 3 GR. | 380-415V3N 50/60Hz | 6.3-7.5 kW | 11A | 5x1,5 mm ² or 5x2,5 mm ² |
| | 220-240V3 50/60Hz | | 19A | 4x2,5 mm ² |
| | 220-240V 50/60Hz | | 31A | 3x4 mm ² or 3x6 mm ² |
| 4 GR. | 380-415V3N 50/60Hz | 6.3-7.5 kW | 11A | 5x1,5 mm ² or 5x2,5 mm ² |
| | 220-240V3 50/60Hz | | 19A | 4x2,5 mm ² |
| | 220-240V 50/60Hz | | 31A | 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 - Ø 3/8 gas

HYDRAULIC FEEDING PRESSURE - 0 ÷ 6 bar (0.6 MPa)

WATER DISCHARGE - Ø 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.

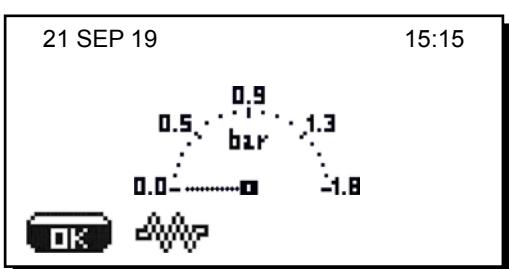
-  **Note: the customer cannot switch on or switch off the electric heating.**

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).

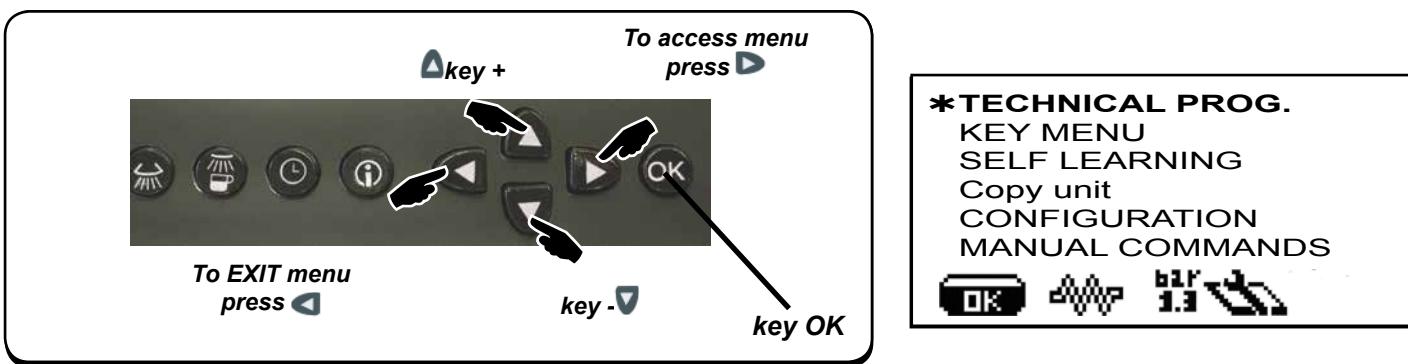
Note. The number next to the icon (1 or 2) indicates which grinder/dispenser needs adjusting.

The icon appears on the display instead of the level symbol.

PROGRAMMING - ENGINEER MODE

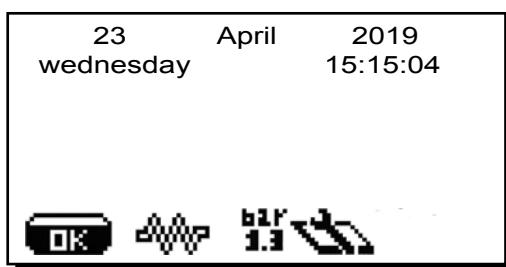
1. Data flow chart - Technician programming

English



| KEY MENU | SELF LEARNING | Copy unit | CONFIGURATION | MANUAL COMMANDS |
|--------------|---|-----------|---------------|-------------------|
| Press | Press | Press | Press | Press |
| Type | SELF-LEARNING Group 1 DV: 000 090 150 080 160 | | | Boiler |
| 1 coffee | Water dose | | | Boiler pressure |
| Water | Grinder Sel. | | | Low Power |
| | Dispens.Time | | | Level sensit |
| TURBOSTEAM | T Stop Steam | | | MESAUREMENT UNITS |
| Press | Emulsion Level | | | Drying |
| SERVICE TIME | DATE AND TIME | | | Time control |
| | ON time | | | Buzzer |
| | OFF time | | | Customer prog. |
| ITALIANO | Day off | | | Program. block. |
| | Energy Saving | | | Paym system |
| ENGLISH | Night. On | | | WASHING OPTIONS |
| | Night Off | | | SOFTNER. REG. |
| FRANCAIS | WASH | | | Change W. Filter |
| | Refill | | | MAINTENANCE |
| DEUTSCH | | | | DATA IN/OUT |
| NEDERLANDS | | | | Standard data |
| ESPANOL | | | | BOILER |
| PORUGUES | | | | WIFI |
| 漢語 | | | | BLUETOOTH |
| РУССКИЙ | | | | BDS |
| | | | | GRINDER CONTROL |
| | | | | Archive reset |
| | | | | REQUIRED |
| | | | | PERFORMED |
| | | | | REFILL HISTORY |
| | | | | MALFUNCT. ARCHIVE |
| | | | | INFO |
| | | | | SERIAL N° |
| | | | | VERSION SW |
| | | | | SETUP |
| | | | | DIP SETTINGS |

2. Technical Programming Access

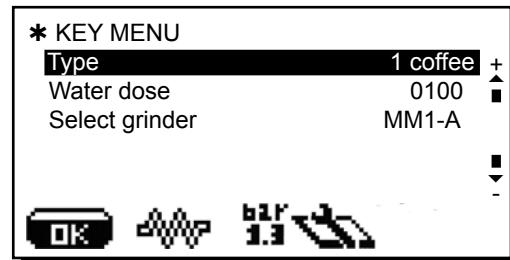


To enter programming, press the key and then **OK** for 3 seconds. The following message will appear on the display:

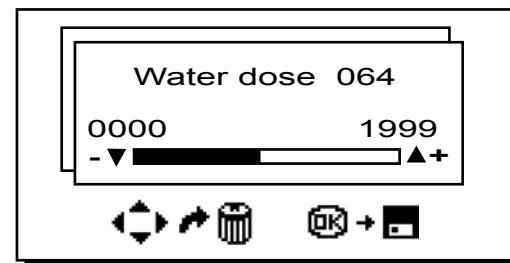


Display available menus: using the and keys, then press .
ACCESSING the menus: position the cursor on the desired line using the and keys, then press (press a selection key in the case of the "KEY SELECTION" menu)

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:

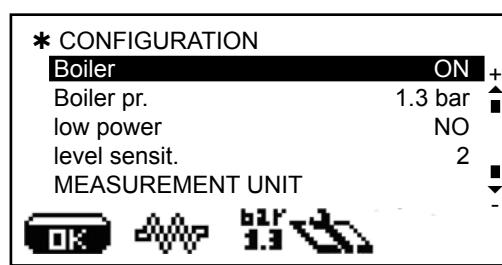
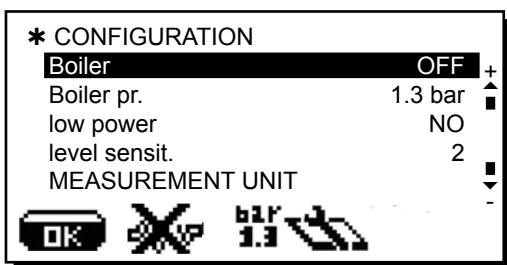
- 1) Confirm the changes by pressing **OK**
- 2) Exit the menu, leaving the data unchanged, by pressing

3. Electric heating

The technical staff can activate or deactivate the heating element (if the service boiler heating element is disabled, self-leveller control is inhibited) as follows:

- 1) Access the technical programming panels;
- 2) position the cursor over "BOILER" using the and keys in the machine's configuration menu and press the key;

3) adjust the parameter using the and keys and confirm the adjustment made by pressing the **OK** key or exit the menu and leave the data unchanged using the key.

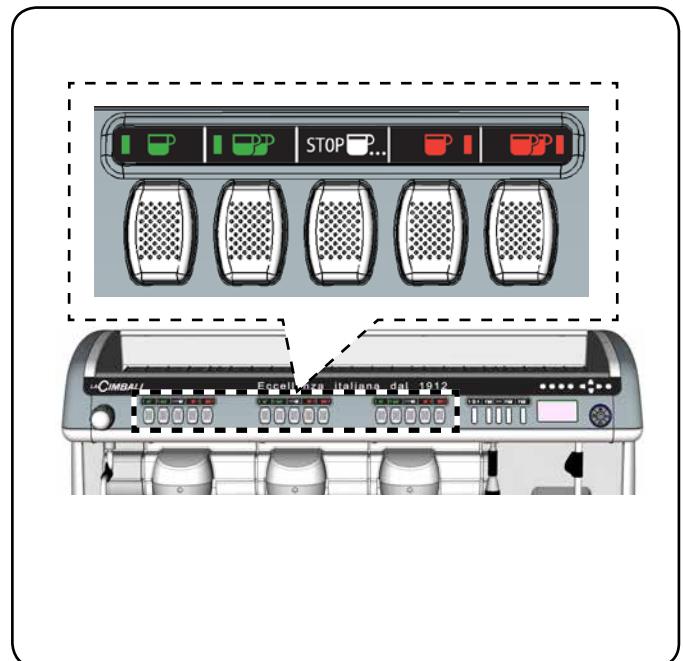
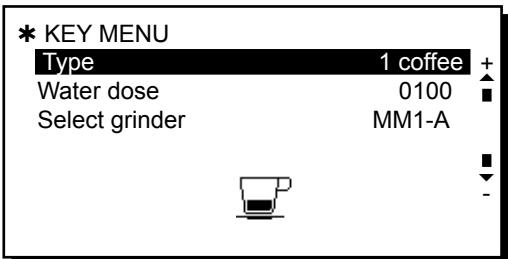


"Boiler" **OFF** = heating element disabled (main menu icon);

"Boiler" **ON** = heating element enabled (main menu icon);

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:

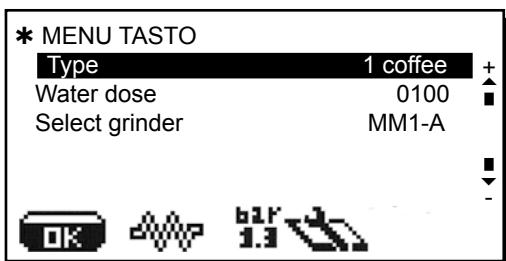
- **type** (key customisation, e.g. 3 espressos for 1 "short, normal, long", 3 espressos for 2 "short, normal, long", stop, disabled).
- **water dose** (volumetric dosing device impulses, 0 ÷ 1999 in steps of 1).
- **Select grinder** (grinding-machine customisation)
- **MM1- MM2** Option to associate with different types of filter holders for one or two grinder/dispensers

4.1 KEY Menu - Test Frame (Key “i”)

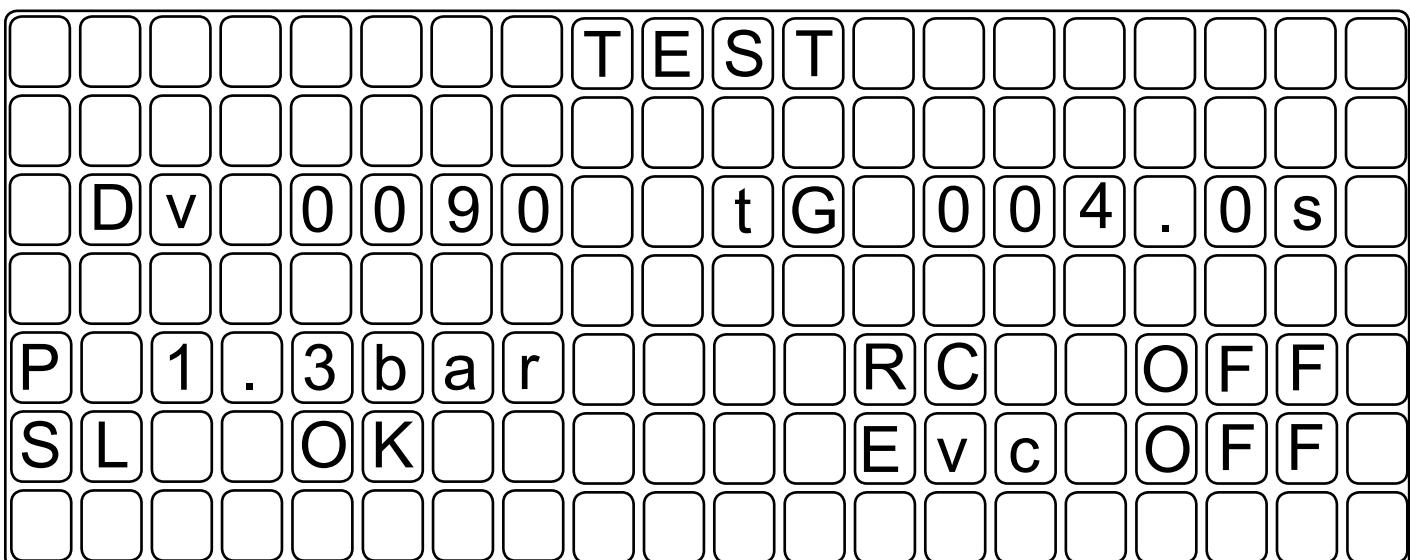
After entering the programming menu, access the key menu by pressing one of the drink-dispensing keys (the associate LED remains lit); the following will be shown on the display:

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

- (E.g. Group 2 Key)

