



USER MANUAL

UNDERCOUNTER DISHWASHER | PRO LINE

EN

KX 40

KX 50

KX 50 3P





INDEX

- 1.** Introduction
 - 1.1** Minimum Requirements for Startup
 - 1.2** Machine Equipment and Preparation
 - 1.3** Control Panel
 - 1.4** Startup
 - 1.5** Operating Process (User)
 - 1.6** Machine Draining
 - 1.7** Detergent and Rinse Aid
 - 1.8** Water Pressure
 - 1.9** Water Hardness
- 2.0** Possible Issues
- 2.1** Maintenance
- 2.2** Waste Management
- 2.3** Drain Pump (Optional)
- 2.4** Safety Warnings

1. INTRODUCTION:

This manual provides the necessary information for the startup, operation, and maintenance of the following undercounter dishwasher models: KX 40 / KX 50 / KX 50 3P.

The operation of the machine is simple. Thanks to the rotating arm system, wash water with a temperature according to the cycle, is sprayed in a fan shape against the dishes, with a circulation equivalent to a flow rate of 250 liters per minute. After washing, the dishes are rinsed, water with a temperature according to the cycle. In this process, water is automatically mixed with rinse aid, aiming to evaporate the water evenly and leave the dishes dry and shiny for service.

1.1 MINIMUM REQUIREMENTS FOR STARTUP:

- We must have the following elements (described in the installation diagrams attached to this manual).
- Floor-level drain. If the drain is on the wall (max. 1.2m from the floor), a drain pump will be necessary.
- Water inlet with shut-off valve, ending in a ¾" threaded connection. See section 9.
- Three-phase or single-phase electrical line as requested, with an electrical panel equipped with a circuit breaker and residual current device. According to international standards, the main switch must have a minimum contact separation of 3mm.
- Protective line (grounding).
- Use softened water. See section 10.

1.2 MACHINE EQUIPMENT AND PREPARATION:

The machine is equipped with:

- Ø19x12 pressure hose, with its respective ¾" connectors and seals.
- Ø35mm drain hose.

	Dishes rack 350 x 350	Dishes rack 400 x 400	Dishes rack 500 x 500	Glasses rack 350 x 350	Glasses rod rack 400 x 400	Glasses rod rack 500 x 500	Dishes support	Cutlery basket
KX 40	-	-	-	-	1	-	-	-
KX 50	-	-	-	-	-	2	-	-
KX 50 3P	-	-	-	-	-	2	-	-

ALL CHECKS AND CONNECTIONS OF THE MACHINE MUST BE CARRIED OUT BY QUALIFIED TECHNICAL PERSONNEL OR BY THE OFFICIAL TECHNICAL SERVICE.

Proceed to level the machine by adjusting the adjustable feet as needed for the floor.

Connect one end of the water inlet hose to the shut-off valve, and the other end to the inlet of the solenoid valve located at the front bottom of the machine.

Connect the drain hose, one end to the general drain pipe of the machine, and the other end to the external general drain (see installation diagram section 18).

CONNECTION OF ELECTRICAL SUPPLY

ATTENTION

CHECK THE MAINS VOLTAGE AND VERIFY IT WITH THAT OF THE MACHINE

The machine must be connected to one of the following voltages:

