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## 2. GENERAL INFORMATION AND WARNINGS

This manual has been created to help you understand the operation, installation and maintenance of the machine. It contains all the necessary information and warnings to ensure that the appliance is installed and used correctly, together with information about the characteristics and possibilities offered, so that you may enjoy your machine to the full.



**BEFORE STARTING THE APPLIANCE, PLEASE READ THE INSTRUCTIONS CONTAINED IN THIS MANUAL CAREFULLY.**

The manual should be kept safely to hand for future reference.

If the machine is sold or transferred, please pass the manual to the new user.



**THIS APPLIANCE IS EXCLUSIVELY FOR PROFESSIONAL USE, AND SHOULD ONLY BE USED BY QUALIFIED PERSONNEL.**

- The choice of materials, construction in conformity with CE safety directives (2014/35/EC- Low Voltage Directive, 2014/30/EC- EMC Directive, 2006/42/EC- Machinery Directive, 2011/65/EU- RoHS2) and complete testing ensure the quality of this machine. In addition to this manual, you will find in the machine: wiring diagram and topographic table.
- The positioning and installation, and all repairs or modifications, should always be carried out by an **AUTHORISED TECHNICIAN**, in accordance with the applicable legislation of the country. The manufacturer does not accept liability if the machine is incorrectly installed.
- The installation, incorrect adjustment, inappropriate maintenance or use of the appliance may cause material damages and injuries.
- The dishwasher should be correctly levelled and care taken to ensure that none of the electric cables, water or drainage hoses are trapped or kinked.
- **DO NOT** climb on top of the dishwasher or place heavy objects on top of the machine as it has only been designed to bear the weight of the basket of plates to be washed.
- **The dishwasher is designed for washing plates, glasses and other kitchenware with traces of human food. Any other objects must not be washed in the machine.**
  - If your machine breaks down, please call the **Technical Service Centre**.
  - Unqualified or unauthorised personnel must **NOT** try to repair the machine.
  - Use of spare parts other than original parts will cancel the guarantee.



- During all maintenance operations, the dishwasher must be disconnected from the main power supply at the mains power switch, and the water intake tap must be closed.
- Abrasive or corrosive products, acids, solvents and chlorine-based detergents must **NOT** be used to clean the appliance, as this may damage the components.
- This appliance has been designed for use in ambient temperatures between 5 °C and 40 °C.
- Only the baskets, soaps and rinse aids recommended by the manufacturer should be used.



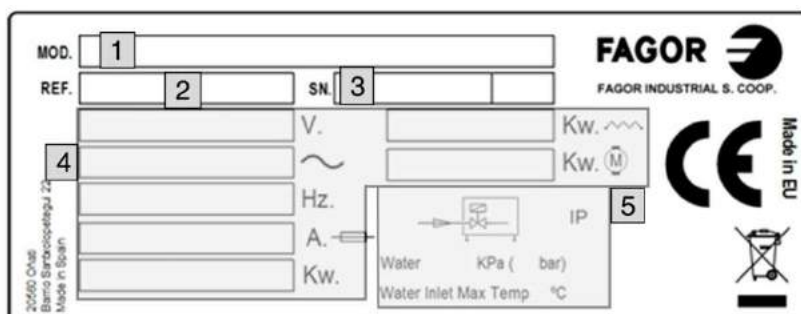
**FAILURE TO COMPLY WITH THESE INSTRUCTIONS OR THE INCORRECT USE OF THE APPLIANCE SHALL RELIEVE THE MANUFACTURER OF ANY OBLIGATIONS REGARDING THE GUARANTEE OR POSSIBLE CLAIMS.**

## 3. PRODUCT DETAILS

The machine which you have just purchased is specially designed for cleaning tableware, glassware and other items of kitchenware, used in the hotel and catering sector. As it is an industrial product, it is characterised for having a high dishwashing capacity.

All the appliances have a specifications plate which identifies the appliance and indicates its technical characteristics, it is located on one side of the machine. Don't remove the specifications plate from the unit.

### SPECIFICATIONS PLATE



The specifications plate includes the following fields and information:

- MOD. 1**: Appliance model name
- REF. 2**: Appliance reference
- SN. 3**: Serial number + manufacture date
- 4**: Electrical specifications (V., Hz., A., Kw.)
- 5**: Water inlet specifications (Water kPa, Water Inlet Max Temp °C)

Additional information on the plate includes the FAGOR logo, 'FAGOR INDUSTRIAL S. COOP.', 'CE' mark, and 'Made in EU'.

- 1: APPLIANCE MODEL NAME
- 2: APPLIANCE REFERENCE
- 3: SERIAL NUMBER + MANUFACTURE DATE
- 4: ELECTRICAL SPECIFICATIONS
- 5: WATER INLET SPECIFICATIONS

These details should be quoted when the technical service is called.

## 4. INSTALLATION INSTRUCTIONS



The positioning and installation, and all repairs or modifications, should always be carried out by an **AUTHORISED TECHNICIAN**, in accordance with the applicable legislation of the country.

The installation, incorrect adjustment, inappropriate maintenance or use of the appliance may cause material damages and injuries.

### 4.1 Removal of packaging

Remove packaging from the machine and check for damage during transportation. If any damage is observed, immediately notify the supplier and the transport company. In the event of doubt, do not use the machine until the problem has been assessed.



**Packaging (plastic, expanded polyurethane, staples, etc...) must not be left in the reach of children, they are a potential hazard.**

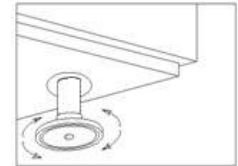
The machine should be moved using a fork-lift truck or similar to avoid damage to the structure. Transport the machine to the installation location and then remove packaging.

All the packaging can be recycled. Dispose of packaging correctly.