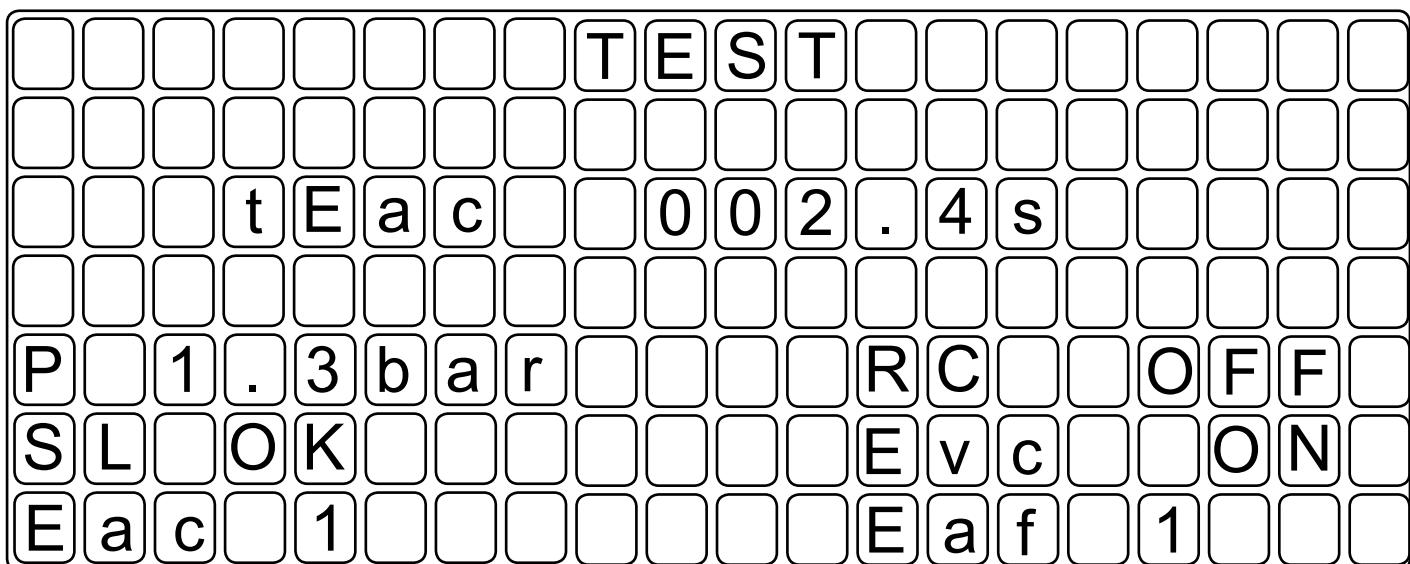


Key menu - Coffee selection

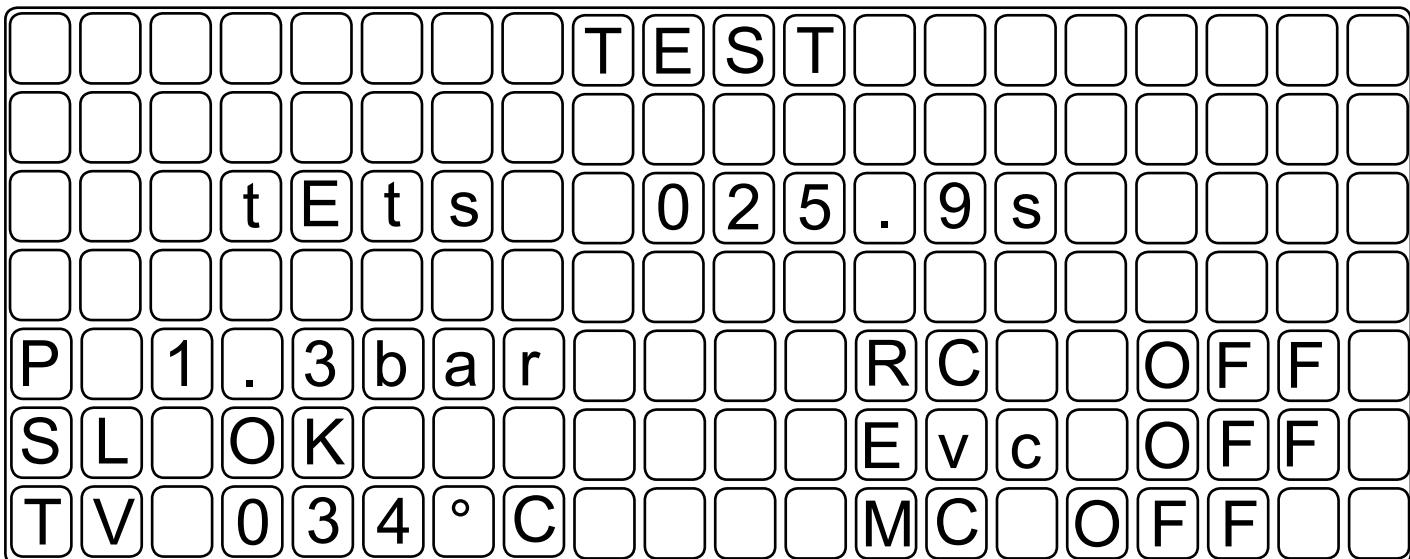


English

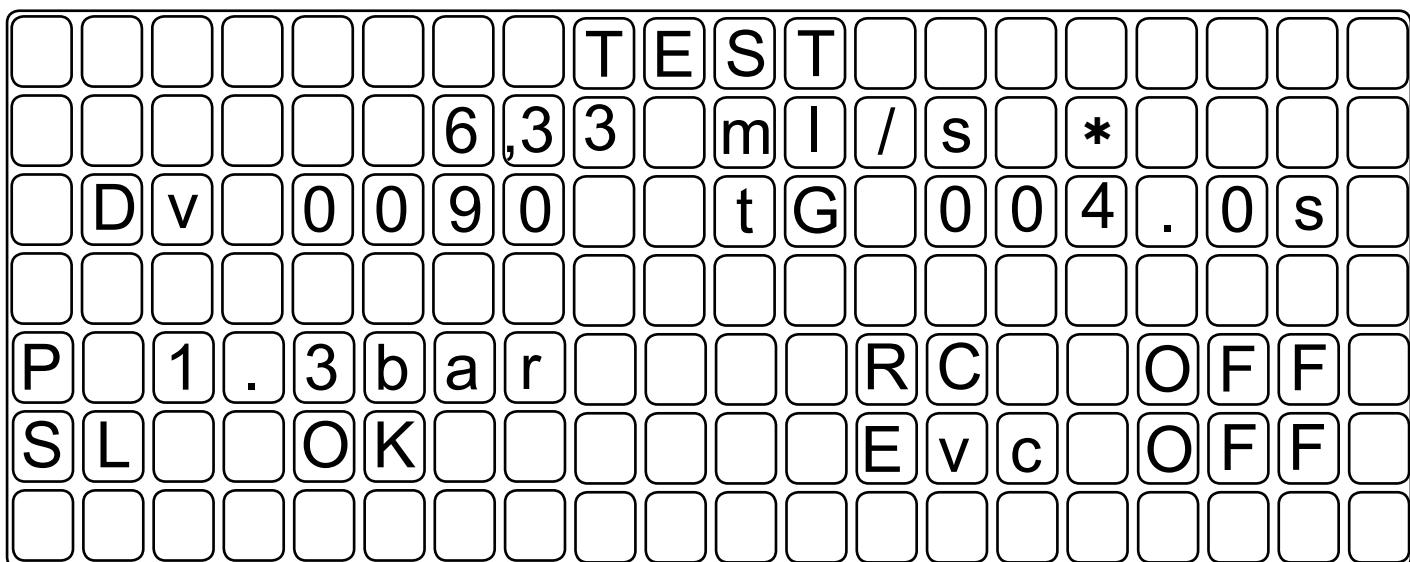
Key menu - Hot water selection



Key menu - Turbosteam selection



Key menu - Grinding Control Selection

*Legend*

ml/s Coffee dispensing flow (millilitres/seconds).

***** When * appears, dispensing is taken into consideration by the grinder control function.

RC Display services boiler resistance status (ON/OFF).

Eac Water solenoid valve.

Eaf Cold-water solenoid valve.

Ets Turbosteam solenoid valve.

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).

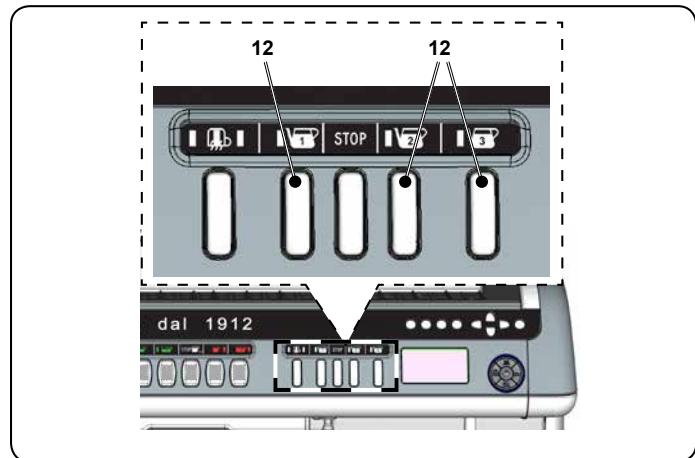
4.2 Key menu - Hot water selection

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



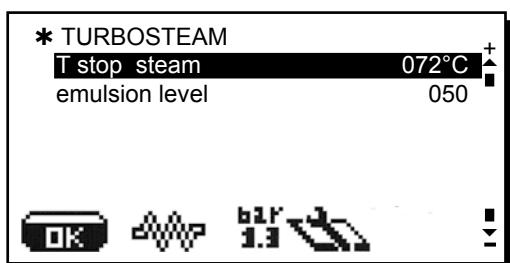
The hot water selection settings that can be changed are:

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



4.3 Key Menu - Steam and Air selection

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:

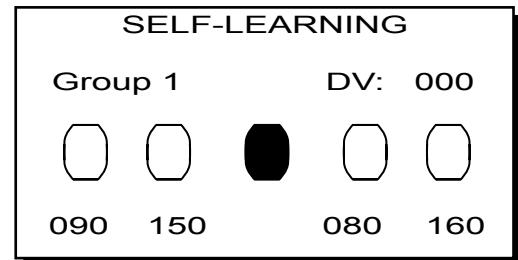
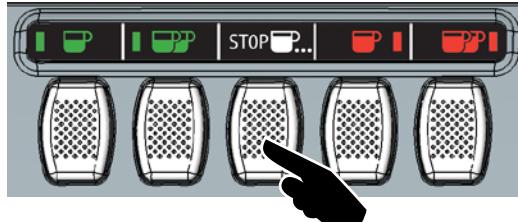
- steam stop disabled

- **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-LEARNING" function:

Hold the STOP button down for more than 8 seconds, until you hear the buzzer; the selection keys flash simultaneously for the entire duration of programming. The menu below will appear on the display (*), showing the keys with the relative quantities for water for the coffee.



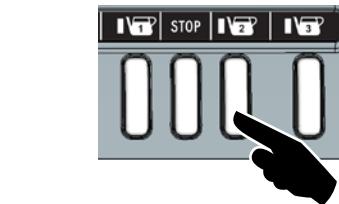
Coffee measures

- 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.

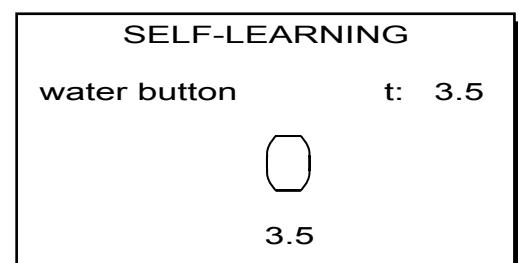


During this phase, the setting for the volumetric dosage pulses (top right of display (*)) is increased. When the key is released, the setting reached is memorized and appears under the programmed key.

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



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.



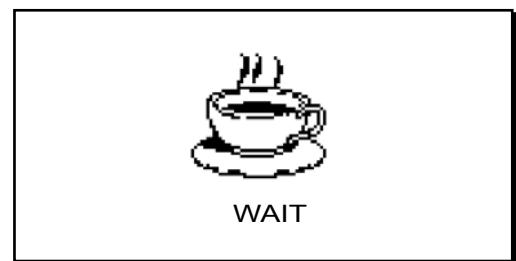
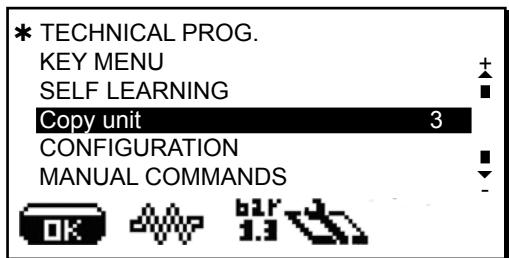
- 2 - Starting from step 1, continue programming, as desired, on all the water buttons.

(*) (where present)

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

5.1 “Copy unit” function

This feature allows you to copy the selected coffee unit settings for all other machine units.

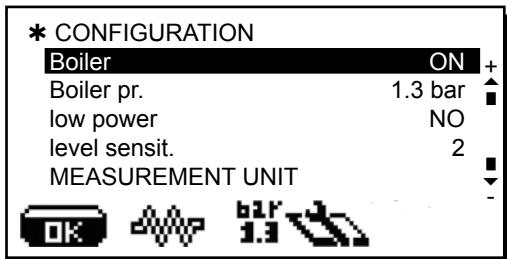


Operate as follows:

- 1) position the cursor over “**Copy unit**” using the **▼** and **▲** keys and press the **►** key;
- 2) set the unit to be copied to the other machine units using the **△** and **▼** keys and confirm by pressing **OK**.

- 3) at the end of the process, all the units will have the same parameters.

6. Configuration menu



Boiler - The heating element and the self-leveler feature of the service boiler are activated or deactivated through the “Boiler” ON/OFF function.

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.

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.

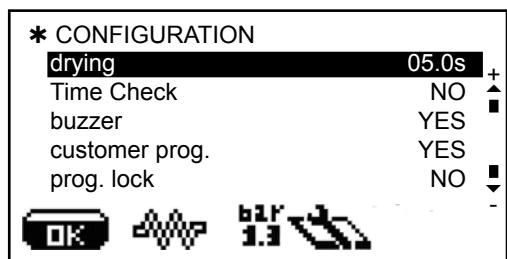
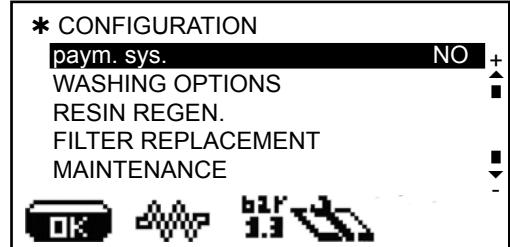
Drying - wafer drying time from 0 to 5 with steps of 0.1 seconds “if Drying kit is present”.

Time check - view dispensing time on the display: YES/NO (from 1 second to 60 minutes)

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”.



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. Additionally, an efficiency percentage is displayed (Softener/Filter), descending from 100% to 0%.

Once the filter has been replaced, push Reset on the relative menu to cancel the message.

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.

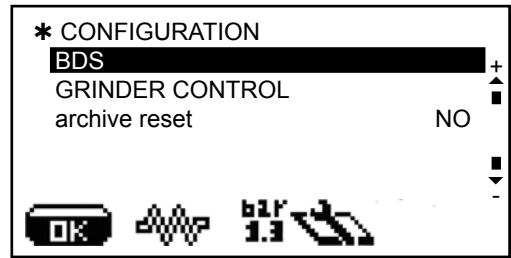
Reset - the choices are:

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.



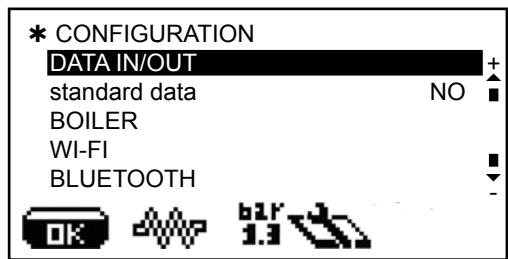
BDS - see section "BDS Activation" in the pages that follow.

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.

Log reset - clears malfunctions (Wash archive and Malfunctions archive and Water change) that 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 - Allows loading of standard data or reconfiguration of the machine. In both cases the machine is automatically restarted.

Boiler - not active.

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.

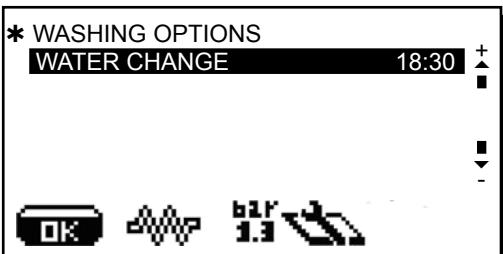


Changing the water in the boiler

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 parameters 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.

- **MAC** - Represents the Mac address of the machine's Wi-Fi module. This parameter is displayed only and cannot be changed.

- **NETWORK** - 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.

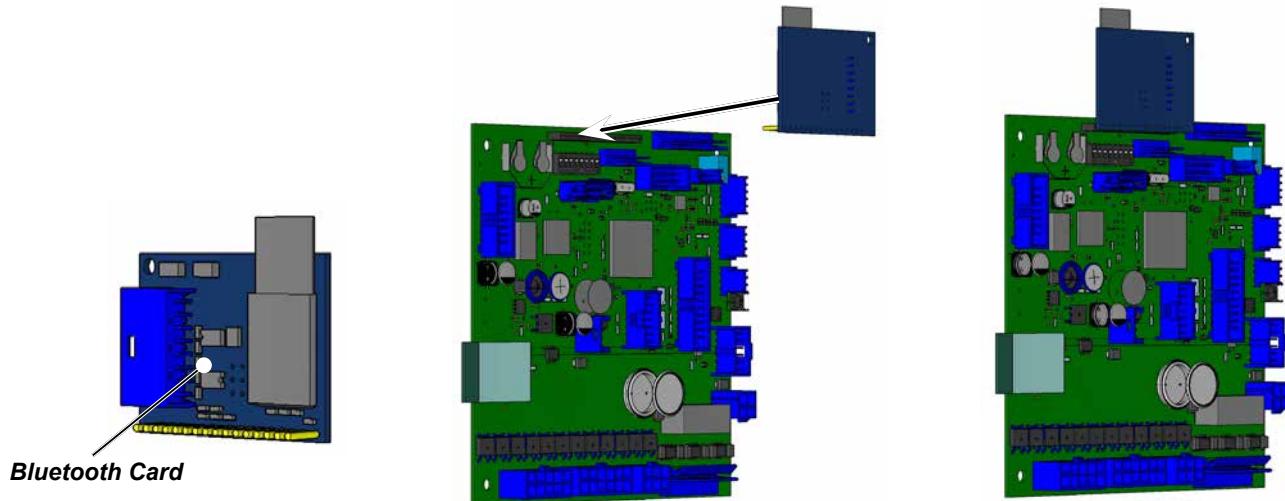
- **fTX** - reduces data transmission to the remote server:

> - transmits all data daily at machine startup, faults/washings per event;

>> - level 1 plus hourly counts;

>>> - level 2 plus pings every 10 min. (default).

- **RESET** - To restore the parameters to the standard parameters.

**Bluetooth Menu** - The parameters that can be set are:

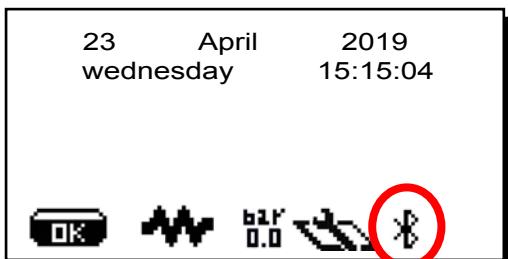
- **MM1-MM2** - 1 to 2 grinders can be connected.
- **Search** - the machine will find all bluetooth devices within 10 m.
- **Reset** - cancels the connection with the associated device.

