T 600 Original Manual for Use and Maintenance



Read the operating instructions and the chapter on safety information before operating the machine. Keep the operating instructions near the machine.







WEEE

Disposal of the equipment by the users within the European Community (WEEE) in compliance with the article 13 of the legislative decree issued on 25 July 2005, nr151 "Implementation of the directives 2002/95/CE,2002/96/CE e 2003/108/CE, concerning the decrease in the usage of dangerous substances in the electrical and electronic equipment and the disposal of waste".



Ш

The symbol of the crossed waste bin indicated on the equipment or on the packaging means that the product at the end of its lifetime must be disposed of separately from all the other waste.

The separate collection of this equipment coming at the end of its lifetime is organized and run by the importer/distributor. The user who should have to dispose of such equipment should get in touch with the importer/ distributor and follow the procedure they have adopted for the separate disposal of the equipment coming at the end of its lifetime. The proper separate disposal of disused equipment so that it can be recycled and treated according what is environmentally compatible contributes to avoid possible negative effects on the Environment and on Health and allows the reutilization and/or the recycling of the materials the equipment is composed of.

The improper disposal by the user causes the enforcement of the administrative sanctions according to current regulations.



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1. GENERAL DESCRIPTION OF THE MACHINE

The FRANKE **T 600** coffee machine is designed and manufactured to increase the profitability of the buffet bar service by reducing operating costs to the minimum.



LEGEND

- **1.** Selector touchpad
- 2. Main display
- 3. Navigation touchpad
- 4. Coffee dispensing group 1 touchpad
- 5. Right steam tap
- 6. Steam wand with incorporated temperature sensor (M.A.T.) (optional)
- 7. Right steam wand

- 8. Water collection basin + grill
- 9. Adjustable foot
- **10.** M.A.T. dispensing system touchpad (optional)
- 11. Main on/off switch
- 12. Two-cup filter holder
- 13. Card reader
- 14. SD/MMC card reader

- 15. Water supply touchpad for infusions
- 16. One-cup filter holder
- 17. Left steam wand
- 18. Water supply wand for infusions
- 19. Coffee dispensing group 2 touchpad
- 20. Coffee dispensing group display
- 21. Left steam tap
- 22. Cup warmer plate



1.1 DESCRIPTION OF THE MAIN COMPONENTS OF THE MACHINE

1.1.1 Coffee delivering touchpad



LEGEND

- 1. Display
- 2. 2 long coffees' key
- 3. 2 short coffees' key
- 4. Work surface illumination LED
- 5. Continuous delivery key
- 6. 1 long coffee key

7. 1 short coffee key



1.1.2 Control panel



LEGEND

- 1. Cup warmer heating plate on/off key
- 2. Cup warmer heating plate temperature increase key
- 3. Logo
- 4. OK key
- 5. Scroll up arrow key
- 6. Stand-by/on key
- 7. Scroll right arrow key
- 8. Scroll down arrow key
- 9. Scroll left arrow key
- 10. Main display
- 11. On/off manual boost key
- 12. Cup warmer heating plate temperature decrease key



1.1.3 Main display



LEGEND

- 1. Boiler pressure
- 2. Boiler temperature
- 3. Compensation temperature
- 4. Water supply or water pump pressure
- 5. Series and model of the machine
- 6. M.A.T. temperature setting programme system (optional)
- 7. Hour and date
- 8. Message area
- **9.** Hot water dispensing times setting programme for infusions
- 10. Signal symbols

SYMBOLS







1.2 ORIENTATION OF THE MACHINE

To ensure that each reference to the various parts of the machine (front, rear, etc..) that appear in this manual is clear and unmistakable, the orientation of the machine is as represented in this figure.

Any exceptions to this rule will be specified.





2. GENERAL ADVICE FOR THE INSTALLER

Read carefully the instructions and warnings contained in this manual and in the "**INSTRUCTION MANUAL FOR THE INSTALLER**", since they provide important indications concerning the installation of the appliance.

Attention!

The electric system, water system and drainage system MUST BE put in place by the customer in a suitable position to allow correct installation. The installation engineer cannot change the existing system put in place by the customer. See chapter 2.2: "Installation requirements for the user".

Attention!

The appliance must be installed where use and maintenance are restricted to trained staff.

2.1 GENERAL WARNINGS

Attention!

