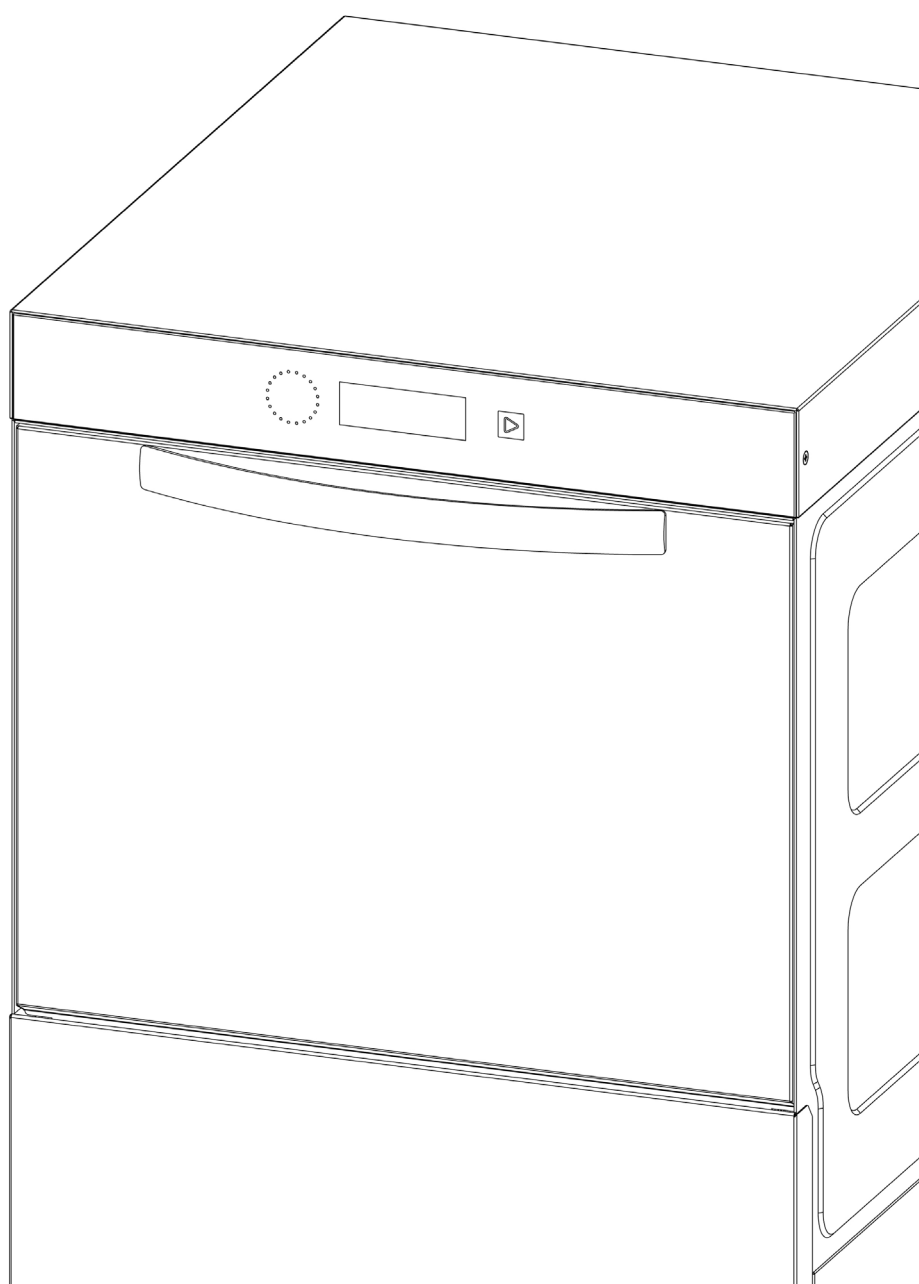




Instruction and Maintenance Manual

Uniko Display dishwasher







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SYMBOLS KEY

SYMBOL	DESCRIPTION
	ATTENTION - RISK OF INJURIES This symbol marks information and warnings which if not respected can jeopardise personal safety or damage the appliance.
	ELECTROCUTION HAZARD This symbol marks information and warnings which if not respected can jeopardise personal safety or damage the appliance.
	BURNING HAZARD This symbol marks information and warnings which if not respected can jeopardise personal safety or damage the appliance.
	DANGER OF FALLING This symbol marks information and warnings referring to situations when using the product, where lack of attention can jeopardise personal safety.