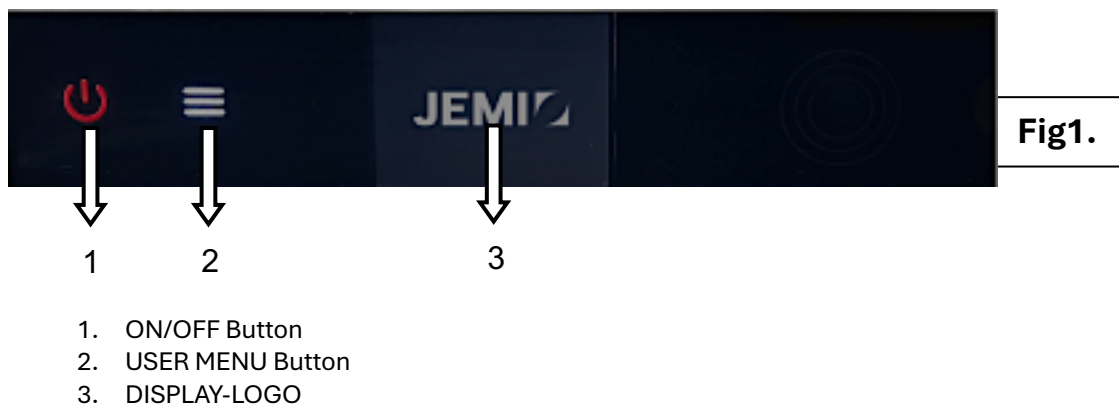
400V 3N~ +T
230V 3~ +T

According to the voltage indicated on the nameplate.

For other voltages, please consult us.

1.3 VENTILACION

With the machine powered on and off, the display shows the following screen. Fig1. If no activity is performed after a few minutes, the USER MENU button (Fig1. No.2) will turn off, and the screen brightness will dim automatically.



By pressing the USER MENU button (Fig1. No.2.) you access the following menu:

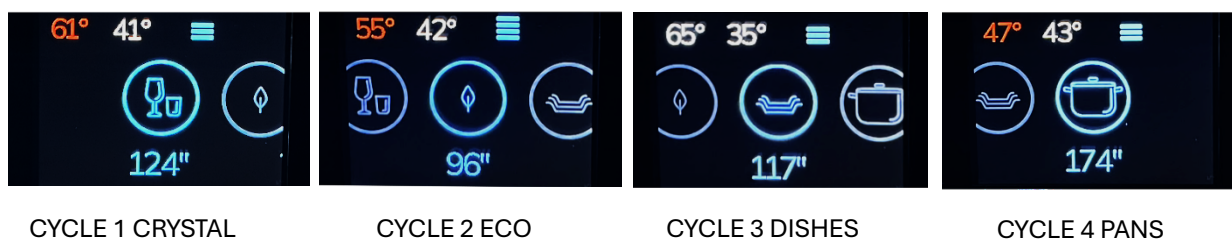


1. Drain: (Drain pump. Ap.14)

From the USER MENU, using the UP-DOWN buttons (Fig2. Núm5.), it is possible to select (Fig2. Núm6.) the drain option and enable the drainage pump for emptying the tub, necessary for models that cannot drain at ground level.

2. Autoclean:

From the USER MENU, using the UP-DOWN buttons (Fig2. No.5.), it is possible to select (Fig2. No.6.) the autoclean option. Once in this option, there are four types of cycles:



3. Boiler Draining:

From the USER MENU, using the UP-DOWN buttons (Fig2. Núm5.), it is possible to select (Fig2. Núm6.) the boiler draining option.

4. Buzzer:

From the USER MENU, using the UP-DOWN buttons (Fig2. Núm5.), it is possible to select (Fig2. Núm6.) the buzzer option. This function allows informing the user that the washing cycle has finished. An acoustic signal is activated for a few seconds.

5. Configurations:

From the USER MENU, using the UP-DOWN buttons (Fig2. Núm5.), it is possible to select (Fig2. Núm6.) the configurations option.

·From the configurations submenu, it is possible to configure the **USER LANGUAGE**: Italian, English, German, French, Spanish, Portuguese. Press the START button (Fig2. Núm6.) to confirm the selected language.

·From the configurations submenu, it is possible to select the **DATE AND TIME** menu. In sequence, you will be asked to configure DAY-MONTH-YEAR-HOURS-MINUTES. The configuration will be confirmed by the final message OK.

·From the configurations submenu, it is possible to select the **BRIGHTNESS** menu. This parameter sets the brightness of the display.

·From the configurations submenu, it is possible to select the **°C / °F** menu. This parameter sets the unit of temperature measurement.

·From the configurations submenu, it is possible to select the **END OF CYCLE NOTIFICATION** menu. This parameter enables the audible signal indicating the end of the washing cycle.

6. Information:

From the USER MENU, using the UP-DOWN buttons (Fig2. Num5.), it is possible to select (Fig2. Num6.) the information option. This menu is used to view the firmware revisions of the power board and the Display.