### 4.2 Positioning and levelling

This appliance has adjustable feet to allow it to be adjusted to the correct height, this is done by turning the foot to the desired height. For optimum operation, it is essential that the machine is correctly levelled. The flooring on which the machine is to be installed must be able to bear the full weight of the machine.

**Inspect final location of the machine prior to installation to prevent damage during use.**



### 4.3 Electrical connection

An **AUTHORISED TECHNICIAN** should always carry out the appliance's electrical connection.

The legal standards in force in each country regarding connection to the mains should be taken into account.



- Check that the mains voltage corresponds to that indicated on the nameplate.
- The electric cable should be flexible, with an oil-proof covering, and it should not weigh less than the cable in an ordinary sleeve made of standard polychloroprene or an equivalent synthetic elastomer (H05RN-F).
- The cross-section of the power cable must be suitable for the rated current of the machine.
- The appliance must be earthed using the earth connection of the terminal block of the appliance.
- Near the appliance and easily accessible to the user, between the power supply and the appliance, a suitable omnipolar cut-off Circuit Breaker with a minimum contact separation of 3 mm (0,12 in) must be installed. It is recommended that it has lockout-tagout capabilities. The manufacturer will not be held liable for damage originated by failure to observe this requirement.
- A suitable safety switch / Residual current device must be installed near the appliance between the power supply and the appliance. The manufacturer will not be held liable for damage originated by failure to observe this requirement.
- If any faults are observed during the installation, the supplier should be notified immediately.

To access the connection strip, release the cover of the machine's rear. The power cable is connected to the connection strip. It is also possible to change the machine configuration here. **Fig. 1**



**The manufacturer will not be held liable for any personal or material damage to the machine resulting from incorrect installation or failure to comply with the manufacturer's specifications.**

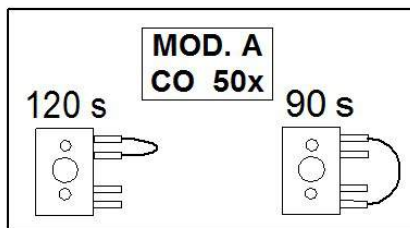
#### 4.3.1 Voltage Configuration of the machine

The voltage configuration of the machine is stipulated on the nameplate. If the mains voltage supply is not the same as that stipulated on the machine, there is a terminal box from which the different voltage options can be configured (230V 1N~, 230V 3~ or 400V 3N~). **Fig. 6**  
 In the event of a change, the supplier must be notified to ensure that the machine's guarantee remains valid.

**ONLY AUTHORISED PERSONNEL may change the electrical configuration. Users may not tamper with the machinery.**

#### 4.3.2 Configuration of the wash cycles (only MOD. A)

The machine is prepared for different wash cycles. The factory setting is for cycles of 120 s and 180 s, and for a production of 30-20 baskets/hour. In the event of a higher production rate, 40-20 baskets/hour, the wash times can be changed by going to the connections box on the rear left of the machine and making the change as shown in the diagram. **Fig. 1**



**ONLY AUTHORISED PERSONNEL may change the electrical configuration. Users may not tamper with the machinery.**

#### 4.4 Hydraulic connection

The new hoses supplied with the appliance should be used (do not reuse old hoses). Before connecting the machine to the water supply **Fig. 1**, the water quality should be tested. Recommended water quality:

<b>Water temperature (T):</b>	max. 60 °C	<b>Total water hardness:</b>	5 – 10 °fH (French degrees)
<b>pH:</b>	6.5 - 7.5		7 – 14 °eH (English degrees)
<b>Impurities:</b>	Ø < 0.08 mm		9 – 18 °dH (German degrees)
<b>Chlorides:</b>	max. 150 mg/l	<b>Conductivity:</b>	400 - 1,000 µS/cm
<b>Cl:</b>	0.2 - 0.5 mg/l		

If the water hardness is more than 10 °fH (French degrees), a descaler must be installed. In addition to water quality, the pressure of the mains water supply must be considered. This is important to ensure the machine operates correctly. Required water pressure:

DYNAMIC PRESSURE	Min.				Max.			
	bar	kPa	Kg/cm <sup>2</sup>	psi	bar	kPa	Kg/cm <sup>2</sup>	psi
	2	200	2,03	29	4	400	4,07	58,01

In the B and C models the water inlet is: 0.5 - 4 bar. If the water pressure is higher than the recommended pressure, a pressure regulator must be mounted at the output **Fig. 2**. If the mains water pressure is lower than the recommended pressure, a pressure pump should be mounted at the mains water supply **Fig. 3**. In the B models, a pressure pump is not required even when the water pressure is lower than that stipulated.

**Fig. 2.** Direct connection of water input hose.

**Fig. 3.** Pressure pump connection.

- S → SHUT-OFF COCK                      F → FILTER                                      H → WATER HOSE
- E → ELECTROVALVE                      B → ELECTRIC PRESSURE PUMP

The following requirements are necessary for the correct hydraulic installation of the machine.

- The hydraulic circuit must be fitted with a valve to shut-off the water supply.
- Check that the mains pressure is within the range indicated above.
- To optimise the working of the machine, the manufacturer recommends that the water temperature at the machine intake is within the following range.

Cold H <sub>2</sub> O	Hot H <sub>2</sub> O
5 °C < T <sup>a</sup> < 25 °C / 41 °F < T <sup>a</sup> < 95 °F	40 °C < T <sup>a</sup> ≤ 60 °C / 122 °F < T <sup>a</sup> < 140 °F

- If using hot water, the water temperature must not exceed 60 °C / 140 °F.
- If the input water temperature is less than 10 °C, the COLD WATER KIT should be used.
- All the machines should have a 3/4" screw-on connection.

#### 4.5 Drainage connection

The water draining from the machine must flow freely and therefore the drainage pipe should be lower than the drainage outlet **Fig. 4**. If the drainage pipe is not lower, a drainage pump will be required. This must not be mounted at a height of more than **800 mm Fig. 1, Fig. 5**. In this case, the pump may be requested at the time of purchase or subsequently.