WARNINGS

Please read the following general warnings carefully.

- ▶ Please make sure you have fully read and completely understood this manual before using the dishwasher.
- ▶ The manual must be kept within the user's reach so that it can be consulted easily and quickly. Should it be damaged, destroyed or lost, please ask your constructor for a new copy (see para. 1.4 - PART TWO)
- ▶ **Do not use the dishwasher if you cannot consult the manual.**
- ▶ This dishwasher was designed to wash dishes such as glasses and plates normally used in bars and restaurants. Any other kind of usage is strictly forbidden.
- ▶ The dishwasher must only be used by trained operators.
Untrained operators must be supervised by a manager or a colleague with sufficient experience in the use of dishwashers until it is considered they have acquired adequate experience to operate it independently.
- ▶ Shut down the dishwasher once the wash cycle has finished and you no longer need to use it.
- ▶ Follow the Instruction and Maintenance Manual with the utmost care both for use and maintenance operations.
- ▶ Always keep the dishwasher and the area around it clean, so that the operator and their equipment can transit quickly and safely. Do not pile up objects or other material that could prevent easy access to the door.
- ▶ Clean the filter every day.
- ▶ Clean the whole dishwasher at least once a week.
- ▶ In the event of danger, immediately remove the power supply to the dishwasher by pressing the power button or by disconnecting the appliance from the mains.
- ▶ Check the integrity of the power wire daily, especially if the point of connection to the mains is not near the dishwasher.
- ▶ Position the cord appropriately, avoiding situations in which it could be damaged (avoid repeated trampling of the cable, passage of the cable under the doors, etc.).
- ▶ Perform regular maintenance, as indicated in the Instruction and Maintenance Manual.
- ▶ All maintenance must be carried out with dishwasher stopped and disconnected from the mains until the intervention is completed.
The interventions of extraordinary maintenance, repair and the replacement of components must be performed by personnel who are suitably trained and certified.
- ▶ Children must be supervised to ensure they are not playing with the machine;

This appliance is not intended to be used by persons (children included) with reduced physical, sensory or mental capabilities or with insufficient experience and knowledge, unless they have received assistance or instructions for use of the appliance from a person responsible for their safety.

- ▶ The protection degree of the machine is IPX1, and therefore the machine does not have to be washed with wash jets at high pressure.

ATTENTION!**SHOCK HAZARD****PART ONE****1. Purpose of the information contained in PART ONE**

The purpose of the information contained in PART ONE is to inform the Customer about the necessary data for correct identification of the dishwasher.

2. Reference standards

The dishwasher has been designed and manufactured in compliance with EMC Regulations EN55014-1:2006+A1:2009+A2:2011; EN55014-2:2015; EN61000-3-2:2014; EN61000-3-3:2013 Safety Electrical EN60335-2-58:2005 (incl. Corr.:2007)+A1:2008+A11:2010 used in conjunction with EN60335-1:2012; EN62233:2008 (incl. Corr.:2008).

This dishwasher also complies with the Safety and Work Hazard Prevention Regulations (applicable to dishwashers) in force at the date of manufacture.

The dishwasher's connection with a suitable residual current operated circuit-breaker according to IEC 947 standard (type 1 coordination) is highly recommended; the maximum noise level of our dishwashers is 74.3dB and the value Kpa=2.5db

3. Applicability

The instructions found in this manual are only suited for the type of dishwasher specified.