7. Alarms:

From the USER MENU, using the UP-DOWN buttons (Fig2. Num5.), it is possible to select (Fig2. Num6.) the alarms option. This menu is used to view the ongoing alarms.

1.4 STARTUP:

Once the operations indicated in the previous chapter have been carried out, startup will be performed by the usual installer or the official technical Service.

- Connect the machine to the electrical line. See section 3.
- Connect the hoses. See section 3.
- Detergent. The machine has an inlet tube connection for detergent, visible as soon as the lower front panel is removed. At the back, there is a transparent tube (not blue) that must be inserted into the detergent compartment all the way to the bottom for automatic detergent dosing.
- Rinse aid. At the back, there is a blue tube that must be inserted into the rinse aid compartment all the way to the bottom for automatic rinse aid dosing.
- Place the tank filter and overflow tube in their position.
- Run a complete cycle (see section 6) to check the operation of:

Thermometers

Resistors

Tank filling

1.5 OPERATING PROCESS (USER)

THE MACHINES ARE FOR PROFESSIONAL USE AND SHOULD BE OPERATED BY QUALIFIED PERSONNEL.

- Place the tank filter and overflow and close the door.
- Press the ON/OFF button (Fig3. No.7). The ON/OFF startup logo will change from red to green.
- First, the board will check the water levels in the machine and fill it if necessary. The animated icon (Fig3. No.8) indicates that the phase is in progress. At the same time, the START button (Fig3. No.9) will be yellow.



- Once the machine is turned on, the boiler or tank will be filled first.
- The washing tank is filled through the rinse pump. This is activated intermittently with the tank full and the door closed. Opening the door or turning off the machine interrupts the regulation.
- The tank is filled until the working level is reached. Upon reaching this level, if there is any pending program, the machine would finish it, and if there is none, the machine would start the heating phase beginning with the boiler.
- Detergent and rinse aid are automatically dosed.
- Once the regulation phase is completed, the heating phase is enabled. Priority is given to the tank and then to the wash chamber. The temperatures of the tank and wash chamber are displayed on the screen. If the tank is heating up, the displayed temperature is red; otherwise, it is white (Fig4.). If the wash chamber is heating up, the displayed temperature is red; otherwise, it is white (Fig5.).