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

Procedure for Bluetooth connection with the machine-grinder unit

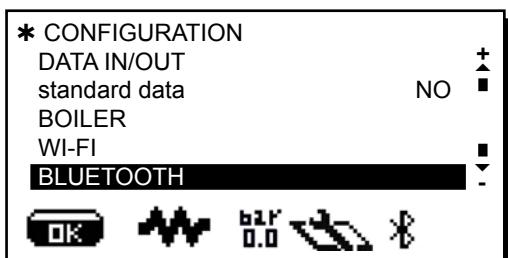
English

- 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.

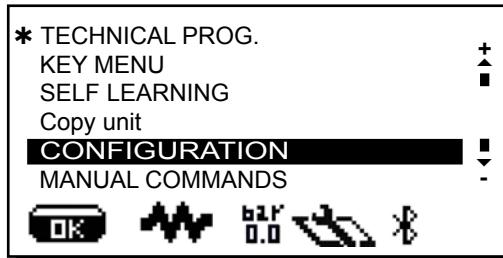


To enter TECHNICAL programming, press the  key and then **OK** for 3 seconds. The message in Point 2 will appear on the display.

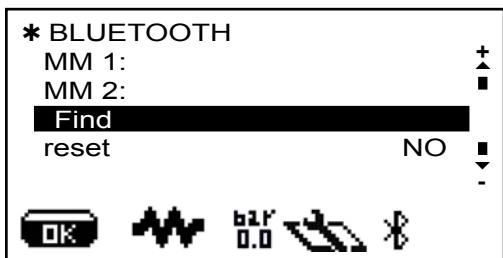
- 3** Position the cursor on the "BLUETOOTH" entry and press the  key:



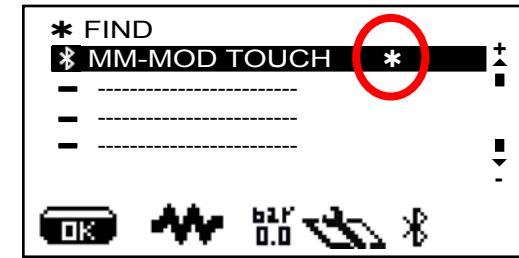
- 2** With the  and  keys, place the cursor on: "CONFIGURATION" in the machine Technical Prog. menu and press the  key:



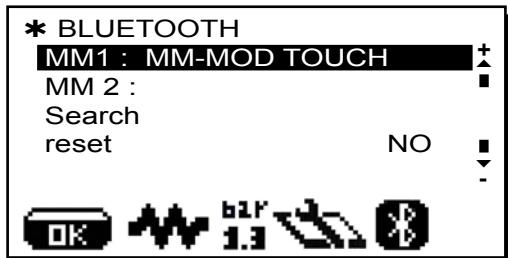
- 4** Position the cursor on the "Find" entry and press the  key:

**5**

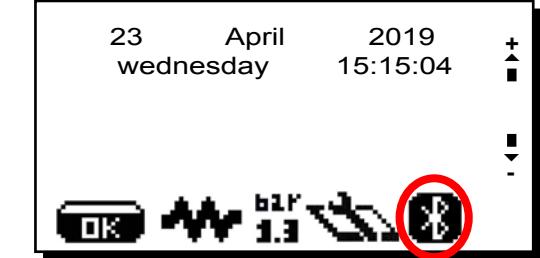
The machine will find all Bluetooth devices within a range of 10 metres.

6

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:

7

Exit from programming by pressing the icon .

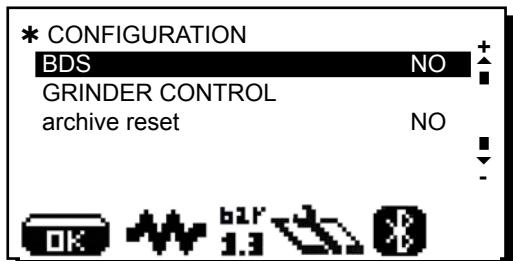
8

The icon  indicates that the machine and grinder/dispenser are communicating.

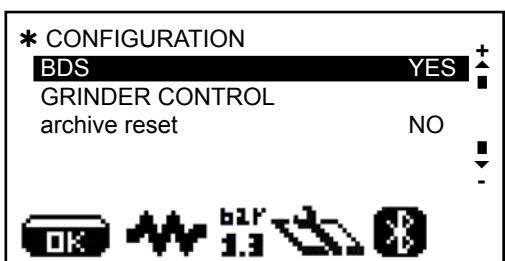
In the event of communication problems, the "COMMUNICATION FAILURE" message will appear on the display followed by the name of the disconnected grinder/dispenser. The message disappears automatically when the Bluetooth connection is restored. A common cause of this failure is the grinder/dispenser being turned off with the machine turned on.

1

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

**2**

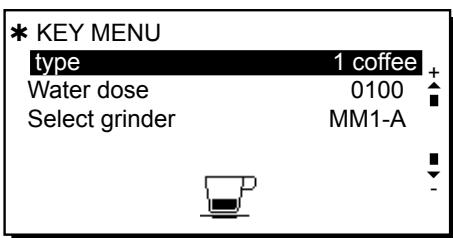
Use the and keys to indicate "YES" and then press the **OK** key to confirm



Setting recipes and connections with grinder/dispenser

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

GRINDER/DISPENSER 1



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

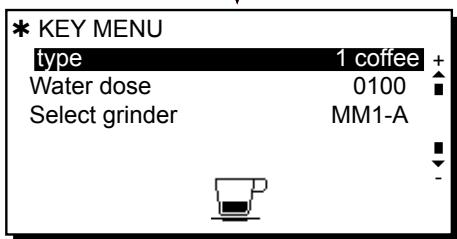
1-A or 2-A = activation of the first actuator
(filter-holder with single delivery spout)

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

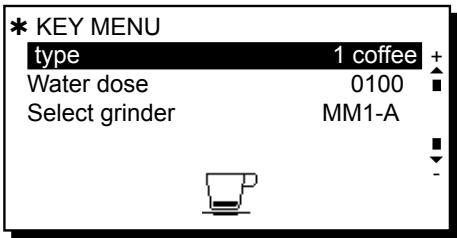
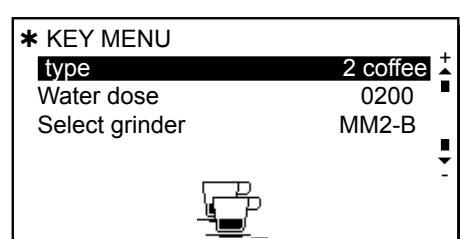
1-C or 2-C = activation of the third actuator with filter-holder with dedicated filter

With the number **1** the first grinder/dispenser **MM1** is identified
With the number **2** the second grinder/dispenser **MM2** is identified

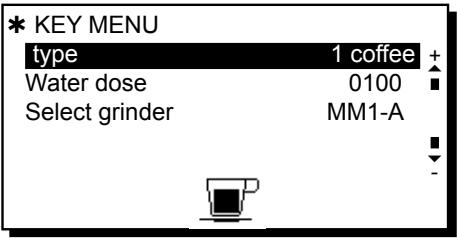
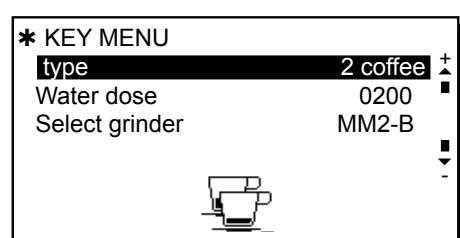
With the letters **A-B and C** the filter-holders are identified



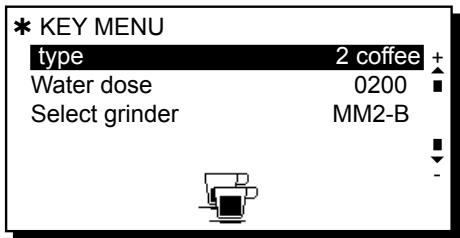
MEDIUM



SHORT

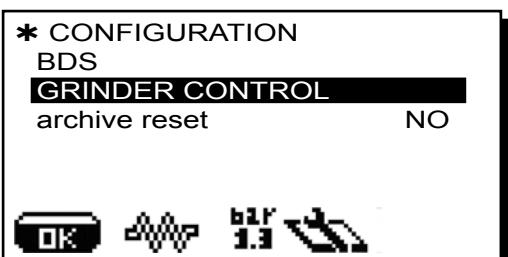


LONG



Grinder control parameters configuration

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

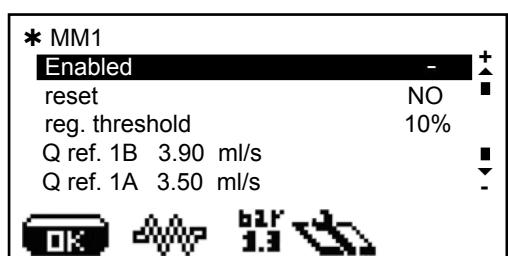
Grinder Control-1Grinder Control-2

The parameters that can be set are:

- Enabled:

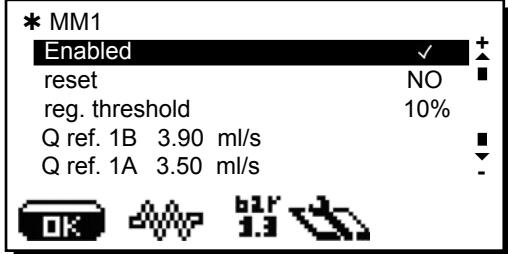
- : not in use
- : manual grinder control (for grinder/dispensers with no bluetooth connection option).
- : automatic grinder control (bluetooth connection with grinder/dispenser).

- 2 Position the cursor on the item "MM1" of the machine and press the key.



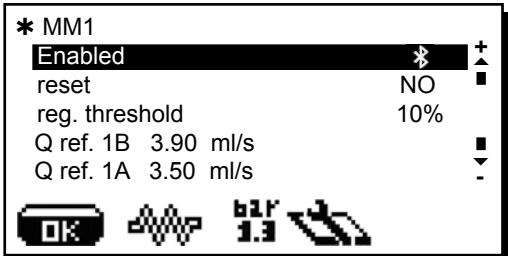
- : not in use

- 3 Position the cursor on the item "MM1" of the machine and press the key.



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

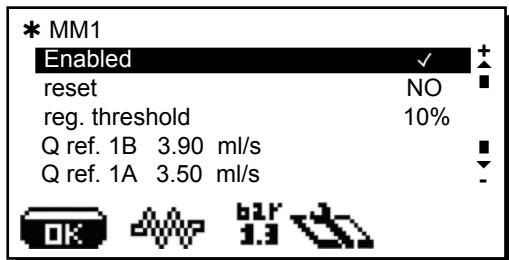
- 4 The parameters can be modified manually using the keys .
- After completing operations confirm the values by pressing the key **OK** or exit and leave the previous data using the key .



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

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).

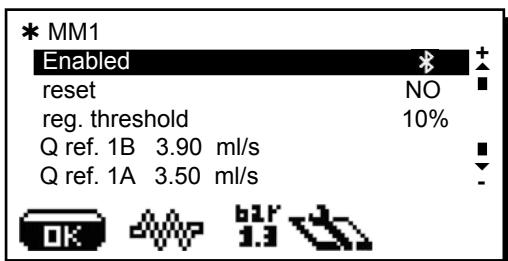


means that the grinding needs to be tightened.
(flow of coffee is greater than the reference).

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.



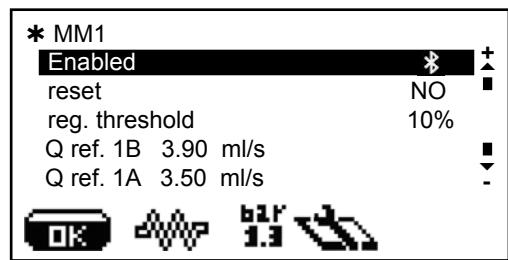
: Method 1: manual setting of Qref.



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.

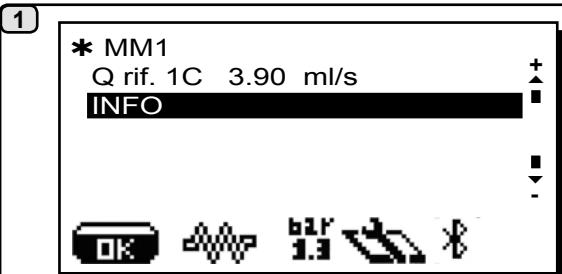
The machine is ready to work with the grinder control on. In the event of problems, dispensing can be performed in the test square with the grinder control in use to see if the symbol * is present beside the flow. Remember that dispensing is deemed valid only if it lasts more than 10 seconds.

Other symbols are used in the test square:

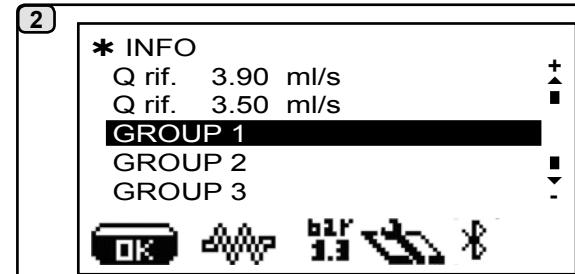
- > if the flow is too high compared to the reference, above the upper limit
- < if the flow is too low compared to the reference, below the lower limit
- * flow within the acceptable range
- dispensing too brief (at least 8 s but less than 10 s)
- (3) number of remaining coffees to be dispensed and deducted from the count

Grinder control parameters configuration

INFO : grinder control.



Position the cursor on the item “INFO” of the machine and press the **►** key.



Pressing the **►** key at the line “GROUP 1”, the display will show:

3

* GROUP 1
[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.