**Fig. 4.** Drainage installation.

**Fig. 5.** Installation of drainage at a height using drainage pump.



**The drainage pump must only be installed by personnel authorised by the manufacturer, and the manufacturer does not accept liability in the event of incorrect installation.**

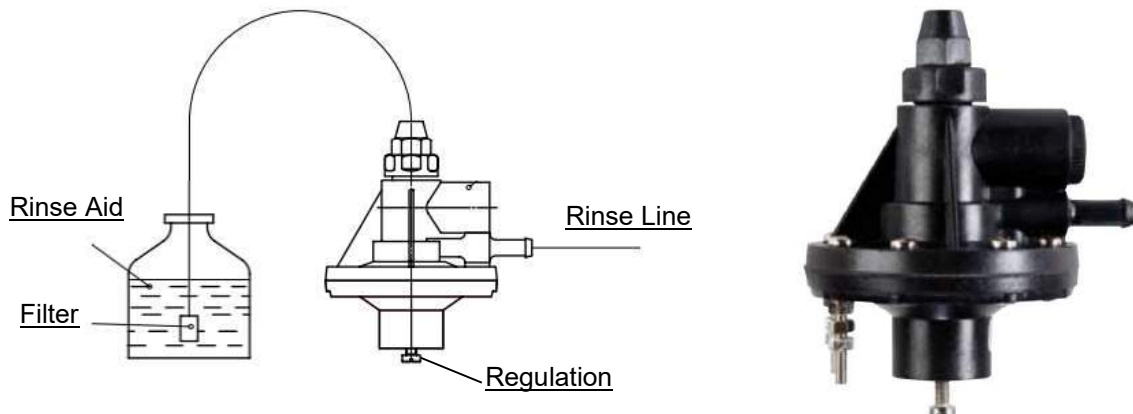
#### 4.6 Hydraulic rinse aid dispenser (A MOD.)

**Installation:** Take the tube located in the back of your machine marked "Rinse Aid" and place inside rinse container.

Tubes are transparent to provide you visible mean that chemicals are being dispensed.

**Operation:** This dispenser absorbs the rinse aid when it detects a loss in pressure during rinsing. That is, when the filling solenoid valve closes, a vacuum is created that makes the rinse aid dispenser absorb the fluid to which it is connected.

**Adjustment:** The dispenser should be adjusted when the machine is installed to ensure that the wash is optimised from the start. The setting should be adjusted according to the type of rinse aid and the water hardness.



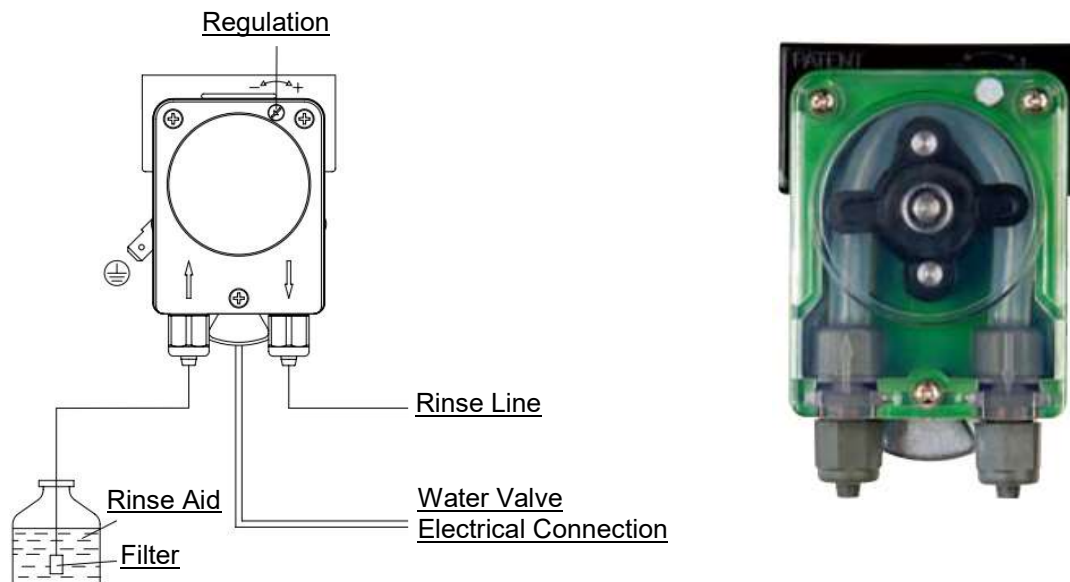
#### 4.7 Electric rinse aid dispenser (B, C MOD.)

**Installation:** Take the tube located in the back of your machine marked "Rinse Aid" and place inside rinse container.

Tubes are transparent to provide you visible mean that chemicals are being dispensed.

**Operation:** this dispenser absorbs the rinse aid when the rinse pump is switched on. That is, when the machine is filling and when the machine is running the rinse cycle.

**Settings:** The dispenser should be adjusted when the machine is installed to ensure that the wash is optimised from the start. The setting should be adjusted according to the type of rinse aid and the water hardness.



In order to maintain dishwasher at optimum conditions, it is requested to remove lime and corrosion deposits on a frequent basis. A de-liming solution should be available from your chemical supplier. Read and follow all instructions on the label of the de-liming solution. Operations:

- Fill the machine. Add the correct amount of de-liming solutions as recommended by the de-liming solution manufacturer. The water capacity of the tank can be verified on the specification sheet of this manual.
- Remove detergent and rinsing tubes from containers so no chemicals go to the machine.
- Run the machine for the recommended period of time. As many cycles as needed.
- Turn off the machine and open the door.
- When clean, drain and re-fill the machine.
- Run machine for 3-4 cycles to remove de-liming solution.
- Drain the machine.