CAREFULLY READ THE FOLLOWING WARNINGS, WHICH OFFER IMPORTANT GUIDELINES FOR THE SAFE USE AND MAINTENANCE OF THE APPLIANCE.

The appliance must only be used for its intended purpose and it must be installed in a suitable place for its use. Any other use is therefore considered as improper and unreasonable. The manufacturer cannot be held liable for any damage caused by improper, incorrect or unreasonable use. Installation must be carried out by qualified personnel according to current laws and to the manufacturer's instructions. Incorrect installation may cause damage to people, animals or property for which the manufacturer cannot be held liable.

⚠ Danger!

The electrical safety of the appliance is fully achieved only after it has been correctly connected to an earthing system as required by the laws in force.

It is necessary to have the earthing connection checked by professionally qualified personnel. The manufacturer cannot be held liable for any damage caused by the lack or inefficiency of the system's earthing connection. The appliance has not been designed for outdoor use. It must only be operated in a place where the ambient temperature is between +5°C and +40°C.

Attention!

The use of any electrical appliance also requires observance of the following important regulations.

- Do not touch the appliance with wet or damp hands or feet.
- Do not use the appliance barefooted.
- Do not pull the power supply cord to unplug the appliance from the mains power.
- Do not allow children or unqualified persons to use the appliance.
- The specific instructions related to the safe operation of this appliance is collated together in the front section of the user instructions.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- Access to the appliance's service area, should only be permitted to persons having knowledge and practical experience of the appliance, in particular as far as safety and hygiene are concerned.
- The machine must be installed with the highest surface at least than 1,2 m.
- These instructions are also available in an alternative format, e.g. on a website.
- Before carrying out any routine maintenance or cleaning operation, disconnect the appliance from the mains power and shut off the water supply tap.
- In the event of damage and/or malfunction of the appliance, switch it off completely without trying to make any direct repairs. Contact the nearest Service Centre authorised by the manufacturer.
- In order to guarantee the proper efficiency and operation of the appliance, it is fundamentally important to follow the manufacturer's instructions, and to follow a regular maintenance schedule.
- The appliance has **IPX2** protection against water and therefore, it cannot be installed in areas where it may be subject to jets of water.
- The appliance has class I protection against electric shocks.
- The noise emitted by the appliance during normal operation is less than **70 dB**.



Attention!

Failure to comply with the above regulations could jeopardise the correct operation and safety of the appliance as well as its useful lifetime.

🕂 Warning!

The appliance is supplied without a plug. It is supposed to be directly connected to the electric mains and therefore, it is necessary to fit a single-pole switch with contact opening of 3 mm or more beforehand, according to the regulations in force.

2.2 INSTALLATION REQUIREMENTS FOR THE USER

The machine has to be placed on a stable flat surface that can guarantee a safe position. Check this important requirement, since the manufacturer cannot be considered liable for any damage caused by the instability of the appliance. While preparing the systems, take into account that a hole is needed in the bearing surface in order to make all electric and water connections through the opening below where a water softener will need to be fitted, if recommended by the installation engineer.

A hole of $10 \times 10 \text{ cm}$ is enough in the area (a) as indicated in Pict. 6.

The machine needs a minimum clearance of:

- height 60 cm.
- width 40 cm.
- depth 40 cm.



Legend:

- 1 Single pole switch with an opening of at least 3 mm between contacts
- 2 Water supply tap
- 3 Drain siphon
- **X** min. 20 cm.
- Y min. 40 cm.
- **Z*** min. 10 cm.
 -) Distance between the back of the appliance and the wall.

- Between the water mains and the water inlet pipe of the appliance, there must be a tap to stop the water flow if necessary (2 Pict.6).
- The water mains pressure must be within the range of 1 and 6 bar.
- If this requirement is not met, please consult the manufacturer.
- The appliance is supplied without a plug. It is supposed to be directly connected to the electric mains and therefore, it is necessary to fit a single-pole switch with contact opening of **3 mm** or more beforehand, according to the regulations in force (1 Pict.6).
- The drainpipe of the appliance must be directly connected to a suitable open drain siphon, previously installed by the customer (3 Pict.6). Do not fit the drain pipe into basins or buckets placed under the counter as this will increase the possibility of forming dirt deposits and as a result, the spread of bacteria.

Attention!

The appliance is supplied without water in the boiler. This is to prevent serious damage if the appliance is exposed to low temperatures. The appliance must only be supplied with cold drinking water.