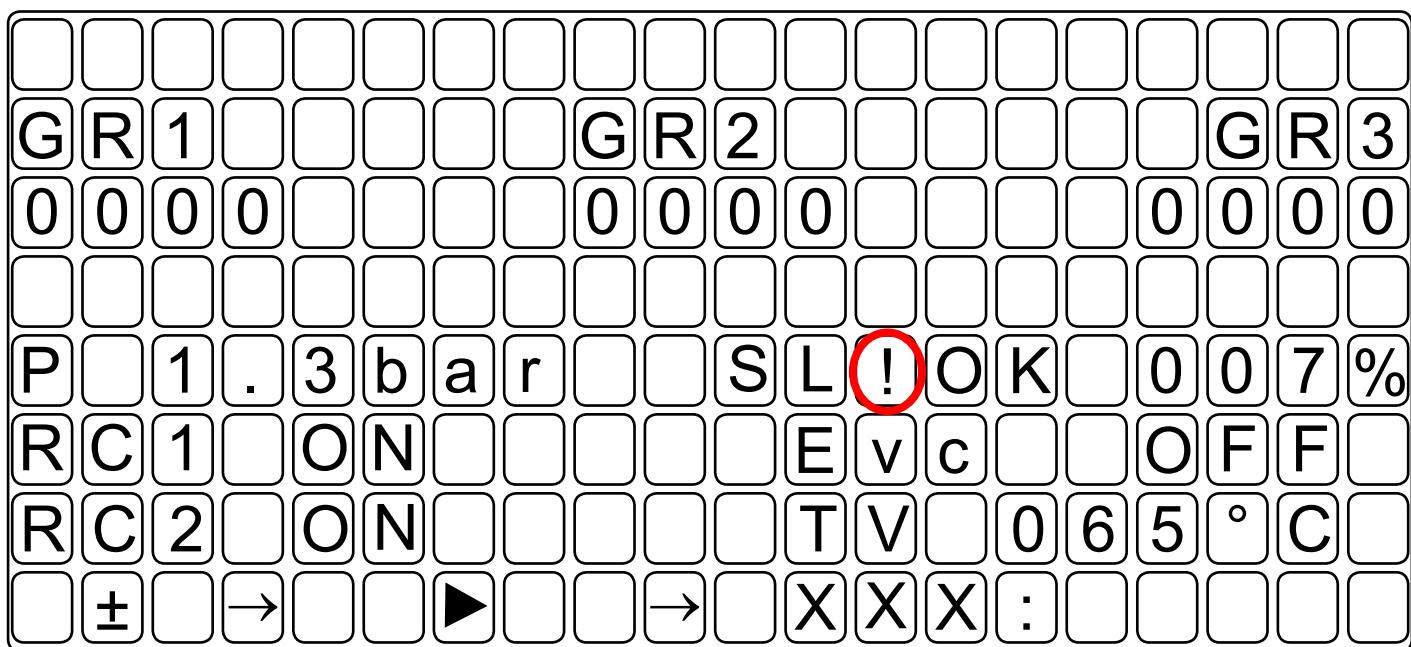
7. Manual Commands Menu

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



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

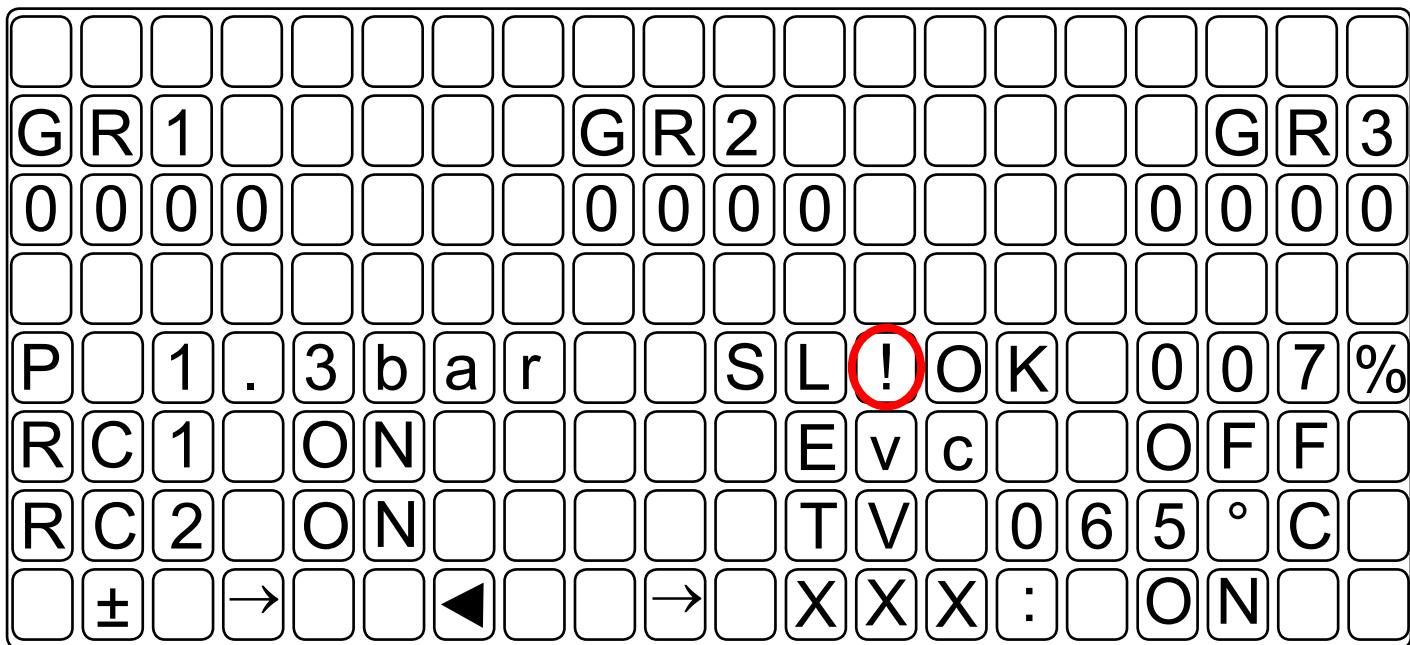
Panel 1



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

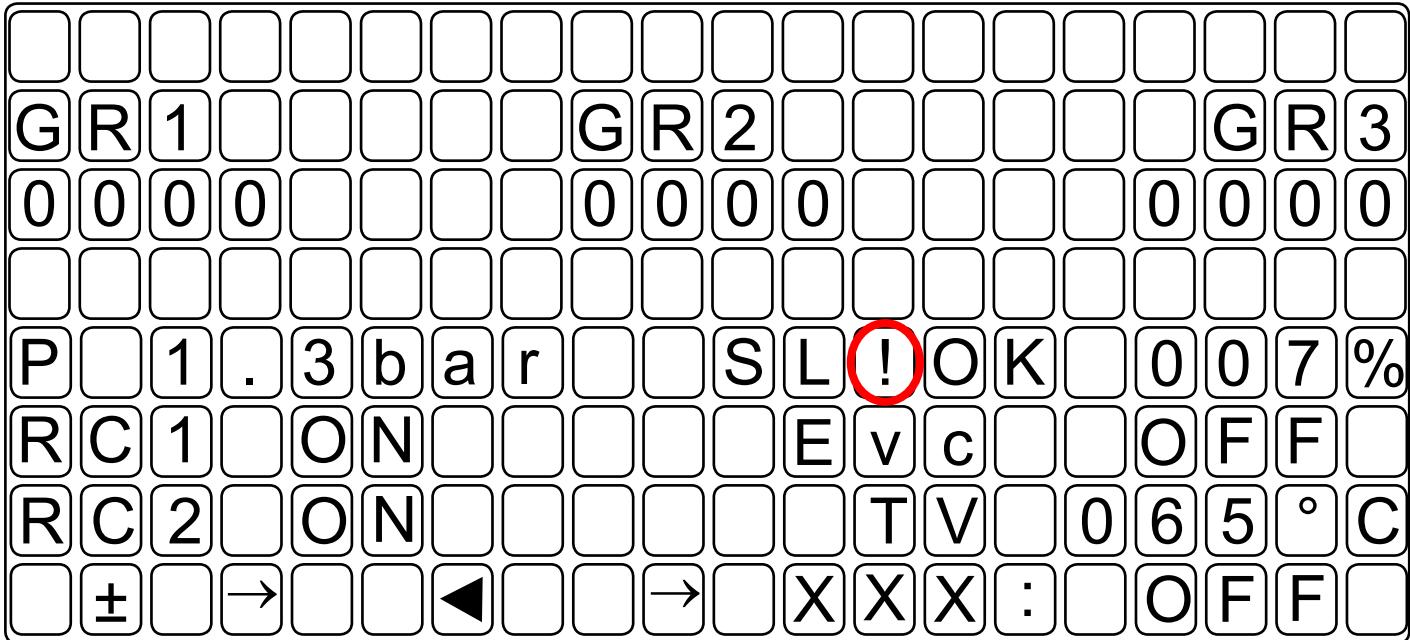


Optional symbol: if visible, this indicates the presence of anomalies on the level probe signal.



English

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

**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:

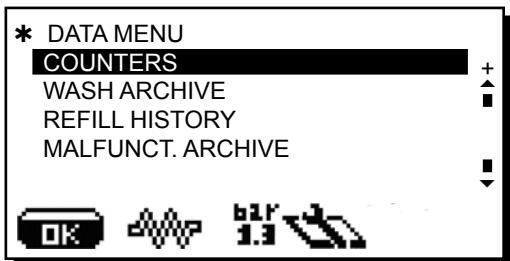
| | |
|------------|--|
| RC | Boiler resistance |
| Evc | Boiler load solenoid valve |
| P | Boiler pressure |
| SL | Boiler water level |
| TV | Steam temperature (if the Turbosteam system is not present, this parameter is not displayed) |

| | |
|--------------|--------------------------------|
| MP | Pump Motor |
| Em | Pressure-reset solenoid valve |
| Eds | Drying solenoid valve |
| MC | Turbosteam compressor motor* |
| Ets | Turbosteam solenoid valve* |
| Evc | Charge-boiler solenoid valve |
| Eaf | Cold-water solenoid valve |
| Eac | Water solenoid valve |
| G1-G4 | Dispense-coffee solenoid valve |

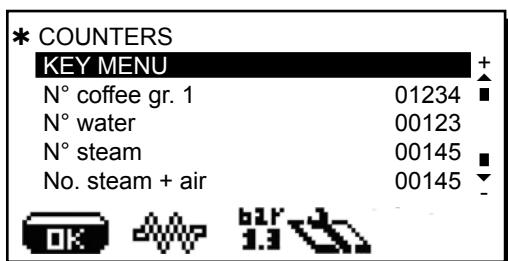
*The components - * - are only applied with certain product configurations.*

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 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.

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**

8.1 DATA menu: Wash Archive



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.

| *WASH ARCHIVE | |
|----------------------|---------------|
| Required | 00005 |
| Performed | 00004 |
| 01 | 23 April 2019 |

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

| *WASH ARCHIVE | |
|----------------------|-------|
| Required | 00005 |
| Performed | 00005 |

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.

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



The Refill parameters that can be displayed are:

- **Required:** 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.

| *REFILL HISTORY | |
|------------------------|---------------|
| Required | 00005 |
| Performed | 00004 |
| 01 | 23 April 2019 |

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

| *REFILL HISTORY | |
|------------------------|-------|
| Required | 00001 |
| Performed | 00001 |

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

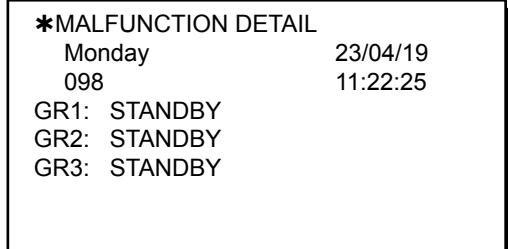
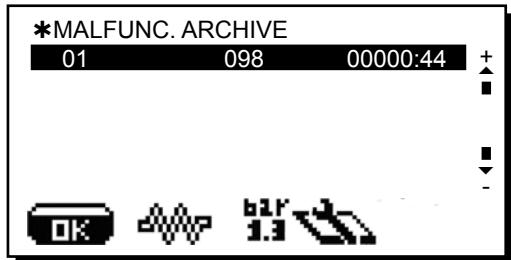
English



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

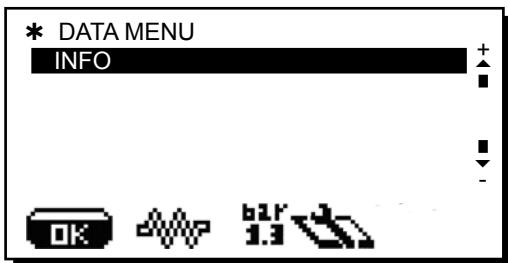
Pressing the **▶** key is again takes you to a detailed display that shows:

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



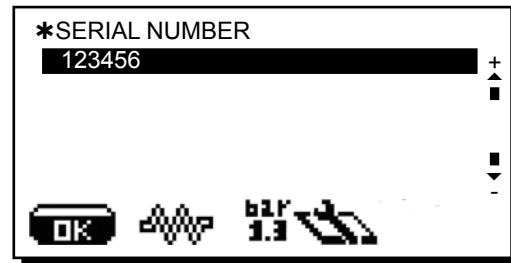
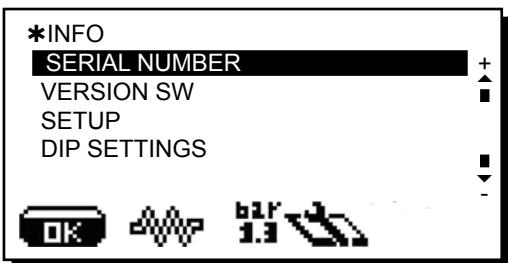
When you press the **▶** key at the line “Malfunctions Archive”, the display shows:

8.4 DATA menu: INFO



Serial number

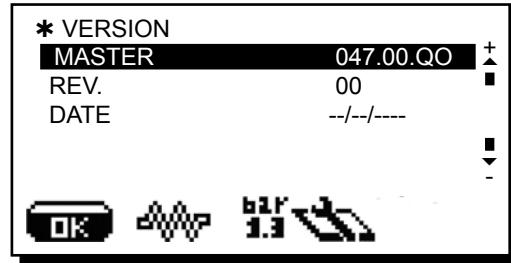
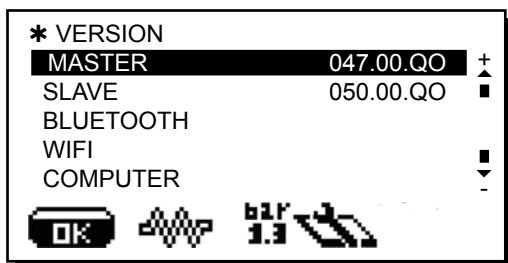
Positioning the cursor on the line “INFO” and pressing the **▲** and **▼** keys, and then pressing the **►** key, the following is displayed:



Version

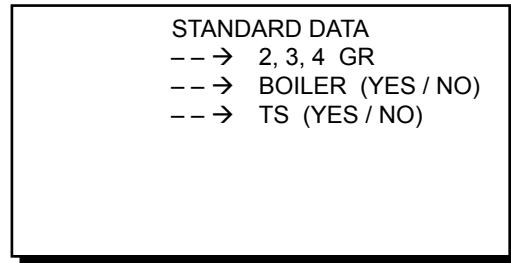
The submenus under “Version” show the memory versions:

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



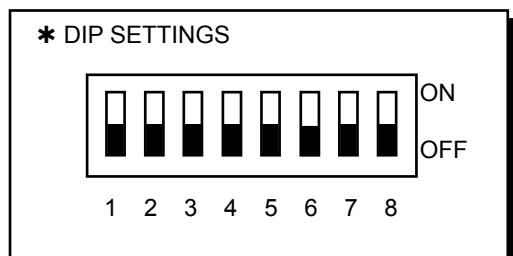
Setup

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



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
- 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

Update from USB pen drive



NOTE: for machines with SW version 047.00.00 and later, the request to input standard information occurs WITHOUT setting Dip 1 to ON.

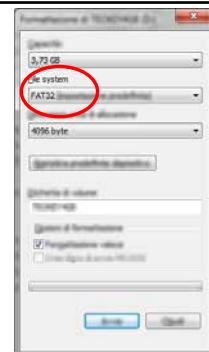
1

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 **image.hex**, **image.s19**).

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.

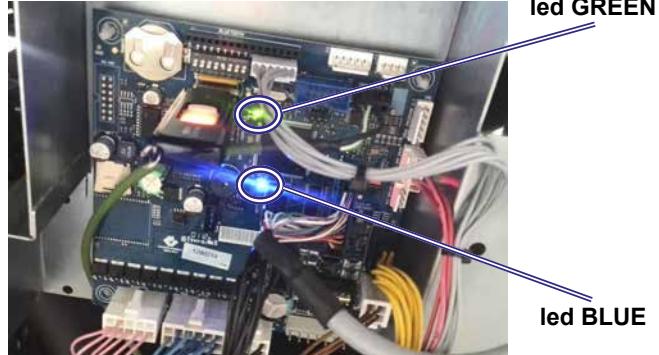
29 October 2019
wednesday 15:18:12



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 **image.hex**, **image.s19** from the USB Pen Drive to the CPU board memory.

**NOTE: during copying of the files, the display of the machine**

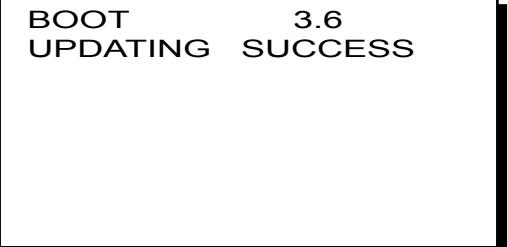
5

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
UPDATING 3.6
SUCCESS

6

When the update is complete, the services display automatically restarts and the following message appears:



UPDATE COMPLETED
REMOVE USB

Remove the USB Pen Drive.

7

Enter the standard data, update the machine data and reactivate the heating element, if necessary.



DATI STANDARD
--> ENGLISH
-->

9. Check-control messages

| MALFUN. CODE | DESCRIPTION | POSSIBLE CAUSES | VERIFICATIONS and SOLUTIONS |
|-----------------|---|---|--|
| 020 | USB power-supply malfunction. | • 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. | • Sensor failure • Card failure. | <ul style="list-style-type: none"> Check cabling Replace the sensor Replace the card. |
| 023 | AC 24V power supply malfunction. | • 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. <p>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.</p> |
| 025* | No power: group, EV, milk pump | • 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. |

English

| 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. |
| (x) 53* | Steam thermocouple out of range. DX > 053; SX > 153 | <ul style="list-style-type: none"> Thermocouple 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"> Resistance 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. | <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. | <p>Turn the machine off and on again. If the error persists, replace the CPU board.</p> <p>Check the condition of the clock battery.</p> |
| 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. | | |
| 105 | SD card communication malfunction. | • SD card corrupted or malfunction. | • Replace SD card. |
| 282 | Keypad reset operation carried out by CPU board due to repeated communication problems. | | • Check the insulation. • Check the wiring and connections. |
| 583 | TS/AS keyboard board communication error. RGB light module failure only for Emblem R. | • Break in wiring. • Keyboard board failure. • Light board failure. | • Check wiring. • Replace keyboard board. • Replace light board. |
| 683 | Turbosteam module communication malfunction. | • Break in wiring. • Board failure. | • Check wiring. • Replace Turbosteam board. |

Faults - * - appear only in some product configurations.