If desired you can control the amount of Chemical being dispensed by opening the bottom front panel of the machine. Locate the detergent dispenser and regulate according to the flow. For the Rinse, turn the button counterclockwise to get more rinse aide and clockwise for less. Verify all connections to the dispenser are hand tighten to prevent any leaks. Control and maintain the level of detergent and rinse aid of the tanks. Keep chemical tubing and filters submerged.



**It is recommended that the rinse aid product and the dispenser setting are defined by a technician specialised in the use of chemical products in order to ensure a more efficient wash.**

#### 4.8 Detergent dispenser (Optional A, B MOD.)

Use ONLY **Commercial Grade, High Temperature, Low Suds Liquid Detergent**. Fagor doesn't recommend any specific brand name of chemicals. Contact your local chemical distributor for questions concerning your chemical needs.

All machines come equipped with an internal Detergent and Rinse dispenser.

**Installation:** the detergent dispenser input is in the wash tank front part, above the maximum water level.

Take the tube located in the back of your machine marked "Detergent" and place inside detergent container.

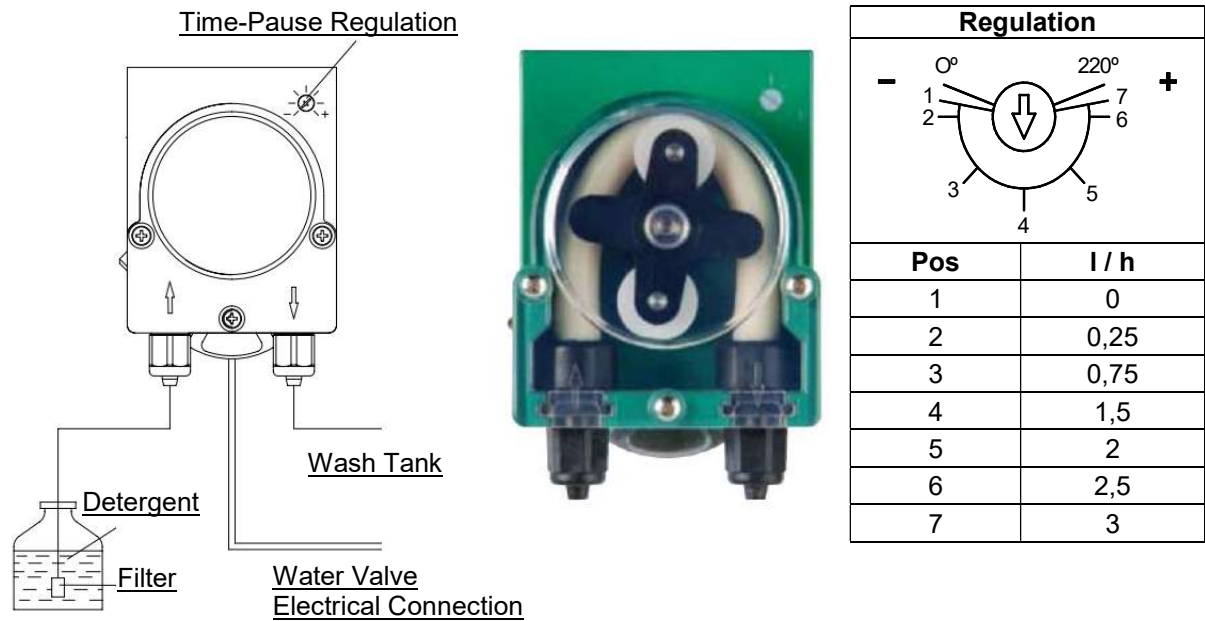
This ensures that the correct measure of detergent is supplied to the machine. **Fig. 1**

**Installation:** the detergent dispenser input must be in the tub of the machine, below the maximum water level. Please see the electrical circuit diagram for details of the electrical connection. The tub has an opening for the installation of the dispenser, marked with an adhesive label as "DETERGENT CONNEXION".



**Operation:** the detergent dispenser is activated when the machine is taking water, whether it is in rinse cycle or whether it is filling.

**Settings:** the measure of detergent used should be adjusted when the component is installed to ensure that the wash is optimised from the start.



It is recommended that the detergent and the dispenser setting are defined by a technician specialised in the use of chemical products in order to ensure a more efficient wash.

## 4.9 Pressure pump (only A MOD.)

If the mains water pressure is less than 2 bar (200 kPa), you have the option of installing a pressure pump. If the pressure is less than 2 bar (200kPa), the machine may operate incorrectly. The electrical connections for the pressure pump are shown in the electric circuit diagram. The water connection to the pressure pump is shown in **Fig. 3**.

If the mains water pressure is less than 2 bar (200 kPa), please contact your supplier or the manufacturer to request the PRESSURE PUMP KIT.



**The pressure pump must only be installed by personnel authorised by the manufacturer, and the manufacturer does not accept liability in the event of incorrect installation.**

## 4.10 Recycling

The product packaging consists of:

- A wooden pallet.
- Cardboard.
- A polypropylene band.
- Expanded polyethylene.



All the packaging used around the machine can be recycled; The correct disposal of these products will help to protect the environment. For further information regarding the recycling of these products, please refer to the relevant office of the local body. Dispose of these materials in accordance with current legislation.

## 5. USE AND MAINTENANCE INSTRUCTIONS



**BEFORE STARTING THE APPLIANCE, PLEASE READ THE INSTRUCTIONS CONTAINED IN THIS MANUAL CAREFULLY.**



**THE APPLIANCE IS EXCLUSIVELY FOR PROFESSIONAL USE, AND SHOULD ONLY BE USED BY QUALIFIED PERSONNEL.**

### 5.1 Operation

The steps required to optimise the operation of your dishwasher are shown below, with all the available options.