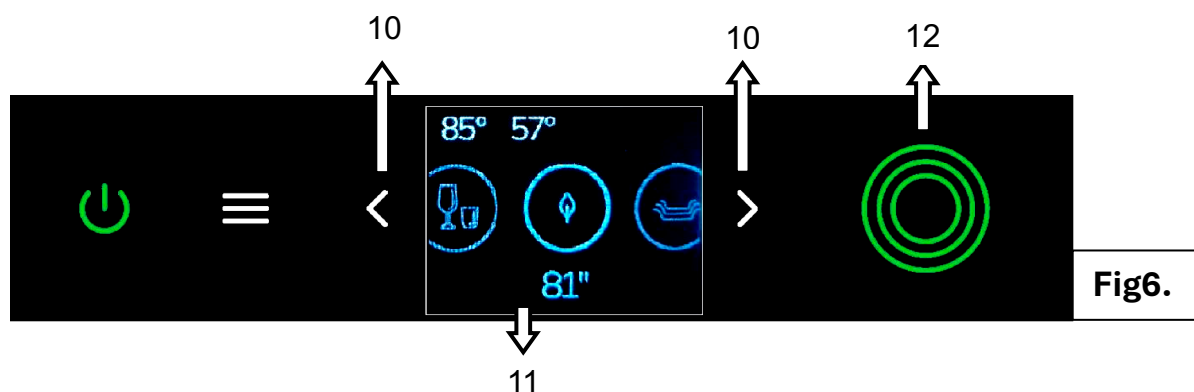
Boiler Heating



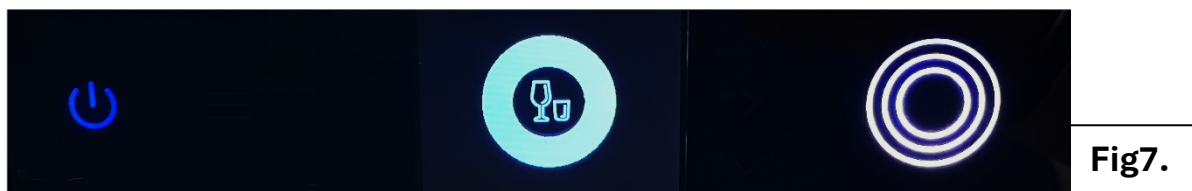
Tank Heating

- When both the tank and wash chamber reach the appropriate temperature for the type of wash, the START button (Fig6. No.12) will change from yellow to green.
- Insert the basket with the dishes correctly placed.

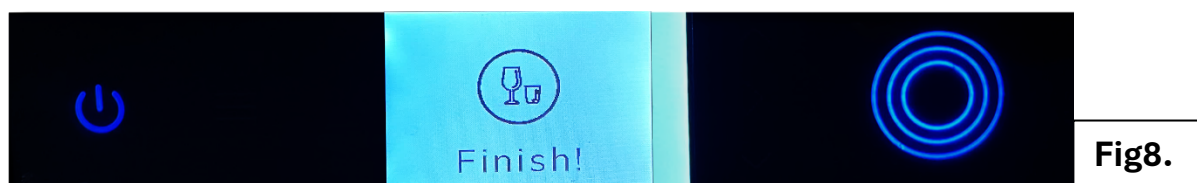
- Once the machine is prepared for washing, with the door closed, it is possible to select one of the four available wash cycles using the LEFT-RIGHT buttons (Fig6. No.10). The program time for the wash is displayed below the center of the Display (Fig6. No.11). After selecting the desired wash program, press the START button (Fig6. No.12) to start the wash cycle.



- When the washing cycle starts, the START button (Fig6. No.12) changes from green to blue. The ON/OFF button (Fig3. No.7) also changes from green to blue. The washing process can be seen on the display. The circle around the wash cycle symbol increases as the process progresses until it reaches the edges of the display (Fig7.).



- At the end of the washing cycle, the display lights up completely with the word 'finish!' just below the wash type symbol (Fig8.). Open the door. Remove the basket with clean dishes.



- Insert a new basket to wash and repeat the operating process.

1.6 MACHINE DRAINING:

- Turn off the machine by pressing the ON-OFF button (Fig 1. Num1.).
- Open the door, remove the basket with dishes, and remove the overflow tube, the water in the tub will drain by gravity. Fig2. (Ap.14 - Option with drainage pump).
- Clean. Ap.12.

ATTENTION:

THE WATER TEMPERATURE IN THE TANK MAY EXCEED 50°C. THERE IS A RISK OF MILD BURNS. WAIT FOR TWO MINUTES WITH THE DOOR OPEN.



Fig2.

1.7 DETERGENT AND RINSE AID:

Use specific detergents for industrial dishwashers.

DO NOT USE HAND WASHING DETERGENTS, AS THEY PRODUCE EXCESSIVE FOAM AND ARE DIFFICULT TO REMOVE.

- Detergent dosing is automatic. You just have to connect a plastic container containing detergent using a transparent plastic tube (not blue).
- Next to the rinse water and through a dispenser, liquid rinse aid is mixed, which is intended to give the dishes a proper presentation.
- The rinse aid is placed in a plastic container that is connected to the dispenser through a blue plastic tube.
- The amount of rinse aid to be supplied by the dispenser is factory set (according to the washing cycle).
- The container should never be left empty, as the function of the dispenser would be affected (the correct amount is not supplied because there is air inside the duct).

ATTENTION:

TAKE PRECAUTIONS WHEN HANDLING DETERGENTS AS THEY ARE CAUSTIC PRODUCTS.



1.8 WATER PRESSURE:

For proper machine operation, the water inlet pressure should be between 2 and 4 atmospheres (200 - 400 kPa) to ensure thorough rinsing and correct presentation of the dishes.