4. Transportation

The machine is packed in a heavy cardboard crate when transported (fig. 1).

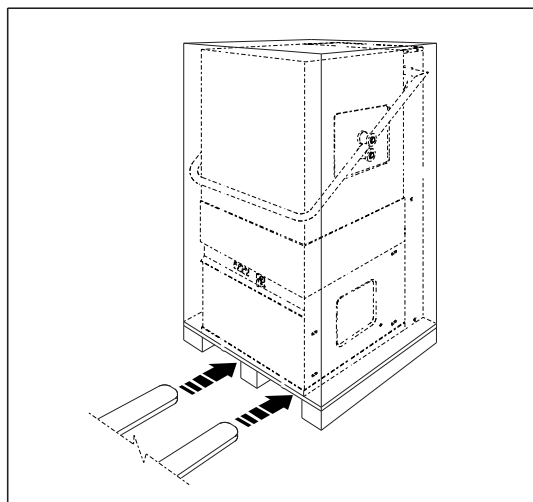
The dishwasher weight may vary between 50 and 170 kg if packed on a pallet, according to the model.

ATTENTION!**INJURY HAZARD**

THE USE OF EQUIPMENT AND THE OPERATIONS NOT SUITED TO LOADING, UNLOADING AND HANDLING OF THE DISHWASHER MAY DAMAGE BOTH THE PERSONNEL IN CHARGE OF SUCH OPERATIONS AND THE MACHINE ITSELF. THE MANUFACTURER RECOMMENDS COMPLYING WITH THE STANDARDS ON LOADING, UNLOADING AND HANDLING IN FORCE IN THE COUNTRY WHERE THE DISHWASHER IS USED.

THE MANUFACTURER DECLINES EVERY RESPONSIBILITY FOR DAMAGE TO THINGS OR PERSONS CAUSED BY IMPROPER USE OF THE EQUIPMENT OR BY PROCEDURES NOT SUITED TO AND/OR NOT SUITABLE FOR LOADING, UNLOADING AND HANDLING OF THE DISHWASHER.

Fig. 1



Once the dishwasher has arrived at its destination, check the transport documents and the number of packs.

Should you find any discrepancy between the documents and the items delivered, contact your Dealer immediately.

Carefully check the condition of the packaging: if it proves to be faulty or broken or with signs of incorrect handling, immediately inform the Supplier.

Please do not throw the packaging accessories away as they may be needed to ship the machine back to your Dealer.

5. Unpacking and assembling instructions

ATTENTION!



INJURY HAZARD

PLEASE PAY SPECIAL ATTENTION DURING UNPACKING AND ASSEMBLING OPERATIONS BECAUSE OF THE INSTABILITY OF THE DISHWASHER.

The unpacking/assembling instructions are only valid if the machine is installed by the Customer themselves.