#### 5.1.1 Control panel symbols A, B MOD. Fig. 7, 8

- |                               |   |
|-------------------------------|---|
| A. Cycle selector button      | H. Regeneration cycle button (only SOFT models) |
| B. Start button / Stop cycle  | I. Machine on pilot light                       |
| C. Temperature display        | J. Salt low pilot light                         |
| D. Wash Cycle 1 (60 s)        | K. Machine ready pilot light.                   |
| E. Wash Cycle 2 (90 s)(120 s) | L. EFFI- RINSE SYSTEM pilot light               |
| F. Wash Cycle 3 (180 s)       | M. Cold rinse                                   |
| G. Drainage control button    |   |

#### 5.1.2 Control panel symbols C MOD. Fig. 9

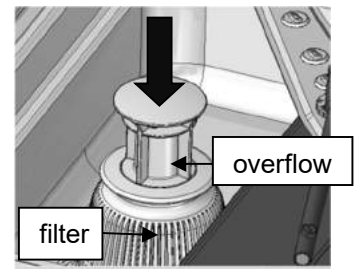
- |                              |                                   |
|------------------------------|-----------------------------------|
| N. (ON/OFF) Button           | Q. Display                        |
| I. Machine on pilot light    | R. Cycle selector button (START)  |
| O. Self-Cleaning button      | L. EFFI- RINSE SYSTEM pilot light |
| P. Programme selector switch |                                   |



### 5.1.3 Switching on the machine

Before switching on the machine, check the following:

- ✓ The mains switch must be on.
- ✓ The water stop cock must be open.
- ✓ There must be water in the mains network.
- ✓ The corresponding filters must be in place.
- ✓ The overflow should be mounted in place. Place and push until the overflow is lined up with the filter. (See figure).



To switch on the machine in A, B models, turn the selector switch from 0 to WASH CYCLE.

In C models, just press the ON/OFF button once for 1.5 seconds.

### 5.1.4 Filling and heating

In the A models, when the machine is switched on, it will start to fill. First the rinse boiler is filled and then the wash tub. The filling process may last a few minutes. Once the wash tub is full, the boiler and the tub start to heat up. Although it is possible to start the wash process, this is not recommended as the water inside the machine is not yet at the ideal temperature. When the machine has reached the ideal temperature for washing the dishes properly, a light comes on, advising the user that the machine is ready. The required temperature of the machine is 85 °C / 185 °F in the rinse boiler and 60 °C / 140 °F in the wash tub. It is recommended that the water in the dishwasher is changed every 40/50 washes or twice a day.

In the B, C models, the filling is thermostatic. This means that when the water boiler is full, the boiler heats the water to a temperature of 60 °C / 140 °F and then the tank is filled. This process is repeated each time the boiler is emptied during the filling cycle. This filling system is more efficient but it helps to reduce the electricity consumption as when the machine has been filled, the water is at the correct temperature.



**The door must be closed for the machine to start filling. For safety reasons, if the door is open, the machine will not fill.**

The machine you have purchased has a safety thermostat in the boiler and another for the tub, so that in the event of the breakdown of any of the main thermostats, the safety thermostats switch off the corresponding heating.



**During the first heating of the day, the boiler may reach a higher temperature than that mentioned above due to heating inertia. This is normal. If pressurised steam is observed coming out of the rinse branch nozzles, while the boiler is heating, the technical service should be notified.**

### 5.1.5 Preparation of the dishes

Before washing the dishes, the preparatory steps below should be followed:

- Remove the largest pieces of waste from the dishes before placing them in the baskets.
- Wash glassware first.
- Put the plates in the rack basket.
- Place the glasses upside down.
- Place the cutlery in the cutlery baskets with the handles downwards. The different pieces of cutlery can be mixed.
- Place the cutlery baskets in the lower baskets.

### 5.1.6 Selecting the wash cycle

Before starting the wash cycle, place the corresponding basket containing the dishes in the machine and close the door. A wash cycle must be selected in order to start the wash in the A, B models. Each wash cycle corresponds to a wash time that should be selected according to the user requirements (90/120 s-180 s). Then press START and the wash cycle will start automatically.

In the C models, to start the wash process, select the wash cycle you wish to run by pressing button O Programme selector switch. Each wash cycle corresponds to a wash time that should be selected according to the user requirements (60 s-90 s-120 s- glass). Then press button Q START cycle button



**The door must be closed for the machine to start the wash cycle. For safety reasons, if the door is open, the wash cycle will not start.**

### 5.1.7 Thermo-stop (only B, C MOD.)

The thermo-stop is designed to ensure a constant rinse at the maximum temperature. This means that the machine continues washing until the boiler reaches the ideal temperature. Then the rinse cycle starts.



**If the mains water temperature is less than 50 °C / 122 °F, the installation of this system may reduce the wash capacity of the glass washer.**

### 5.1.8 Stopping the wash cycle and end of wash cycle

The wash cycle can be stopped in the following ways:

- By switching off the machine → the cycle stops completely.
- By opening the door → when the door is closed, the cycle continues.

At the end of the wash cycle, remove the basket and leave the dishes to dry naturally. Remove the dishes from the basket with clean hands, taking care not to burn yourself as the dishes are extremely hot.

### 5.1.9 Cold rinse (only COLD versions)

The COLD versions have a cold rinse programme. To run this programme, keep the cycle selector switch set to cold rinse (M) for the required time. While the switch is held in this position, the machine will run a rinse using cold water from the mains supply.

### 5.1.10 Drainage of the machine

The dishwashers have two types of drainage; gravity drainage or using a drainage pump.

#### 5.1.10.1 Drainage by gravity

To drain the machine in this way, just remove the overflow from the machine and it will drain naturally. For reasons of safety, this method of drainage should only be used with the machine switched off.

#### 5.1.10.2 Drainage using the drainage pump

The drainage using the drainage pump option is only available on request in the A, B models. The drainage pipe must always be fitted on a siphon to prevent the return of odours. To drain the machine using this method, proceed as follows:

- Remove the overflow valve.
- Select the drainage function on the selector switch (G).
- Press START (B) button, the *START* button light (B) comes on, the drainage cycle will start automatically.
- At the end of the cycle (approx. 160 s), the *START* button light (B) goes off, replace the overflow valve. The machine may be switched off.