If the pressure is lower than the aforementioned values, it is ESSENTIAL to install a pump in the water inlet circuit with the following specifications:

- Pressure: 2 atmospheres (200 kPa).
- Power: 1/4 CV.
- Single-phase 230V.

THESE CONNECTIONS MUST BE CARRIED OUT BY THE USUAL INSTALLER OR THE OFFICIAL TECHNICAL SERVICE.

1.9 WATER HARDNESS:

An important aspect of dishwashing is the water softener, a device designed to remove the calcium content in the water. Calcium precipitates onto surfaces, forming a calcareous film: haze on glassware, blockages in nozzles, and deposits on heating elements...

Using a water softener eliminates this problem and its consequences. It is recommended to install one whenever the water hardness exceeds 5°F.

IF NON-DEMINERALIZED WATER IS USED, PROBLEMS CAUSED BY LIMESCALE WILL VOID THE WARRANTY.

2.0 POSSIBLE ISSUES:

The machine does not fill the tank.

- Inlet valve closed or not connected; connect hose and open valve.
- Clogged or faulty solenoid valve; clean filter or replace solenoid valve.
- Faulty pressure switch, replace.

Insufficient pressure.

- Clogged filter, clean.

Defective rinsing.

- Clogged rinsing nozzles, clean.

Defective washing.

- Clogged nozzles, clean.
- Dirty water; empty the tank and clean the filter.
- Lack of water due to dirt in the filter; clean the filter.
- Temperature; check thermostat regulation and tank resistor.
- Undissolved dirt; ensure detergent concentration is sufficient.
- Arms not rotating; disassemble and ensure proper placement.

Presence of foam.

- Incorrect detergent; change detergent type.
- Excessive rinse aid; check rinse aid concentration.
- Defect in tank temperature; verify thermostat regulation and tank resistor.

Wet dishes.

- Lack of rinse aid, rinse aid container empty.
- Lack of temperature in the rinse, check the heating element of the boiler, check for appropriate washing cycle.

Glass with greasy film.

- Excess rinse aid, check for appropriate washing cycle.

Whitish glass.

- Water with excess lime, faulty or missing water softener.

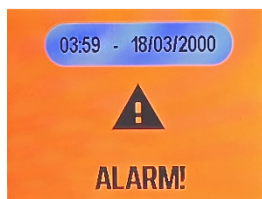
Glassware with market droplets.

- Water with excess lime, faulty or missing water softener.
- Lack of rinse aid, rinse aid dispenser empty, check proper wash cycle.

Failed alarms.



- Rinse start wait time expired. Turn off the machine and turn it back on. If problem persists, contact technical service.



- General error. Turn off the machine and turn it back on. If problem persists, contact technical service.

The points mentioned above are for reference only. For any inquiries or issue resolution, please contact our Technical Service.

2.1 CONDICIONES PARA LA PUESTA EN MARCHA.

For the proper maintenance of the machine, it is essential to follow the following points.

ALL MAINTENANCE OPERATIONS MUST BE CARRIED OUT WITH THE MACHINE DISCONNECTED FROM THE ELECTRICAL SUPPLY, THE START SWITCH TURNED OFF, AND THE MAIN SWITCH DISCONNECTED.

- Empty it daily by removing the overflow tube and cleaning its interior. See Fig. 2.
- Remove the pump filters and wash them under a tap. See Fig. 3.

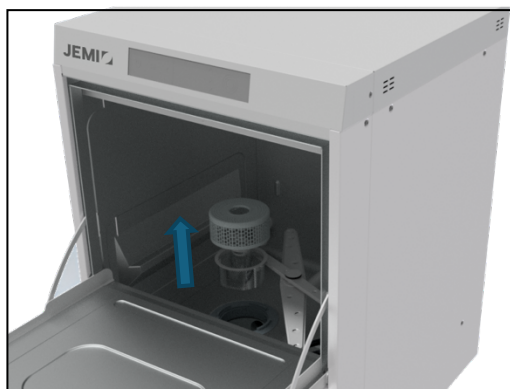


Fig3.

- Remove the washing arms and clean them from impurities. They can be removed by unscrewing the screw counterclockwise and then pulling upwards. Fig.4.