1. Open the cardboard packaging carefully (fig. 2).

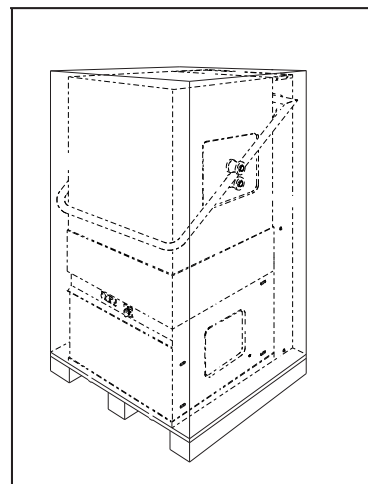


Fig. 2

2. Loosen the two A screws that fasten the dishwasher to the transportation pallet (fig. 3)

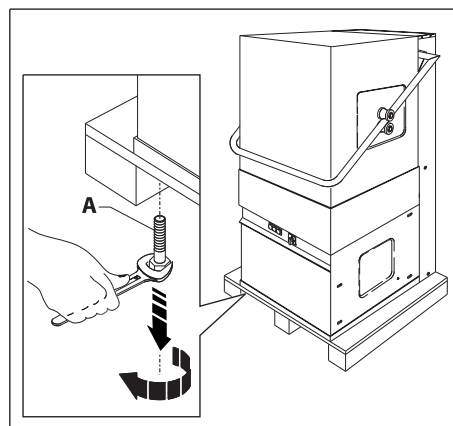


Fig. 3

3. Move the machine on the pallet until freeing of two of the four holes for insertion of the support feet (fig. 4).
Take one of the supplied feet and tighten the screw in one of the two seats vacated (fig. 4).
Proceed with installation of the second foot following the same procedure (fig. 4).

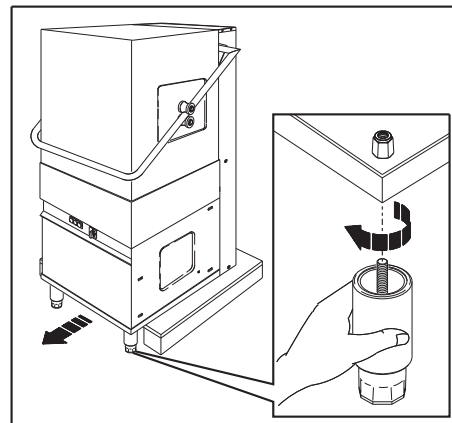


Fig. 4

4. Slide the machine further off the pallet until the first side is standing on its own two feet and the other is still supported by the pallet, so that the two remaining holes are free; then proceed as explained above.

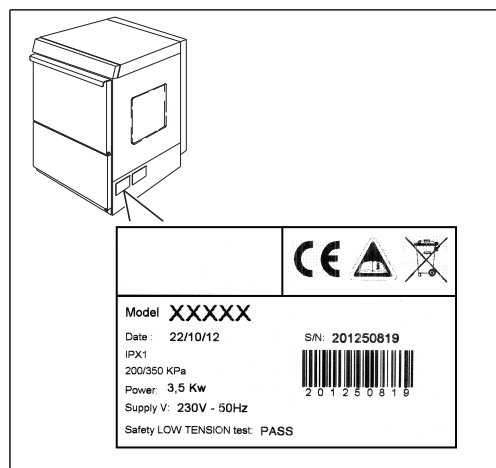
6. Dishwasher identification and marking

The dishwasher bears the following identification marks:

- *Company name*
- *CE marking*
- *Indication of model and type*
- *Year of manufacture*
- *Test certificate*

This information is shown on the plate situated on the dishwasher (fig. 5) and can also be found on the declaration of conformity enclosed herewith.

Fig. 5



PART TWO

1. Purpose of the Manual

The purpose of this Instruction and Maintenance Manual is to provide a description of the safety measures necessary for the use which must be observed when using the dishwasher.

This Instruction and Maintenance Manual is to be considered an integral part of the dishwasher.

The term User comprises not only the purchaser of the dishwasher, but also the personnel involved in the operating, maintenance, checking and handling operations.

The information contained in this manual concerns installation, putting into service and maintenance operations.

1.1. Who should read this manual

This manual is intended for the dishwasher operator and maintenance technician.

1.2. Use and preservation of this manual

The purpose of this manual is to provide all the information needed to use and maintain the dishwasher properly, according to the safety standards established by the Machine Directives and the Unified Standards.

For this reason, even if operation of the dishwasher is very simple, the manual must be kept intact and be readily available if required: it must remain close to the place of use, and be clean, legible and intact.

1.3. Duration and validity of this manual

This manual is to be considered valid for the entire life of the dishwasher.

It has been drawn up according to the current state-of-the-art technology existing at the time of construction of the dishwasher.

The manual therefore specifically refers to the dishwasher it was provided with, and is also to be considered valid in the event of future updates.

1.4. Request for a copy or a new manual

Should your copy of this Manual be lost or damaged, please ask your Manufacturer for a new one.