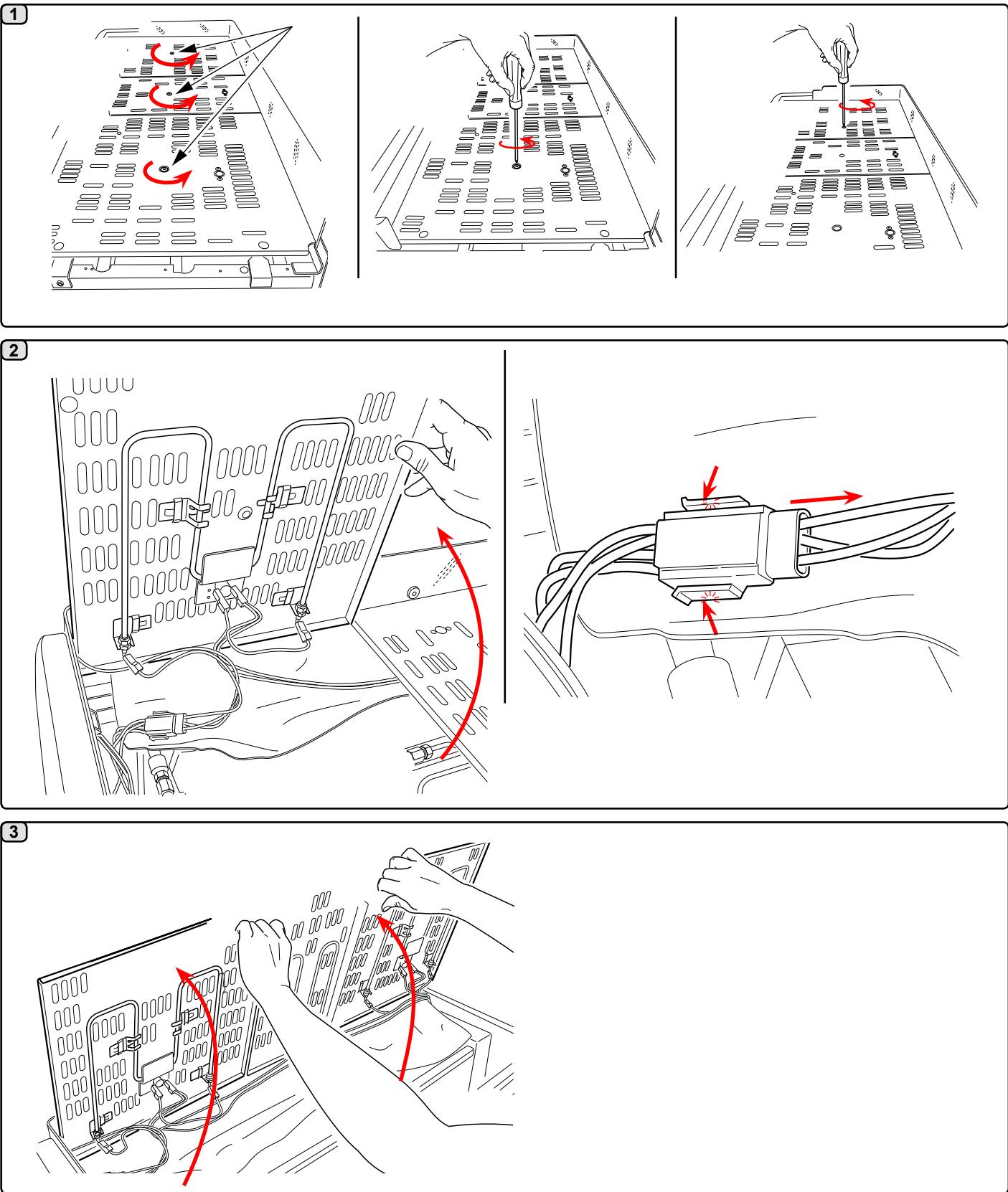
DISASSEMBLY AND SETTING



**ALL OPERATIONS MUST BE PERFORMED WITH THE MACHINE OFF AND COLD.
TO ALWAYS USE THE NECESSARY SAFETY EQUIPMENT (SHOES/GLOVES).**

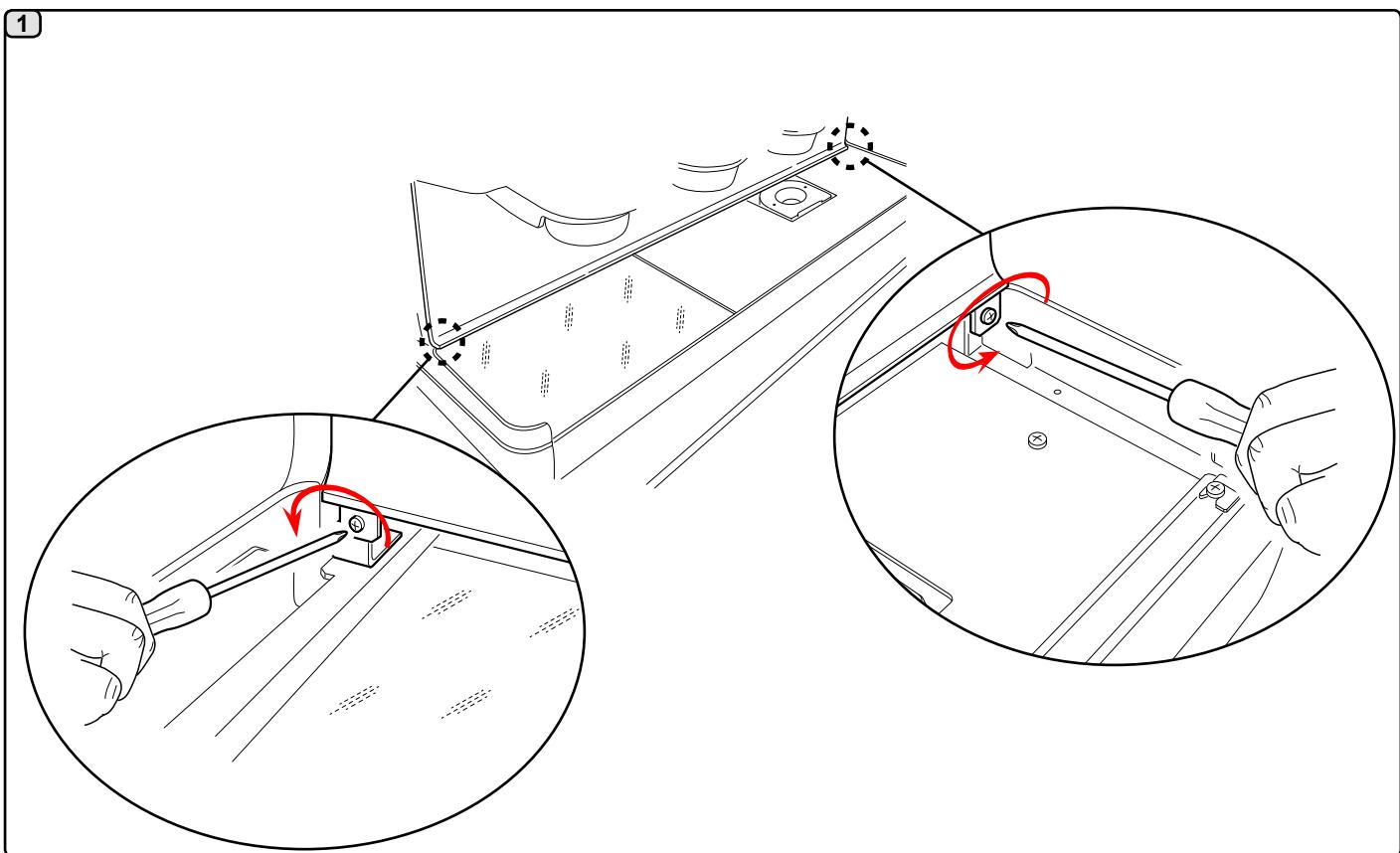
10. Cup Warmer

English



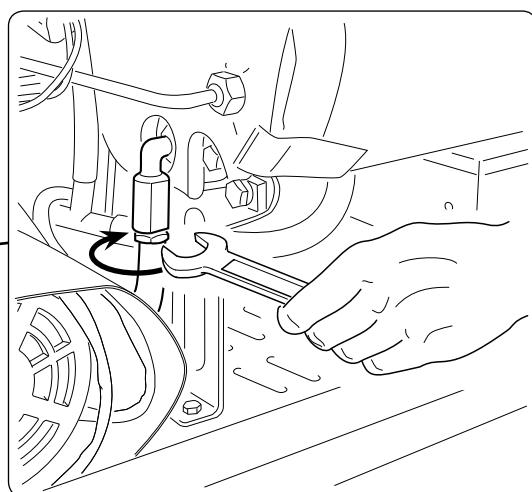
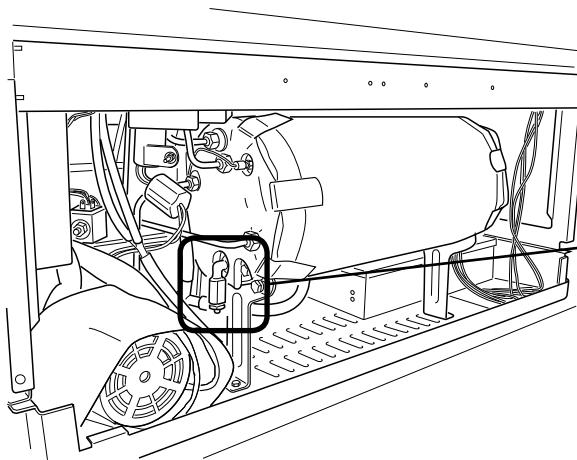
11. Stainless steel front panel

English



12. Draining the boiler water

English



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

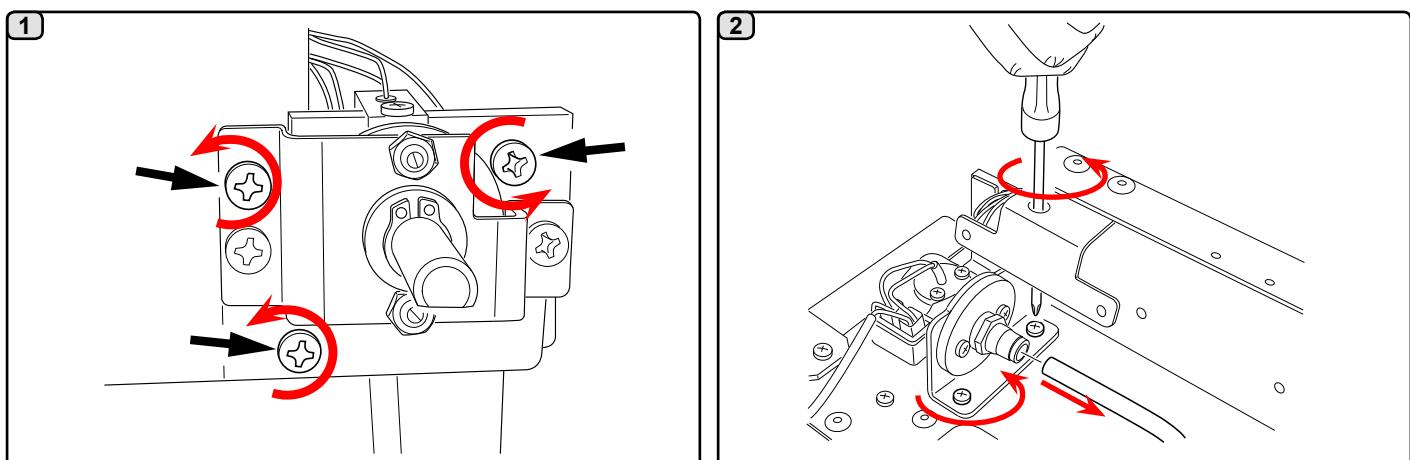
13. Removing the boiler heating element

Remove the resistance only after emptying the boiler.

English

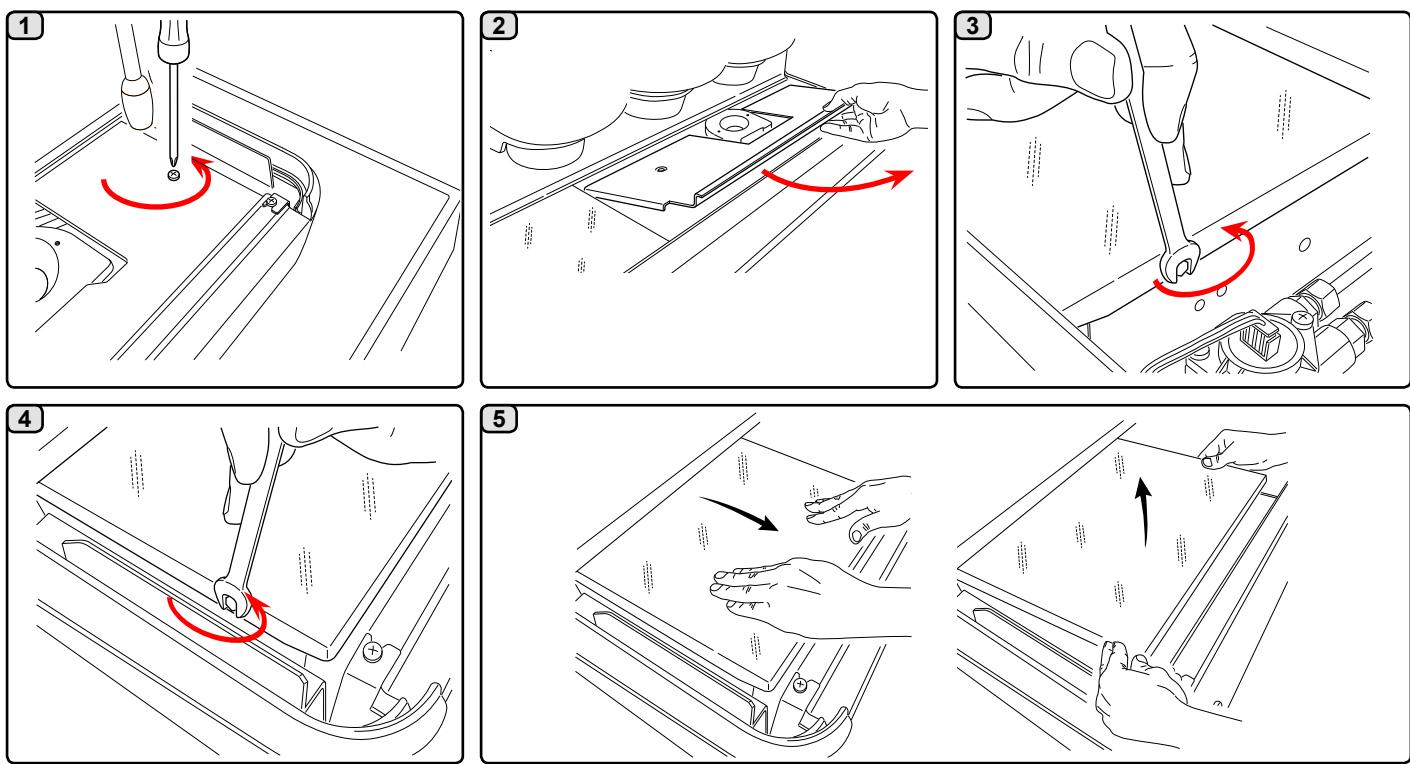


14. Turbosteam Controller and Lance Unit

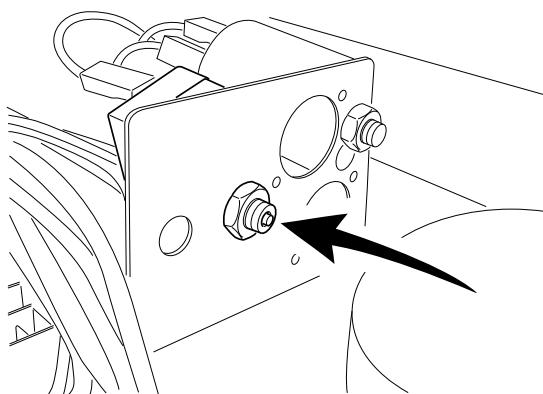


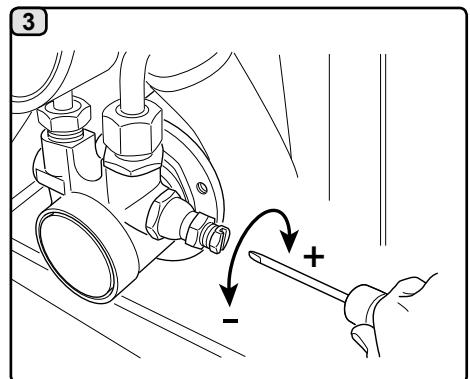
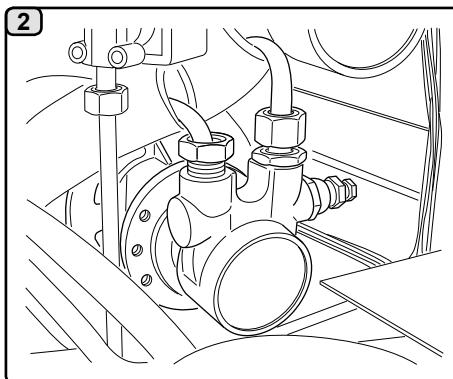
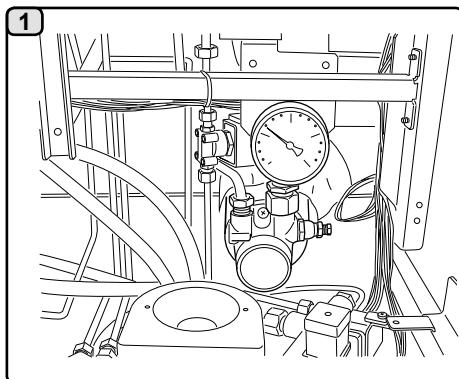
English