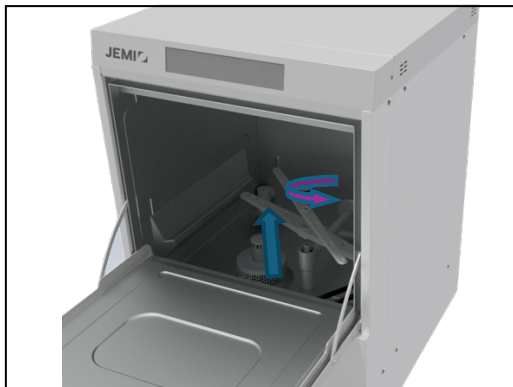


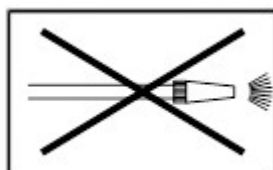
Fig4.

- Check if the rinse nozzles are obstructed.
- Clean the interior and exterior of the machine with neutral detergents (non-oxidizing or abrasive).
- Once the previous operations have been completed, place all the parts in their corresponding places, leaving the door open to finish drying the interior and prevent odors.

The machine is ready to perform its work the next day.

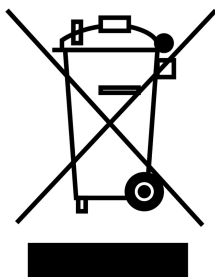
WE RECOMMEND CONDUCTING A GENERAL INSPECTION BY THE OFFICIAL TECHNICAL SERVICE, AT LEAST ONCE A YEAR.

DO NOT CLEAN THE MACHINE WITH HIGH-PRESSURE WATER.



2.2 WASTE MANAGEMENT:

Disposal of Packaging Material: Please follow regulations so that they can be reused.



- The European standard for the disposal of electrical and electronic equipment states that appliances should not be disposed of in the same way as household solid waste.

Disused appliances should be collected separately to optimize the percentage of recovery and recycling of their components and to prevent potential harm to health and the environment. The crossed-out wheeled bin symbol is found on all products to remind of the obligation for separate collection.

For further information on the correct disposal of appliances, owners may contact the responsible public service or retailers.

2.3 DRAIN PUMP (OPTIONAL):

This device should be used in premises that, for some reason, do not have a floor-level drain, and therefore, the water remaining after a wash cycle must be sent to the wall drain through the pump.

When the machine starts the rinse cycle (more water enters the washing tub), the drainage pump starts to suck up the remaining water in the tub and sends it to the drainage.