2.3 WARNING/TECHNICAL DATA LABELS AND NAMEPLATES APPLIED TO THE MACHINE

In the figure below are shown the warning/technical data labels and nameplates positioned on the machine.

Warning!

Dedicate the time necessary to familiarise yourself with these labels.

Ensure that they are readable and keep them clean or replace those that have deteriorated or illegible (both the text and the graphics).

Use a soft cloth, soap and water to clean the labels. Do not use solvents, petrol, etc..

If a label is positioned on a component part that has to be replaced, ensure that the new component has the same label applied or a new one.





3 REMOVING THE PACKAGING

After unpacking the machine, please check its integrity; in case of doubt, do not use it and consult the manufacturer. Packaging materials must not be left within children's reach since they are potentially dangerous.

Attention!

The appliance weight is more than 30 kg and therefore, it cannot be moved by a single person alone.

Take note!

Dispose of the packaging as per the norms in force of the country in which the machine is utilised.



3.2 STANDARD EQUIPMENT OF THE MACHINE



600





BLIND FILTER



x 1









CUSTOMER CARD





x 1





1 CUP LOW FILTER



x 3

x 2

PRESSURE REDUCER



DETERGENT



x 1

x 1



4. COMMISSIONING THE MACHINE

- a) Open the water supply valve as envisaged in the preparations for installation (See Fig. 6 on page 11 Ref. 2).
- b) Check for any water leaks from the hosing/connections.
- c) Switch on the main breaker as envisaged in the preparations for installation (See Fig. 6 on page 11 Ref. 1).



5 SWITCHING ON THE MACHINE

Take note!

1. Move the switch positioned on the lower panel of the machine to the "I" position.

2. The machine goes into **STAND-BY** mode and the warning lights (represented in the figure on the right) on the control panel come on (the \diamond symbol flashes).

3. Keep the stand-by key pressed for three seconds; a general check is carried out during which all symbols on the control panel light up without flashing for two seconds and the main display is subsequently visualised as shown in the figure.

All functions that were active at the moment of switching off the machine the last time are memorised for the subsequent switching on of the machine.





5.1 FILLING UP WITH WATER

Three seconds after switching on, the machine automatically fills the boiler with water **(Fig. 11)**.

When the boiler filling phase is finished, the relative filling warning light switches off and then a check/adjustment of the water pump must be carried out.

5.1.1 Water level indicator of the boiler

The level indicator positioned on the right of the main display indicates the level of water in the boiler.

- EMPTY INDICATOR

When the level of water in the boiler has not reached the minimum level to ensure the functioning of the machine, the level indicator symbol is shown as in the figure on the right.





Д



- LEVEL "1" REACHED

The symbol is visualised when the level of water in the boiler has reached the minimum level to ensure the functioning of the machine, but not at the level preestablished by the manufacturer.

- LEVEL "2" REACHED

The symbol is visualised when the level of water in the boiler has reached the level pre-established by the manufacturer.

- FULL INDICATOR

The ^E symbol is visualised when the level of water in the boiler has reached an excessive level that does not ensure the correct functioning of the machine.





5.2 APPLIANCE HEATING AND PREPARATION STAGE

1. Attach the filter holders to the delivery groups.

2. Open the steam delivery valves by moving the lever upwards and leave them open: then move the steam wands over the grille.

3. Wait for steam to come out of the relevant wands (approx, 15-20 minutes) then close the steam valves by returning the levers to the initial position.





4. Wait for the appliance to reach the running temperature. The groups display will show the text opposite.

Each time that the temperature inside the boiler drops to below the SET LEVEL, the main display will show the screen opposite.



The running temperature is the temperature of the boiler during normal operation.

5. The appliance is ready to use.





5.3 COFFEE PREPARATION

1. Remove a filter holder from the delivery group.

2. Fill with ground coffee, taking care not to leave any coffee powder residues on the top edge of the filter holder, then press it using the special coffee press supplied.

3. Re-insert the filter holder firmly but not excessively.







 Place one or two cups under the outflow (according to whether you wish to pour 1 or 2 cups of coffee).

5. Press one of the delivery buttons (**A** - **B** - **D** - **E**) with programmed doses (during installation) or alternatively, use the button (**C**) for continuous delivery.







To stop a delivery commenced using one of the programmed dose buttons, press the (C) key on the same touchpad.





While delivering the coffee, the group display shows the screen opposite. Represents the symbol for the selected coffee dose with alongside, a bar to show the delivery progress.