15. Junction Box

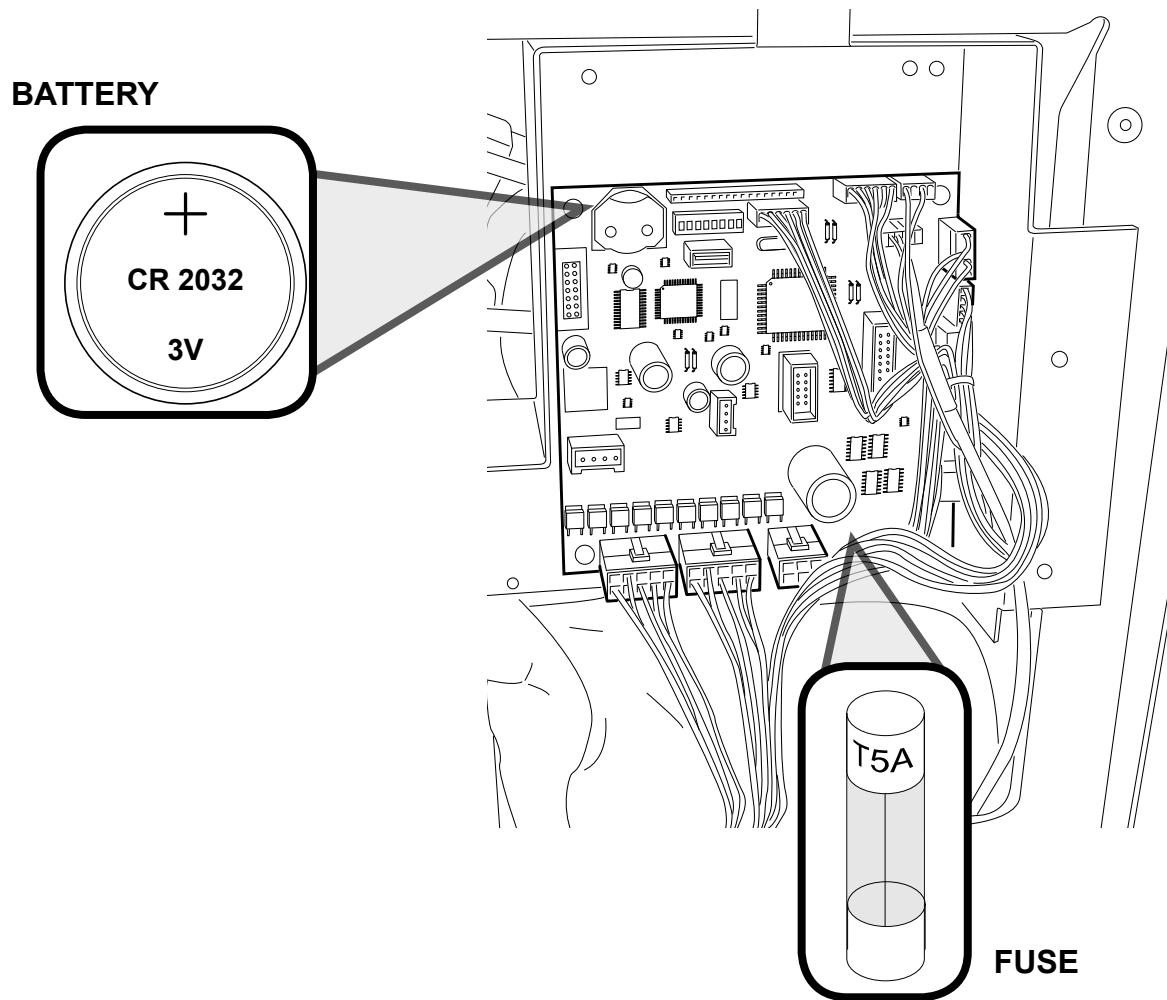


16. Safety thermostat



17. Volumetric pump

English

18. Battery - Fuse

Chiudere il rubinetto di alimentazione idrica.

Close the water tap.

Fermer le robinet d'alimentation hydrique.

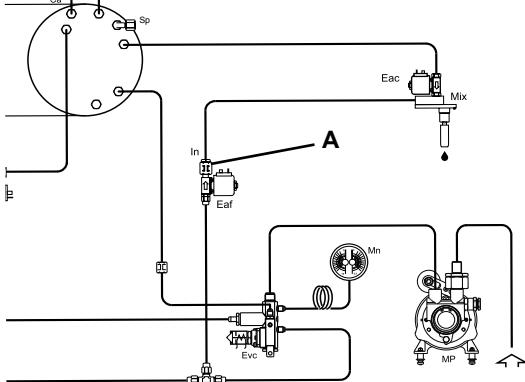
Sperren sie den Hahn zur Wasserversorgung ab.

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

To change the temperature of the water, replace the installed 0.6 nozzle (A) with the 0.8 nozzle provided.

FR REGLAGE DE LA TEMPERATURE DE L'EAU CHAUDE

Pour modifier la température de l'eau, remplacer le gicleur (A) de 0,6 monté par celui de 0,8 fourni.

DE REGELUNG DER HEISSWASSERTEMPERATUR

Um die Wassertemperatur zu ändern, die montierte 0,6-er Düse (A) durch die mitgelieferte 0,8-er Düse ersetzen.

ES REGULACIÓN DE LA TEMPERATURA DEL AGUA CALIENTE

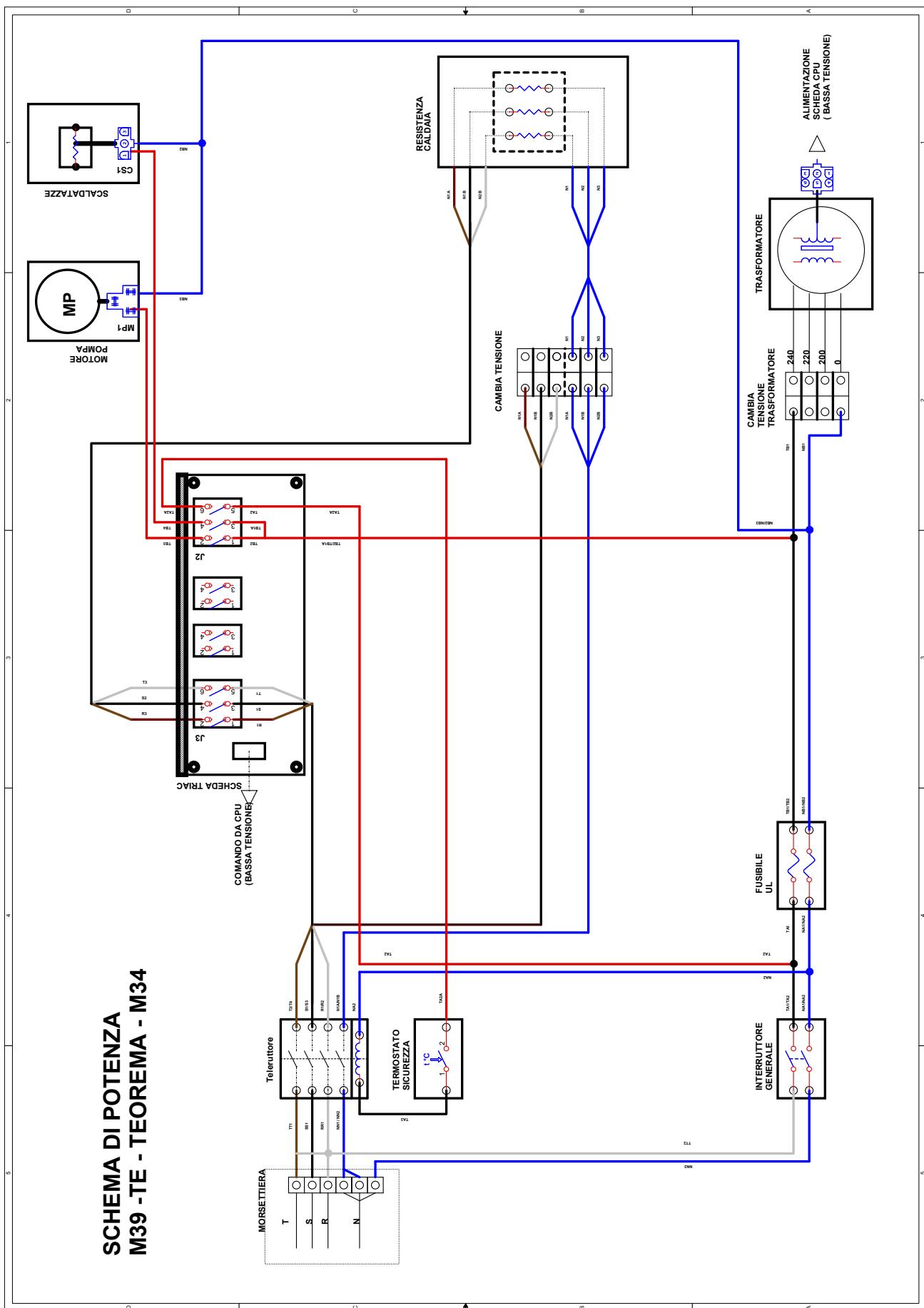
Para variar la temperatura del agua, sustituir la boquilla (A) de 0,6 montada con la de 0,8 suministrada.

PT REGULAÇÃO DA TEMPERATURA DA ÁGUA QUENTE

Para variar a temperatura, da água substituir o bico (A) de 0,6 montado com aquele de 0,8 em dotação.

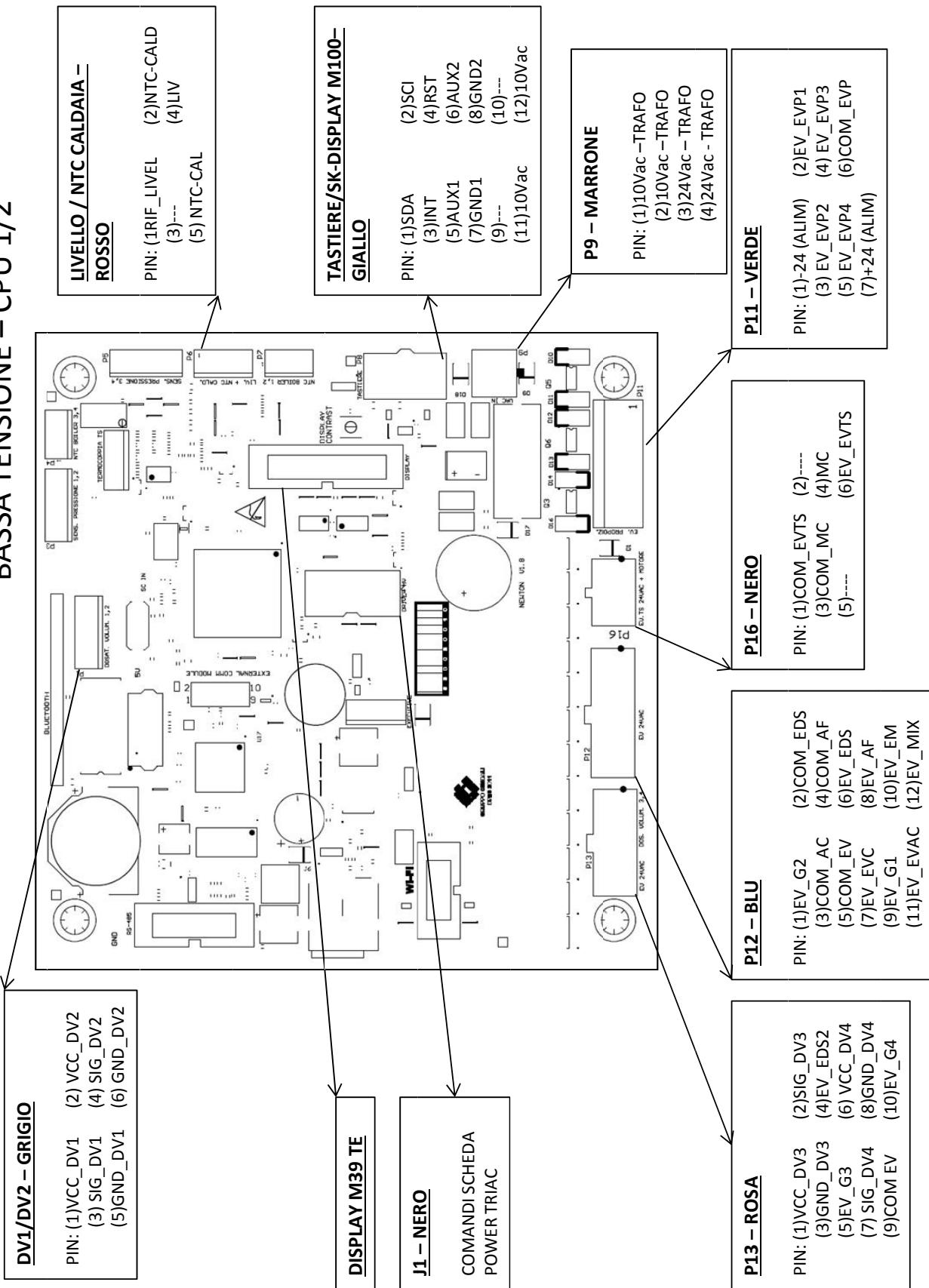
**Schema elettrico - Wiring diagram - Schéma électrique -
Elektrischer Schaltplan - Esquema electrico - Esquema eléctrico**