In the C models, to drain the machine using the drainage pump close the door and press ON/OFF button for 1,5 seconds. The drainage cycle will start automatically at 5 minutes.



**To drain the machine with the drainage pump, the hose must be at a height (max. 800 mm).**

### 5.1.11 Regeneration cycle (only SOFT versions)

In the A, B models, the dishwasher is fitted with a manual regeneration or descaling system for water with hardness equal to or greater than 10 °fH. This means that the water entering the machine must be softened. If this system is not fitted, the machine pipes may become blocked due to the build-up of too much limescale. To ensure that the system operates correctly, proceed as follows:

- Make sure that the deposit contains rock salt. SEE PILOT LIGHT (J).
- The regeneration cycle should be run at the end of each working day.
- The process takes 20 minutes, during which the machine cannot be used for washing.

To run the regeneration cycle, proceed as follows:

- Select regeneration cycle (H).
- Press the START (B) button, the *START* button light (B) comes on.
- After 20 minutes, the *START* button light (B) goes off, the machine may be switched off.

In the C models, the dishwasher is fitted with an automatic regeneration or descaling system for water with hardness equal to or greater than 10 °fH. This means that the water entering the machine must be softened. If this system is not fitted, the machine pipes may become blocked due to the build-up of too much limescale. To ensure that this system operates efficiently, the salt deposit must be filled with rock salt. If the deposit does not contain salt, a warning advising the user is displayed (A5- SALT LOW).

The regeneration process is automatic and can be run at the same time as a wash programme. During the regeneration process, the machine does not run the rinse cycle, but waits until the end of the regeneration cycle (less than 3 minutes).

When the machine has been switched off, the control may consider another regeneration to be necessary. In this case, the machine will run an automatic regeneration, and the message "REGENERATION" is displayed.



**The appearance of streaks of lime on the clean dishes is an indication of the need to urgently run the descaling or regeneration cycle.**

### 5.1.12 Switching off the machine

In the A, B models, to switch off the machine, turn the selector to 0.

In the C models, the dishwasher is switched off by pressing the ON-OFF button for 1.5 seconds.

The machine should not be switched off during the wash process as this will stop the tableware inside the machine from being cleaned properly.

### 5.1.13 Self-cleaning cycle (only C MOD.)

The machine you have purchased is fitted with a self-cleaning function. The self-cleaning cycle should be run at the end of each working day. The programme runs an internal clean cycle to automatically remove any dirt inside the machine. The cycle lasts approximately 2 minutes. During this cycle, the machine will not be able to run any other dishwashing cycle. To run this programme, proceed as follows:

- **DO NOT** remove the filters from the machine.
- Close the door.



- Press the self-cleaning button.
- At the end of the auto-wash cycle, the machine will automatically switched off, remove the filters and clean.
- Replace the filters and the overflow.



**The self-cleaning cycle may not be able to thoroughly remove severe incrustations of dirt. These should be removed manually.**

### 5.1.14 Cleaning the machine at the end of the day

At the end of the day, the filters, wash distributors, rinse branches and other accessories must be cleaned. This is necessary to prolong the service life of the machine. To ensure the efficient washing of the dishes, the dishwasher must be perfectly clean and disinfected.

### 5.1.15 Dishwasher configuration (only C MOD.)

The machine you have purchased has a display in which it is possible to programme some functions including language, time and date.

### 5.1.16 Language selection (only C MOD.)

The display can be viewed in the following languages: *SPANISH, ENGLISH, FRENCH, GERMAN, ITALIAN, POLISH, TURKISH and RUSSIAN*. To change the language, proceed as follows:

- With the machine switched off, press *MENU* for 5 seconds.
- Scroll through the *CONFIGURATION* menu until reaching the *LANGUAGE* function, and then press the *MENU* button.
- Press the *START* button to go to the *LANGUAGE* menu.
- Select the required menu using the *MENU* button.
- Accept the language by pressing *START*.

### 5.1.17 Selecting the date and time (only C MOD.)

The date and time are displayed in the following format.  $D_1D_2/M_1M_2/Y_1Y_2 H_1H_2/m_1m_2$ . To programme the date and the time, proceed as follows:

- With the machine switched off, press *MENU* for 5 seconds.
- Scroll through the *CONFIGURATION* menu until reaching the *DATE/TIME* function, and then press the *MENU* button.
- Press the *START* button to go to the *DATE/TIME* menu.
- The value  $D_1$  starts to flash immediately.
- Use the *MENU* button to set the required value. (This is always ascending).
- Press *START* to confirm the value, and go to the next setting ( $D_2$ ).
- Enter all the values. When the last value ( $m_2$ ) has been entered, the programming is complete.
- It is also possible to confirm the setting without reaching the last value, by pressing the *START* button for 3 seconds.

## 5.2 Useful tips

Read the useful tips listed below carefully to allow you to get the most out of your dishwasher.

### 5.2.1 Maintenance

Always clean the machine correctly to prolong the service life of the machine.

- Remove any waste from the machine at the end of each day.
- Do not use abrasive, corrosive or acid products, chlorine-based detergents, solvents or petrol derivatives to clean the machine.
- Do not spray off the machine and the immediate vicinity (walls, floors) with a water hose, steam cleaner or pressure washer.
- In order to prevent water from entering into the machine uncontrolledly, make sure that the machine's plinth is not flooded when cleaning the floor.
- Do not use pressurised water to clean the machine.
- Only wash tableware, glassware or kitchenware that has been used for human food.
- Check that the wash distributors rotate correctly every day.
- Check the salt, rinse aid and detergent levels at the start of each day.
- Call the technical service twice a year to have the machine serviced:
  - Cleaning of water filter.
  - Cleaning of limescale on the resistors.
  - Inspection of the condition of the seals.
  - Inspection of the condition of the parts.
  - Adjustment of the dispensers.
  - Tightening of the electrical connections on the terminals.
- If the power cable is damaged, it must be replaced by the manufacturer, after-sales service or authorised technical personnel in order to prevent risks.