The seconds stored during the dose programming stage for the selected dose (**MEM**) are shown under the bar, while alongside are the seconds indicating the actual progress of delivery (**DEL**).

Once delivery has finished, the group display will show the message opposite. The bottom of the display shows the seconds stored during the dose programming stage for the last dose selected (**MEM**) and alongside, the duration, in seconds, of the last dose delivered (**PREV**).

During continuous coffee delivery, the group display will show the time of the ongoing delivery in seconds.



Fig. 28



5.4 STEAM DELIVERY

1. Insert the steam wand into a jug containing the beverage to be heated.

2. Move the lever of the corresponding steam wand upwards. Adjust the steam flow as required.

3. When the beverage is sufficiently hot, shut off the steam by moving the lever to its original position, remove the jug away from the steam wand and wipe off any residues immediately using a damp sponge.





5.5 DELIVERING WATER TO PREPARE INFUSIONS

1. Place a jug under the hot water delivery wand.

2. The hot water delivery wand is enabled from the touchpad on the left of the bottom front panel on the appliance.

The touchpad has 2 keys; the first serves to deliver 100% hot water, while the second serves to deliver hot water mixed to a set temperature that can be adjusted during the installation stages of the appliance.





Do not use the touchpad to deliver water before first placing the jug under the hot water wand. Danger of scalds and burns.

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Fig. 33

5.5.1 Semiautomatic mode

With the semiautomatic delivery mode enabled (programmed by the engineer); the touchpad keys will operate semi automatically (ON/OFF) and not timed.

5.5.2 Automatic mode

With the automatic delivery mode enabled (programmed by the engineer), the touchpad keys will operate automatically and delivery from the wand will take place for the time set during the appliance installation stage. FR AN KE

5.6 AUTOMATIC MILK EMULSION WITH TEMPERATURE ADJUSTMENT - M.A.T. (OPTIONAL)

The appliance can be equipped with a system that allows you to emulsify milk at a set temperature and completely automatically.

1. Insert the steam wand, complete with probe, into the jug of milk.

2. The M.A.T. wand is started up from the touchpad on the right-hand side of the bottom front panel of the appliance.

The touchpad has 2 keys corresponding to 2 different SET temperatures programmed previously by the engineer.

Delivery stops automatically when the temperature programmed during installation is reached.

To stop steam delivery, press the button pushed to start it again.

3. While the wand with temperature probe is operating, the main display will show the SET temperature selected from the touchpad (left) and the actual temperature of the milk as it is being heated (right).





4. At the end of the emulsion process, remove the jug and wipe any residues from the steam wand and temperature probe away immediately, using a damp sponge.





Do not press the M.A.T. system delivery button before inserting the steam wand with temperature probe into the jug; danger of burns and scalds.



5.7 BOOST FUNCTION

This function has the purpose of optimising the management of the boiler resistances of the machine.

The **"Boost"** function permits taking advantage of the whole power available of the machine so as to have a greater thermal reset speed.

The menu also offers the possibility of activating the "Manual" and "Automatic" functions.

- MANUAL BOOST

The "Boost" function can be activated manually.

Pressing the "BOOST" key on the control panel, the "Boost \mbox{ON} " warning light indicates that the function is active.

Pressing the "**BOOST**" key again, the boost indicator light will switch off, indicating that the function is not enabled.





- AUTOMATIC BOOST

The "Boost" function can be activated also in automatic mode.

In automatic mode the function is active only when there is a drop in temperature in the boiler more than 5° C in respect of the set temperature.

The active function is visualised by the relative flashing warning light on the control panel.





5.7.1 Economy FUNCTION

After 20 minutes with the machine at a standstill, the "**Economy**" function is automatically activated.

In this state, the total power of the appliance is reduced for the purpose of maintaining the running temperature.

When another delivery is requested, the "**Economy**" function is deactivated immediately. The active "**Economy**" function is highlighted by the switching on of the relative warning light on the control panel.





5.8 FUNCTION OF THE THERMOSTAT-REGULATED CUP WARMER SURFACE

The machine is equipped with a thermostat-regulated cup warmer surface that keeps the coffee cups at a determined uniform temperature.

To activate the heating of the cup warmer surface, press the relative key on the control panel and check the switching on of the relative symbol \sum .