**SCHEMA DI POTENZA
M39 -TE - TEOREMA - M34**



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

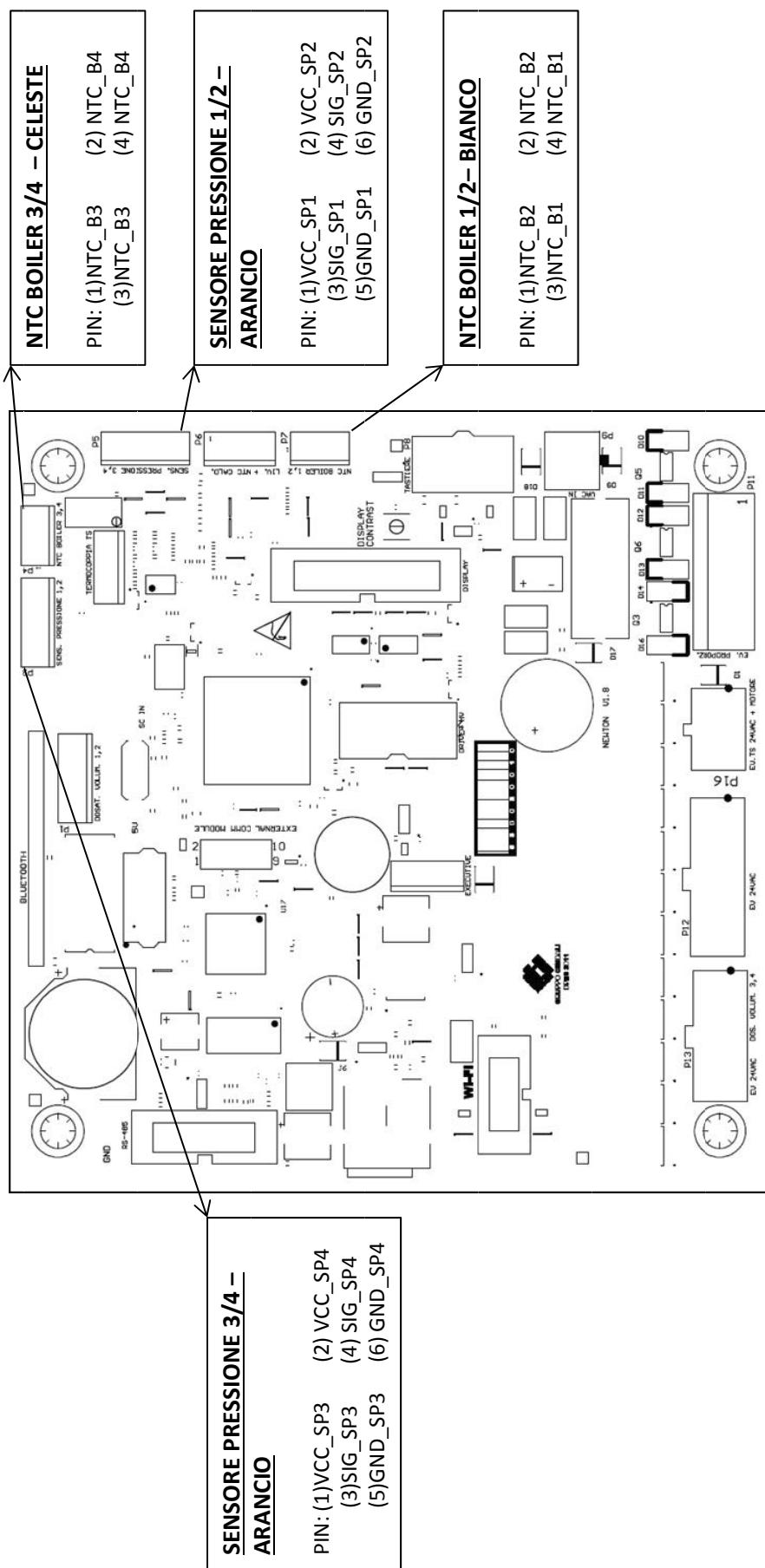
BASSA TENSIONE – CPU 1/2



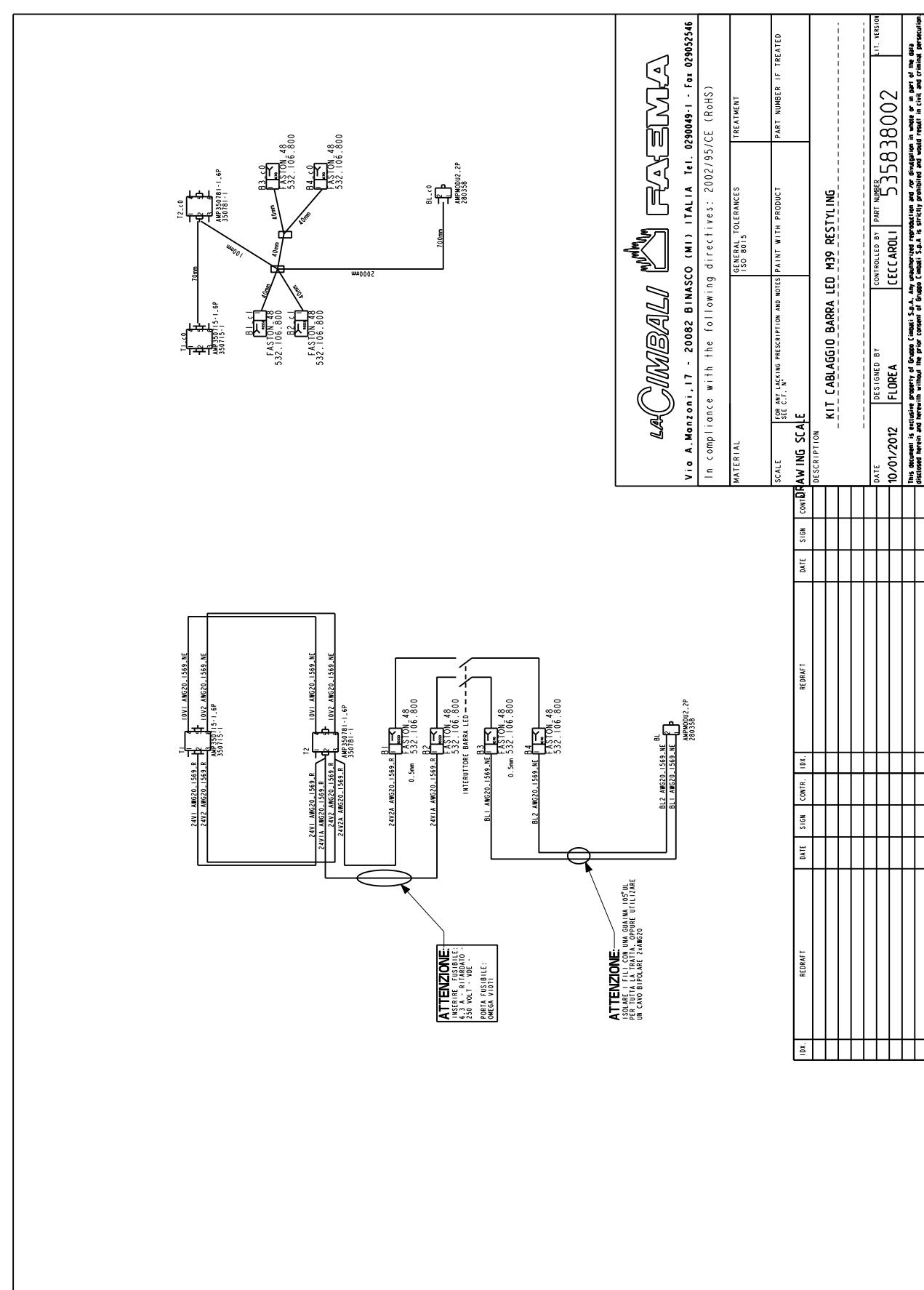
**Schema elettrico - Wiring diagram - Schéma électrique -
Elektrischer Schaltplan - Esquema electrico - Esquema eléctrico**

English

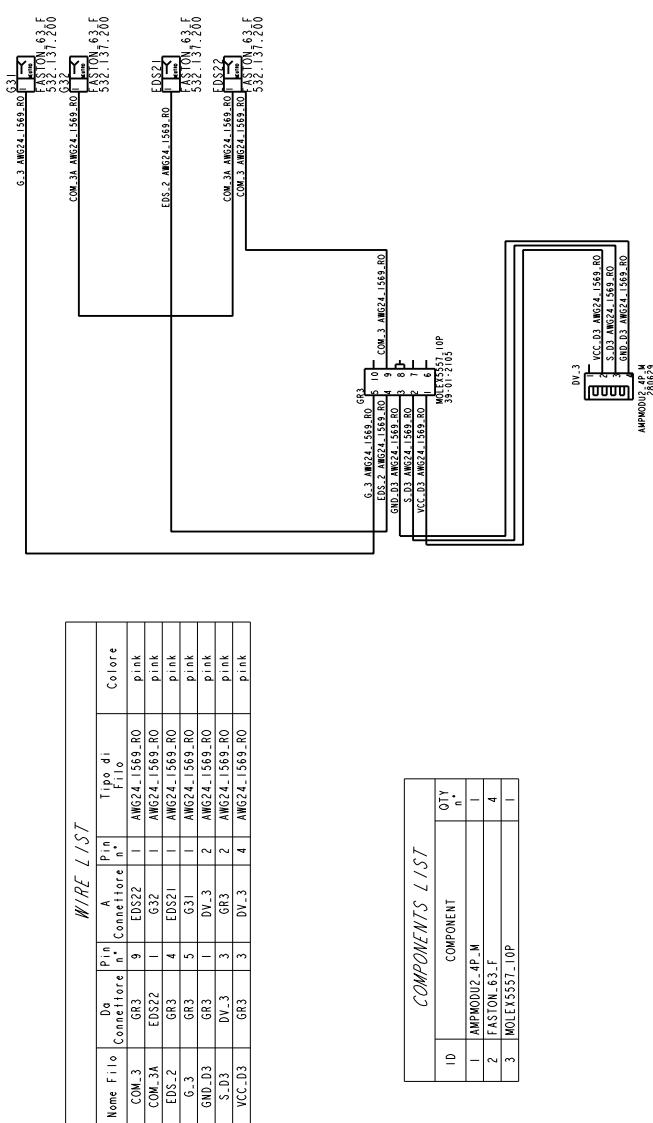
BASSA TENSIONE – CPU 2/2



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



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



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Conforme alle direttive: 2002/95/CE (DIRETTIVA RoHS)

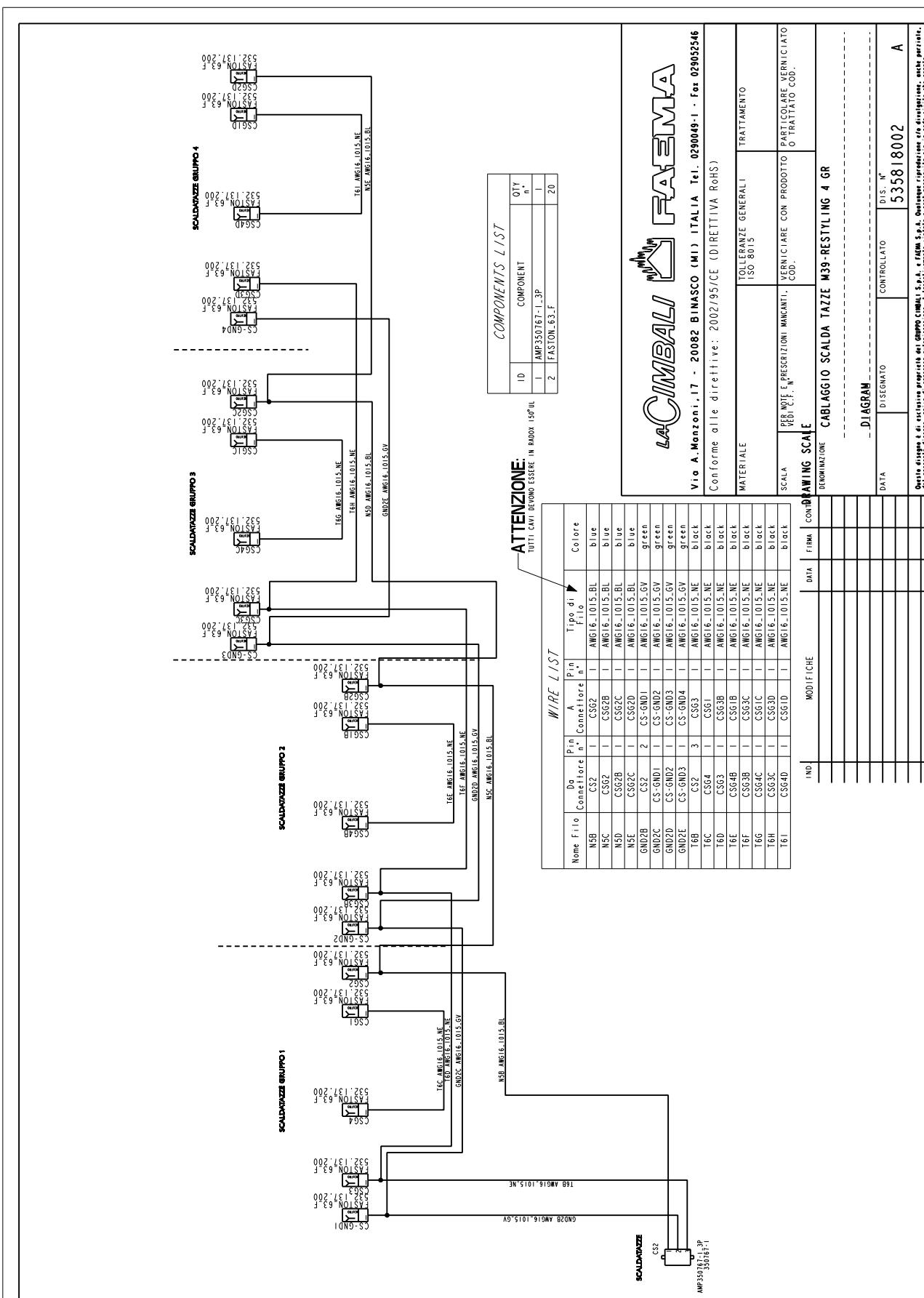
| MATERIALE | TOLERANZE GENERALI ISO 8015 | TRATTAMENTO PARTICOLARE VERNICIATO O TRATTATO COD. |
|---|--------------------------------|--|
| SCALA PER NOT. E PRESCRIZIONI MANCATI NELL'UNICO DISEGNO | CON DRAWING SCALE | |

M34-M39 RESTYLING 3GR DIAGRAM

| DATA | MODIFICA | DATA | FIRMA | CON D RAWING SCALE | CONTROLLATO | DIS. N° |
|------------|----------|------|-------|-----------------------|-------------|-------------|
| 01/10/2011 | | | | | CECCAROLI | 533821002-A |

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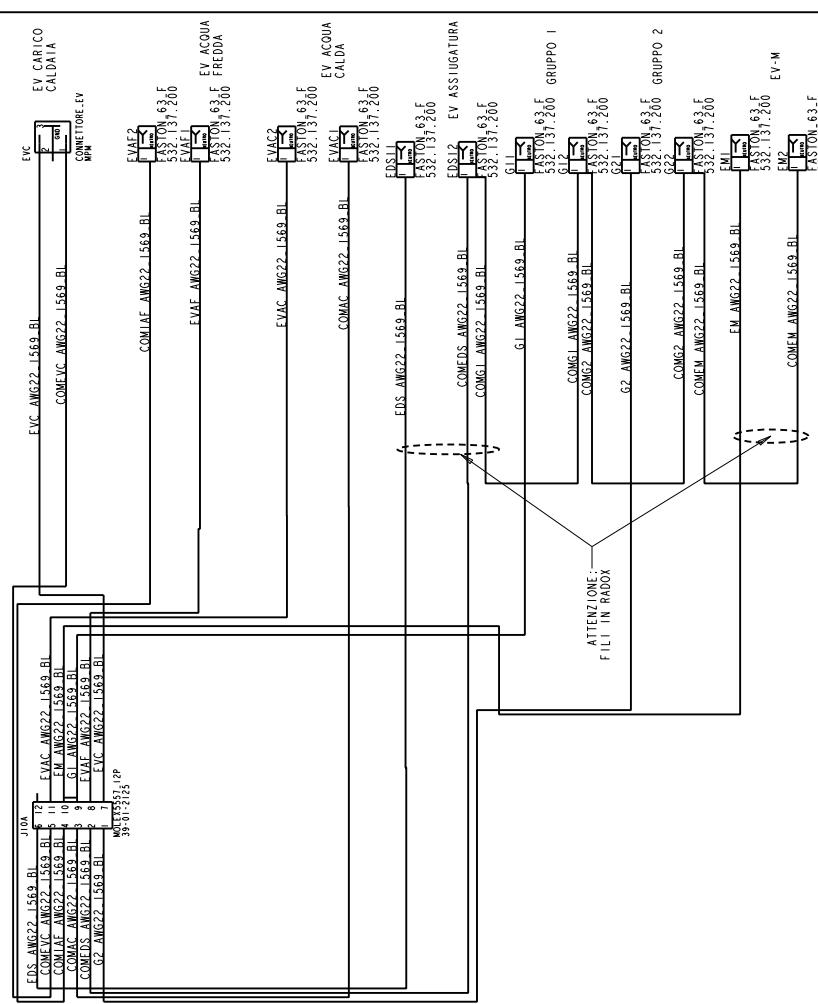
**Schema elettrico - Wiring diagram - Schéma électrique -
Elektrischer Schaltplan - Esquema electrico - Esquema eléctrico**