### 5.2.2 Rinse aid and detergent

If you change the rinse aid or detergent, the settings should be adjusted accordingly. This adjustment must be carried out by qualified personnel. Only use detergents suitable for industrial dishwashers. Do not use foam-producing detergents. Detergents designed for domestic use should not be used under any circumstances.



**When handling chemical substances, the safety instructions must be observed. Use suitable protective clothing, gloves and safety goggles when handling chemical substances. Do not mix different detergents.**

### 5.2.3 Hygiene regulations

- Do not touch clean dishes with dirty or greasy hands.
- Use clean sterilised cloths to thoroughly dry the dishes.
- We recommend you wait until the machine reaches the correct wash temperature as this will ensure a more thorough disinfection and wash.
- Drain the wash tub at least twice a day or every 40/50 wash cycles.

### 5.2.4 Optimum results

To obtain optimum dishwashing results, the manufacturer recommends you proceed as follows:

- Wash the dishes when the machine is ready.
- Always ensure the different dispensers are correctly adjusted.
- Keep the dishwasher thoroughly clean.

### 5.2.5 Prolonged non use

If the machine is kept out of service for a long period of time (holidays, temporary closure...), please observe the following:

- Drain the machine completely, including the boiler.
- Clean the machine thoroughly.
- Leave the door of the machine open.
- Close the water intake valve.
- Switch off the mains power supply.
- If there is a risk of frosts, ask your technical service to protect the machine against frosts.

## 6. FAULTS, ALARMS AND BREAKDOWNS

The steps to be followed in the event of a fault or operating error are described below. The possible causes and possible solutions are listed in the following table. In the event of doubt, or if you are unable to resolve the problem, please contact the technical service.



**Do not handle electrical components, as there is a risk of death as the components are live.**

FAULT	POSSIBLE CAUSE	SOLUTION
<b>The machine does not come on.</b>	There is no power supply.	Check whether the magneto-thermal circuit breaker has been triggered.
	The fuses have blown.	Call the technical service to analyse the reason why.
	Main switch open.	Close switch.
<b>The machine does not fill with water.</b>	Water entrance valve closed.	Open the water valve.
	Rinse nozzles blocked.	Clean nozzles and check branches for build-up of lime.
	Solenoid valve filter blocked.	Call the technical service to clean the filter.
	Rinse pump faulty	Call the technical service to replace the pressure switch.
	Pressostat is broken.	Call the technical service to replace the pressure switch.
<b>Unsatisfactory wash.</b>	Wash distributors obstructed.	Clean distributors thoroughly.

	Shortage of detergent.	Call the technical service to reset the dispenser.
	Dirty filters.	Clean the filters thoroughly.
	Presence of foam.	Unsuitable detergent. Call the technical service to supply correct detergent.
		Too much rinse aid. Call the technical service to reset the dispenser.
	Temperature of lower tub at 50 °C / 122 °F.	Thermostat faulty or incorrectly set. Call the technical service to repair it.
	Length of cycle too short for level of dirt on dishes.	Select a longer cycle.
	Water too dirty.	Drain the wash tub and fill with clean water.
<b>Dishes and kitchenware are not dry.</b>	There is no rinse aid	Fill the rinse aid container.
	Rinse aid low.	Call technical service to adjust dispenser.
	Dishes left inside dishwasher for too long.	When the dishwasher finishes, remove the basket from the machine and allow to dry naturally.
	Rinse temperature lower than 80 °C / 176 °F.	Call technical service to analyse problem.
<b>Scratches or stains on dishes.</b>	Too much rinse aid.	Call technical service to adjust rinse aid dispenser.
	Water too chalky.	Check water hardness and if possible run regeneration cycle immediately.
	Not enough salt in salt deposit.	Fill salt deposit where applicable.
	Traces of salt in tub.	When filling the salt deposit, take care not to spill salt in the tub.
<b>Machine stops during operation.</b>	Electrical installation overloaded.	Call technical service to modify electrical installation.
	Machine protection has tripped.	Reset safety device and if it trips again, call technical service.
<b>Machine stops and fills with water when it is washing.</b>	Pressure switch pipe blocked.	Empty the tub and clean thoroughly.
	Pressure switch faulty.	Call the technical service to replace it.
	Overflow incorrectly mounted.	Mount overflow correctly.
<b>The machine does not start with the wash cycle.</b>	Door is not closed properly.	Close the door correctly and if it is seen to re-open alone, call the technical services to adjust the tensioners.
	Door micro switch faulty.	Call the technical service to replace it.
<b>Machine does not drain completely.</b>	Machine not levelled correctly.	Level the machine In the event of doubt, please contact your technical service.
	Pressure switch faulty.	Call the technical service to replace the pressure switch.



**NOTE: If a fault occurs and is not listed in the above table, please call the technical service. The manufacturer reserves the right to modify the technical characteristics with prior warning.**



## 6.1 Error diagnosis (MOD.B)

ERROR	DESCRIPTION	CONSEQUENCE
1	OPEN DOOR	The ON/OFF LED lights up for 0.5 seconds and then remains unlit for 2 seconds before lighting up again. This continues as long as the door is open and the selected cycle is unfinished.
2	TANK FILL	The ON/OFF LED light up twice for 0.5 seconds each time and then remains unlit for 2 seconds, then lighting up again twice. This continues while the water in the tank does not reach the correct level in the specified time.
3	TANK DRAINAGE	The ON/OFF LED lights up three times for 0.5 seconds each time and then remains unlit for 2 seconds, then lighting up again three times. This continues while the drainage pump does not drain the water in the tank to the correct level in the specified time.
4	BOILER HEATING	The ON/OFF LED lights up four times for 0.5 seconds each time and then remains unlit for 2 seconds, then lighting up again four times. This continues while the water in the boiler does not reach the correct temperature in the specified time.
5	TANK HEATING	The ON/OFF LED lights up five times for 0.5 seconds each time and then remains unlit for 2 seconds, then lighting up again five times. This continues while the water in the tank does not reach the correct temperature in the specified time.
6	BOILER FILL	Le voyant ON/OFF s'allume six fois pendant 0,5 secondes à chaque fois et reste éteint pendant 2 secondes avant de se rallumer six fois, et ainsi de suite tant que la chaudière n'a pas atteint le niveau correct dans le temps imparti.