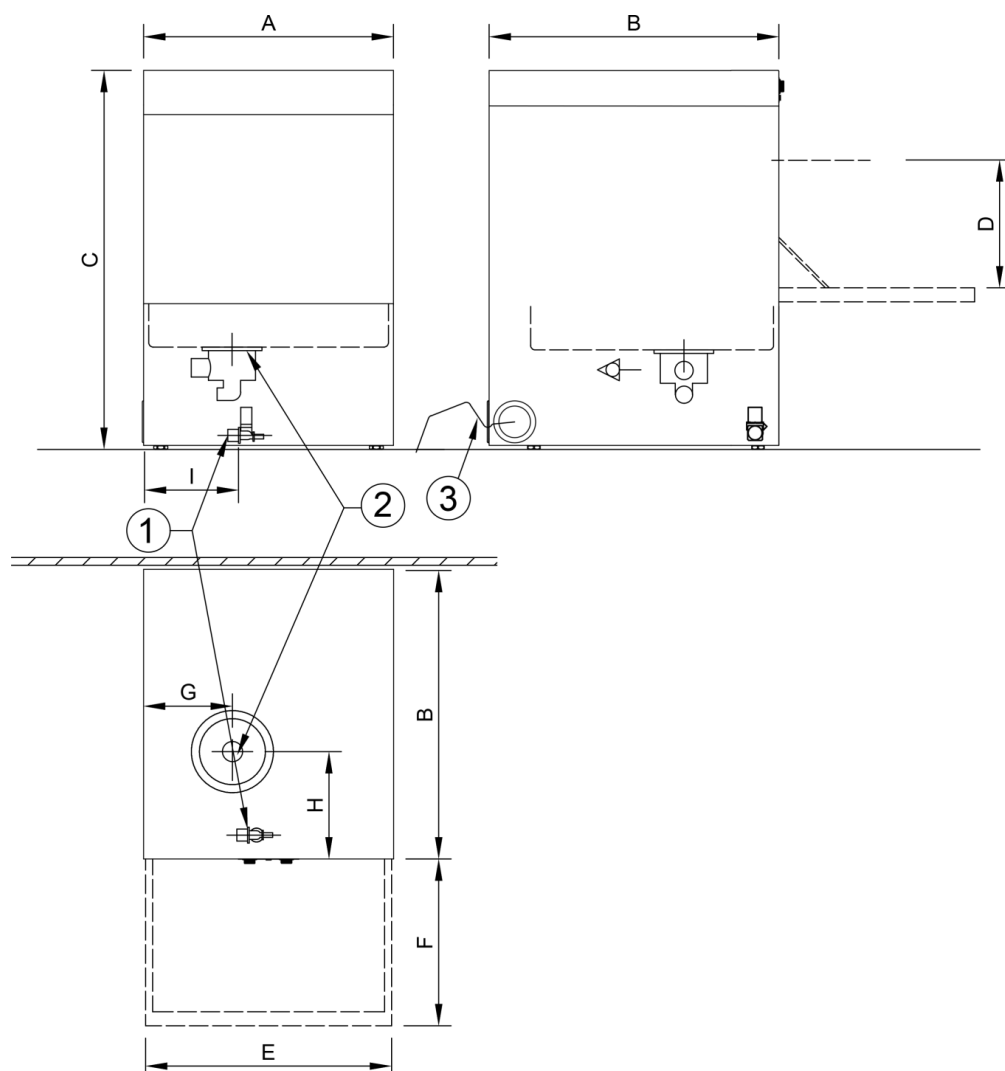
At the end of the cycle, to empty the machine, remove the overflow tube. Then from the USER MENU, using the UP-DOWN keys (Fig2. Núm5.), it is possible to select (Fig2. Núm6.) the emptying option and enable the drainage pump for emptying the tub. The machine will empty automatically.

ATTENTION:

THE MAXIMUM RECOMMENDED HEIGHT FOR CONNECTING THE DRAIN SHOULD BE 600 mm MAXIMUM

2.4 SAFETY WARNINGS:

- Any use of the machine for which it has not been designed will be considered inappropriate and consequently dangerous.
- The qualified professional who performs the installation must instruct the user on the operation of the machine and the safety regulations that must be followed.
- Any intervention on the machine must be carried out by the usual installer or the official technical service.
- Before carrying out any cleaning, maintenance, or repair operation, disconnect the machine from the electrical and hydraulic supply.
- The machine should only be used by trained personnel.
- At the end of the workday, disconnect the machine from the power supply.
- Do not use the machine as a support; it has been designed to support the weight of the objects to be washed.
- Do not use the machine to wash objects for which it has not been designed (shape, size, material, etc.).
- To avoid damage to the machine, remove solid residues from the objects to be washed.
- If liquid leaks are observed or the machine does not function correctly, disconnect the machine from the power supply and shut off the water supply.
- Do not expose the machine to atmospheric agents (rain, sun, etc.).
- Do not start a program if the overflow pipe is not in place.
- Do not bring magnetic objects close to the machine.
- For cleaning the machine, do not use steel brushes, abrasive sponges, or acids.
- Do not use high-pressure water to clean the machine.



	A	B	C	D	E	F	G	H	I
KX 40	450	545	740	290	435	325	130	190	130
KX 50 / KX 50 3P	550	620	820	360	535	405	155	285	220

1. ENTRADA AGUA: 3/4" Máx. 60°C

2. DESAGÜE: Ø50 mm. Mín.

3. LONGITUD CABLE:

KX 40 / KX 50

1,5m.

3 x 1,5 mm². 230V II

KX 50 3P

1,5m.

5 x 2,5 mm². 400V III

4 x 4 mm². 230V III



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