The symbol flashes whilst the surface is heating up and remains fixed when the set temperature has been reached. The temperature of the heating of the cup warmer surface can be increased or decreased using the increase and decrease keys positioned at the side of the heating key of the cup warmer surface.

The relative variation in temperature is visualised by the switching on/off of the ($\blacktriangle \lor$) symbols on the basis of the desired temperature step level.

Take note!

To modify the base temperature of the cup warmer surface (Refer to "IN-STRUCTION MANUAL FOR THE INSTALLER").



Position the coffee cups right side up on the cup warmer surface situated on top of the machine.

Position the coffee cups on top of each other in a maximum of two rows.





6. CLIENT PARAMETER PROGRAM ACCESS

The "**Customer Card**" supplied with each appliance makes it possible to change some of its functions.

Insert the "Customer Card" into the special reader in the front panel (bottom left).

Access to the programming phase is confirmed by an acoustic signal and the main display visualises the **"Main menu"** viewing panel on the display. It is now possible to remove the **"Customer Card"** from the reader.



Sixty seconds after pressing the last key, the machine automatically exits from the programming phase.

The data set previously is memorised.





The "Main Menu" contains 2 screens concerning the parameters to be programmed.

To pass from one viewing panel to another, use the navigation touchpad to position the cursor on the "**>>>**" symbol and press the "**OK**" key.

The display visualises the viewing panel on the right.





6.1 TIMER

This programme permits the programming of the switching on time and switching off time of the machine.

Position the cursor on the "**Timer**" menu and press "**OK**"; the display will show the screen opposite.

The function is enabled by default.

To enable the "Timer" function, position the cursor to "ON" and press the "OK" key to confirm.

Enabling the "Timer" function, the relative warning light on the control panel comes on.





The main display visualises the text on the right.



Programming the "**Timer**" function to switch the machine on/off can be on a daily or weekly basis.



6.1.1 Daily programming

Using the navigation touchpad, position the cursor on the chosen day of the week for switching the machine on and press the "**OK**" key to highlight it.

Subsequently, position the cursor on the time to switch on the machine and set the time using the navigation touchpad (HH:MM).

Using the navigation touchpad, set the time for switching off the machine.

When the settings have been carried out, press the " \mathbf{OK} " key to confirm.





6.1.2 Weekly programming

Using the navigation touchpad, position the cursor on the chosen day of the week for switching the machine on and press the "OK" key to highlight it.

Subsequently, position the cursor on the time to switch on the machine and set the time using the navigation touchpad (HH:MM).

When the settings have been carried out, press the "OK" key to confirm.

Using the navigation touchpad, set the day for switching off the machine. The example on the right shows the machine has been set to come on at 06.00 on Monday and 22.00 on Saturday; Sunday the machine is switched off.





6.1.3 Timer active

If the "**Timer**" function is activated, the main display alternates the visualisation of the date and current hour with the day and hour that the machine switches off.

When the machine is switched off by the timer, the main display shows the information on the right.

If it is necessary to switch the machine on before the pre-established time set by the "Timer" function, consecutively press the ON key on the control panel for three seconds.

This operation automatically disenables the "Timer" function.





6.2 LEDS

From the "**Main Menu**" page, use the navigation touchpad to select the "**LED**" menu and press "**OK**" to open it.

The display visualises the possibility of activating/deactivating the illumination of the work surface

This function is not enabled by default.

To enable this function, position the cursor on "**ON**" and press the "**OK**" key to confirm. The work surface is now illuminated by the LEDs positioned to the side of each coffee dispensing group.





Activating the "**Auto**" function, the two LEDs positioned at the side of each dispensing coffee group are switched on only during the coffee dispensing phase.





6.3 CALENDAR

From the "**Main Menu**" screen, use the navigation touchpad to select the "**Calendar**" menu and press "**OK**" to open it.

- DATE

Using the navigation touchpad, enter the "**Date**" menu and the display visualises the text on the right.

Pressing the **right/left arrows** of the navigation touchpad, select the parameter to modify. Press the "**OK**" key to highlight it and modify the parameter using the **up/ down keys** of the navigation touchpad.

Press the "OK" key again to confirm the modification.

The visualisation of the day of the week is positioned underneath the date that is automatically updated on the basis of the date set.

Having modified the parameters, position the cursor on the "**Calendar**" menu using the navigation touchpad and press the "**OK**" key to return to the "**Settings**" menu or position the cursor on the "**Main menu**" and press the "**OK**" key to return to the main menu.