## 6.2 Errors shown in display (MOD. C)

ERROR	DESCRIPTION	DETECTION MODE	CONSEQUENCE
E1	Faulty boiler probe.	TC out of range [-5..200]	MESSAGE: "E1-TC" and an acoustic signal for 30 seconds every 3 minutes, for 15 minutes. Machine completely disabled.
E2	Faulty tank probe.	TT out of range [-5..200]	MESSAGE: "E2-TT" and an acoustic signal for 30 seconds every 3 minutes, for 15 minutes. Machine completely disabled.
E3	Tank overheating.	TT > 90 °C	MESSAGE: "E3-TANK" and an acoustic signal for 30 seconds every 3 minutes, for 15 minutes. Machine completely disabled.
E4	Boiler overheating.	TC > 105 °C	MESSAGE: "E4-BOILER" and an acoustic signal for 30 seconds every 3 minutes, for 15 minutes. Machine completely disabled.
E5	Boiler heating faulty.	If TC < 70 °C, and CC is on, if TC does not change by 3 °C or more within 5 minutes .	MESSAGE: "E5-BOILER HEATING". The machine is not disabled. The error is displayed and an acoustic signal is emitted for 30 seconds every 3 minutes, for 15 minutes.
E6	Tank heating failure.	60 min without reaching programmed tank temperature.	MESSAGE: "E6-TANK HEATING". The machine is not disabled. The error is displayed and an acoustic signal is emitted for 30 seconds every 3 minutes, for 15 minutes.
E7	The boiler does not fill.	The VC is observed to have been running for 5 minutes or more and the PC=PC-ALTO has not been reached.	MESSAGE: "E7-NEEDS WATER". The machine is not disabled. The error is displayed and an acoustic signal is emitted for 30 seconds every 3 minutes, for 15 minutes. Machine completely disabled.
E8	The tank does not fill.	Since the start-up of the machine, PT=PT1 has not been reached in a period of 30 or more minutes.	MESSAGE: "E8-TANK EMPTY" and an acoustic signal for 30 seconds every 3 minutes, for 15 minutes. Machine completely disabled.
E9	Does not drain.	The BD is observed to have been running for 1 or more minutes and the level of the tub does not go down 5mm, (PT does not change).	MESSAGE: "E9-DOES NOT DRAIN" and an acoustic signal for 30 seconds every 3 minutes, for 15 minutes. Machine completely disabled.

<b>E10</b>	Rinse error.	If PC>20 the level does not go down 5 mm in 12 seconds.	MESSAGE: "E10-INCORRECT RINSE". The machine is not disabled. The error is displayed and an acoustic signal is emitted for 30 seconds every 3 minutes, for 15 minutes.
<b>E11</b>	Max tank level error.	PT4 tank level has been reached (To reject interference, the level must be detected for at least 2 seconds).	MESSAGE: "E11-MAX. TANK LEVEL" and an acoustic signal for 30 seconds every 3 minutes, for 15 minutes. Machine completely disabled The machine drains until level PT3 is reached.
<b>E12</b>	Min. tank level error.	PT1 tank level has been reached while in standby (To reject interference, the level must be detected for at least 2 seconds).	MESSAGE: "E11-MIN. TANK LEVEL" and an acoustic signal for 30 seconds every 3 minutes, for 15 minutes. Machine completely disabled.

### 6.3 Machine warnings (MOD. C)

WARNING	DISPLAY	CAUSE	METHOD OF WARNING	CORRECTIVE ACTION
<b>A1</b>	A1-Door open.	Door open when new cycle starts.	Warning flashes on display for 5 seconds.	Close the door.
<b>A2</b>	A2-Change wáter.	Concentration of detergent and dirt in tub too high. This warning is given after 100 <sup>1</sup> wash cycles without draining the machine. If PT=0, the number of cycles is automatically reset.	Warning flashes on display for 5 seconds every time a cycle ends.	Draining the machine.
<b>A3</b>	A3-Low wash temperatura.	TT 10 °C below programmed wash temp. When a wash cycle is run with a tank temperature lower than the programmed temperature.	Warning flashes on the display until the programme ends, alternating with the normal screen message.	The current cycle ends.
<b>A4</b>	A4- Low rinse temperatura.	TC 10 °C below programmed rinse temp. When a rinse cycle is run (8 min of thermo-stop completed) with a boiler temperature lower than the programmed temperature.	Warning flashes on the display until the programme ends, alternating with the normal screen message.	The current cycle ends.
<b>A5</b>	A5-SALT (only in SOFT models).	SALT level in regeneration not detected.	Warning flashes on the display until the programme ends, alternating with the normal screen message.	Insert salt in corresponding deposit.

<sup>1</sup>The number of cycles is configurable.

## 7. RECYCLING THE PRODUCT



The European Directive 2012/19/EU relating to Waste Electrical and Electronic Equipment (WEEE) states that household appliances should not be disposed of using the normal solid urban waste cycle. Exhausted appliances should be collected separately in order to optimise the cost of re-using and recycling the materials inside the machine, while preventing potential damage to the atmosphere and to public health. The crossed-out dustbin is marked on all products to remind the owner of their obligations regarding separated waste collection. For more information relating to the correct disposal of household appliances, owners should contact their local authorities or appliance dealer.