English



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



ATTENZIONE:
FILE IN RADOX

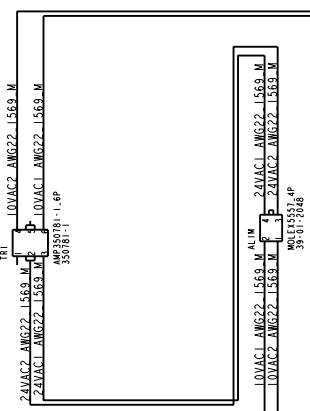


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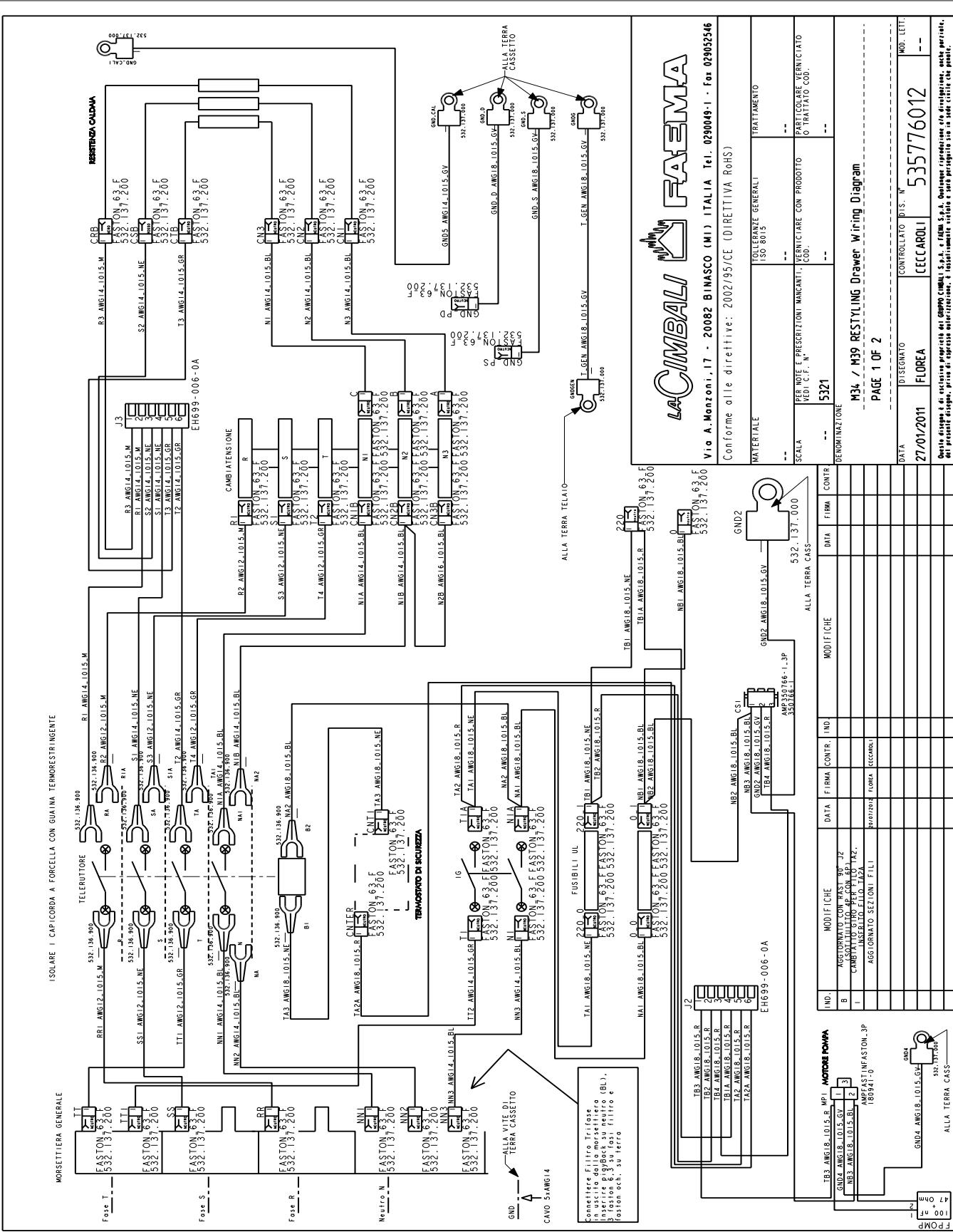
Conforme alle direttive: 2002/95/CE (DIRETTIVA ROHS)

| | | |
|-----------|---------------------------------|-------------|
| MATERIALE | TOLEERANZE GENERALI SO 80/15 | TRATTAMENTO |
|-----------|---------------------------------|-------------|

| IND. | MODIFICA | DATA | FIRMA | CONTR. | DENOMINAZIONE |
|---|-----------------------------|-------------|-----------|--------|--|
| X | AGS DEDICATE PIN OUT CONN | 25/11/11 | | | WEBCAR - UNIVOCALCITRON RADIOTECNICA, S.p.A. |
| 4 | ELIMINARE ZONA TS, NC E TPG | 6/01/12 | | | CONVENZIONE CON PROVVISORIO D'ISTRATTO COD. |
| | | | | | |
| | | | | | |
| | | | | | |
| M34-M39 RESTYLING BASIC BI WIRING DIAGRAM | | | | | |
| DATA | DISSEGNATO | CONTROLLATO | DIS. N° | A | |
| 07/10/2011 | FLOREA | CECAROLI | 535385042 | | |

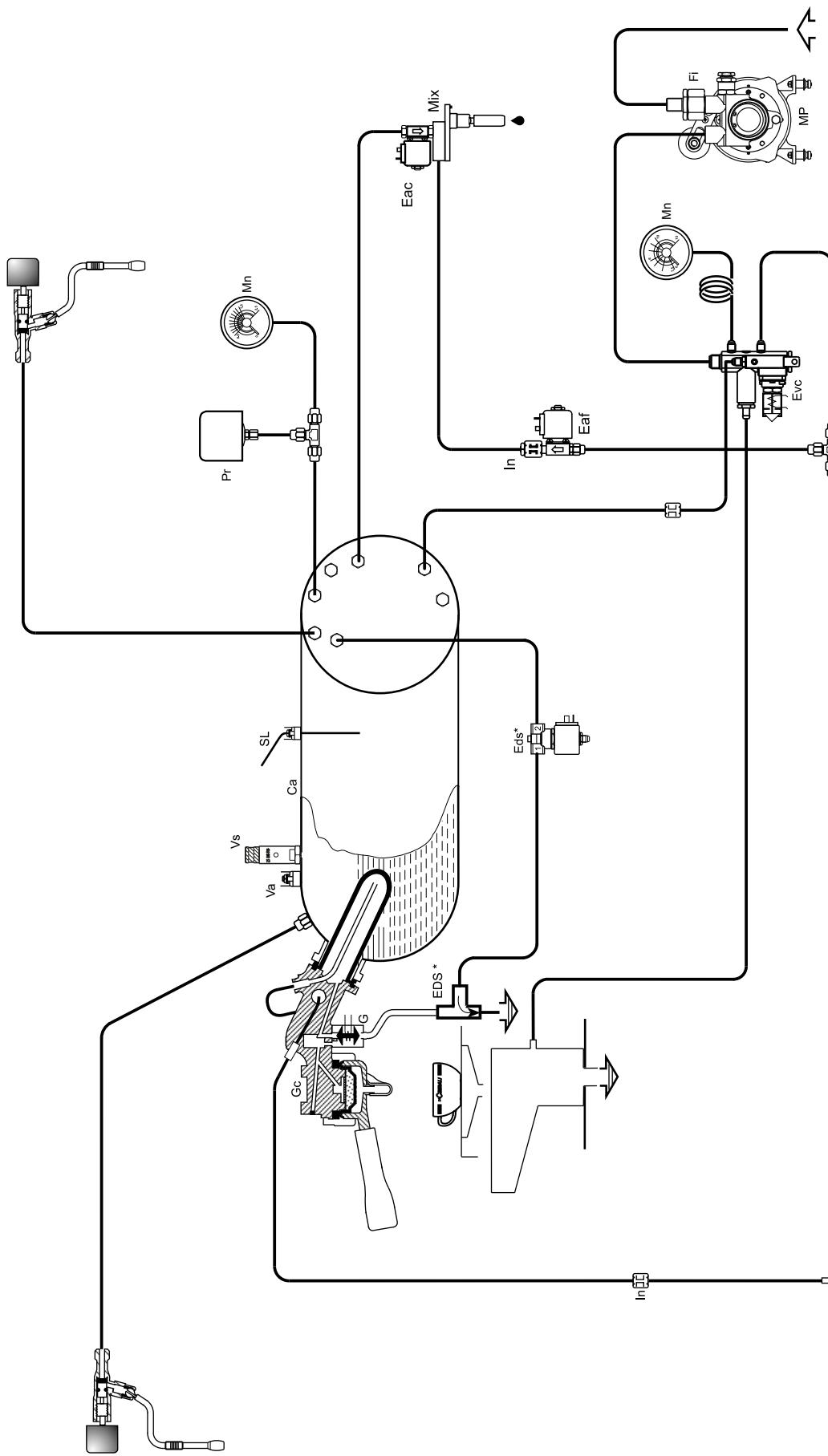


Schema elettrico - Wiring diagram - Schéma électrique -
Elektrischer Schaltplan - Esquema electrico - Esquema eléctrico



English

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

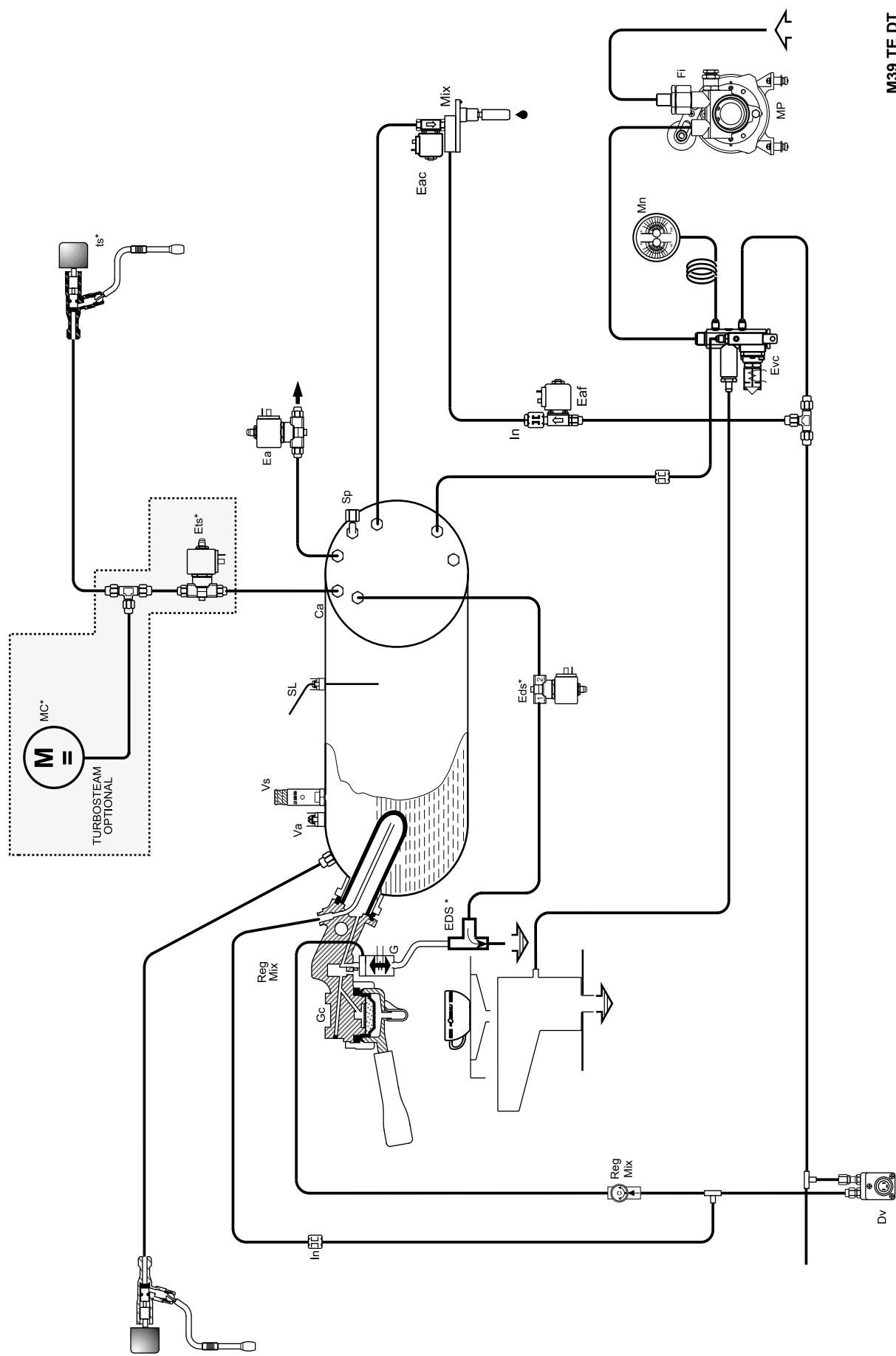


M39 TE C
1517

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

M39 TE DT
1517

English



Legenda schema idraulico - Hydraulic diagram Legend - Legende du schema hydraulique - Legende Wasserkreis - Leyenda esquema hidraulico - Legenda esquema hidráulico

English

IT Legenda

| | |
|------------|-----------------------------------|
| Ca | = Caldaia |
| DV | = Dosatore volumetrico |
| Ea | = Elettrovalvola antirisucchio |
| Eac | = Elettrovalvola acqua calda |
| Eaf | = Elettrovalvola acqua fredda |
| Ets | = Elettrovalvola turbosteam |
| Evc | = Elettrovalvola carico caldaia |
| Eds | = Elettrovalvola EDS |
| Fi | = Filtro pompa |
| G | = Elettrovalvola caffè |
| Gc | = Gruppo caffè |
| In | = Iniettore |
| MC | = Motore compressore |
| Mix | = Miscelatore acqua |
| Mn | = Manometro |
| MP | = Pompa volumetrica/ Motore pompa |
| Pr | = Microinterruttore pressostato |
| SL | = Sonda livello caldaia |
| Sp | = Sensore di pressione |
| ts | = Selettore turbosteam |
| Va | = Valvola antirisucchio |
| Vs | = Valvola di sicurezza caldaia |

EN Legend

| | |
|------------|---|
| 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 sole noid valve |
| Eds | = EDS solenoid valve |
| Fi | = Pump filter |
| G | = Coffee solenoid valve |
| Gc | = Coffee preparation group |
| In | = Injector |
| MC | = Compressore motor |
| Mix | = Water mixer |
| Mn | = Pressure gauge |
| MP | = Volumetric pump/ Motor pump |
| Pr | = Pressure microswitch |
| SL | = Boiler level probe |
| Sp | = Pressure sensor |
| ts | = Turbosteam selector |
| Va | = Anti-suction valve |
| Vs | = Boiler safety valve |

FR Legende

| | |
|------------|--|
| 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 |
| Eds | = Electrovanne EDS |
| Fi | = Filtre pompe |
| G | = Electrovanne du café |
| Gc | = Groupe café |
| In | = Injecteur |
| MC | = Moteur comprimeur |
| Mix | = Mélangeur eau |
| Mn | = Manomètre |
| MP | = Pompe volumétrique/Moteur pompe |
| SL | = Sonde de niveau de la chaudière |
| Pr | = Micro-interrupteur pressostat |
| Sp | = Détecteur de pression |
| ts | = Sélecteur turbosteam |
| Va | = Clapet fausse pression |
| Vs | = Soupape de sécurité chaudière |

DE Legende

| | |
|------------|-----------------------------------|
| Ca | = Kessel |
| DV | = Mengenzähler |
| Ea | = Rücksaugschutz Magnetventil |
| Eac | = Heißwasser-Magnetventil |
| Eaf | = Magnetventil Kaltwasser |
| Ets | = Magnetventil Turbosteam |
| Evc | = Wasserzugabe-Magnetventil |
| Eds | = EDS-Magnetventil |
| Fi | = Filter Pumpe |
| G | = Kaffee-Magnetventil |
| Gc | = Kaffeegruppe |
| In | = Düse |
| MC | = Motor Kompressor |
| Mix | = Wassermischer |
| Mn | = Manometer |
| MP | = Volumetrische Pumpe/Pumpenmotor |
| Pr | = Mikroschalter Druckwächter |
| SL | = Sonde-Kesselwasserniveau |
| Sp | = Druckfühler |
| ts | = Wahlschalter Turbosteam |
| Va | = Rücksaugschutzventil |
| Vs | = Heizkessel-Sicherheitsventil |

ES Leyenda

| | |
|------------|----------------------------------|
| Ca | = Caldeira |
| DV | = Dosificador volumétrico |
| Ea | = Electroválvula antisucción |
| Eac | = Electroválvula agua caliente |
| Eaf | = Electroválvula agua fría |
| Ets | = Electroválvula turbosteam |
| Evc | = Electroválvula carga caldera |
| Eds | = Electroválvula EDS |
| Fi | = Filtro bomba |
| G | = Electroválvula café |
| Gc | = Grupo café |
| In | = Inyector |
| MC | = Motor compressor |
| Mix | = Economizador |
| Mn | = Manómetro |
| MP | = Bomba volumétrica/ Motor bomba |
| Pr | = Microinterruptor presóstato |
| SL | = Sonda nivel |
| Sp | = Válvula antisucción |
| ts | = Selector turbosteam |
| Va | = Válvula antisucción |
| Vs | = Valvula de seguridad caldera |

PT Legenda

| | |
|------------|--|
| Ca | = Caldeira |
| DV | = Doseador volumétrico |
| Ea | = Electroválvula antisucción |
| Eac | = Electroválvula água quente |
| Eaf | = Electroválvula água fria |
| Ets | = Electroválvula turbosteam |
| Evc | = Electroválvula carregamento caldeira |
| Eds | = Eléctroválvula EDS |
| Fi | = Filtro bomba |
| G | = Eléltroválvula café |
| Gc | = Grupo café |
| In | = Injetor |
| MC | = Motor compressor |
| Mix | = Misturador |
| Mn | = Manômetro |
| MP | = Bomba volumétrica/ Motor da bomba |
| Pr | = Microinterruptor do pressostato |
| SL | = Sonda nível |
| Sp | = Válvula andisucção |
| ts | = Selector turbosteam |
| Va | = Válvula andisucção |
| Vs | = Válvula segurança de mola |

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