Copies of the Instruction and Maintenance Manual can be requested by stating the serial number, registration number and year of manufacture of the dishwasher (fig. 5).

Copies are only available for a fee.

1.5. Update

The Manufacturer reserves the right to modify the dishwasher whenever necessary and/or to update previous manuals without giving prior notice, except in special cases.

The manual will be updated by the Manufacturer in the following cases:

- if the dishwasher is returned to the Manufacturer for modifications or improvements
- if the manual contains errors or omissions that may prejudice suitable use of the dishwasher in conditions of total safety.

In such cases, the original Manual supplied to the Customer must be returned to the Manufacturer who will provide a new updated copy.

1.6. Transfer of ownership

In case of sale or transfer of ownership of the dishwasher, the customer is required to give notice to the manufacturer, specifying the address of the new owner and the date of validity of the sale contract so that the manufacturer may inform the new owner of the limits of their liability.

1.7 Customer's suggestions

Customers are invited to communicate any suggestions or proposals they consider helpful to improve the use, legibility or preservation of this manual, in the spirit and terms of our Standards.

To communicate your suggestions, please contact the Manufacturer of this dishwasher.

1.8. Liability Limits

1.8.1. Use Limits

This appliance must only be used for the function for which it was designed, that is to wash glasses, cups and similar items which do not exceed the maximum height of the door opening, together with the basket that contains them, as specified for the different models.

The limits of use are determined by the space available and the overall dimensions of the baskets, as well as that of the dishes that may be washed.

The dishwasher may only be used to wash plates and glasses commonly used in bars and restaurants.

The dishwasher was NOT designed to:

- Wash plates, glasses or other accessories made of plastic*
- Wash glass items that could explode when in contact with boiling hot liquids*
- Wash baby feeding-bottles or other plates and food containers for babies.*

1.8.2. Regulations to be observed

The regulations to be observed refer in particular to:

- ▶ *safety of the operator*
- ▶ *safety of the dishwasher*

The Manufacturer will accept no responsibility whatsoever if the dishwasher is used in such a way as to be in conflict with or that violates the safety regulations in force in the country of use, even if they enter into force during or after purchase.

1.8.3. Liability

The Manufacturer will accept no responsibility whatsoever for damage or injury to things or persons in any of the following situations:

- Misuse of the dishwasher

The term misuse refers to use of the dishwasher with dishes and items other than those recommended in the paragraph on the Use Limits (para 1.8.1 - PART TWO), which could result in damage or soiling of rotating parts and the splintering and/or explosion of the dishes.

Misuse is also to be considered the use of detergents or rinse aid products other than those recommended (such as dishwashing powder, laundry detergents specific for household dishwashers) or corrosive decalcifying products, acids and other unsuitable liquid or powdery cleaning products.

- Use of the dishwasher by untrained personnel

The dishwasher must only be handled by trained personnel. Untrained personnel using the machine should be supervised by a person in charge of the machine, until a certain degree of skill and safety has been achieved in correct use of the dishwasher.

- Use not in compliance with national safety standards

The use of the machine by operators who are not legally employed is forbidden.

- Incorrect installation

The dishwasher must be properly installed, both mechanically and electrically, and positioned in a suitable place that does not create difficulties for operators during its use.

This manual provides instructions referring to proper installation, when this is carried out by the Customer.

- Faulty power supply

A faulty mains power supply can cause damage to the internal motor pump and to the electrical parts of the dishwasher.

The Manufacturer accepts no responsibility for any damage caused by use of the machine with power supply voltages not in accordance with the relative Standards, namely:

- *lower voltage limit: -10% of nominal voltage rating*
- *upper voltage limit: 250 Vac for 220 V single-phase nominal voltage rating and 440 V for three-*

phase nominal voltage rating 380 V.

- Failure to carry out regular, prescribed maintenance (see chap.6 – PART TWO)

Failure to carry out regular, ordinary maintenance is likely to cause damage or malfunction.

- Unauthorised modifications or tampering

The dishwasher cannot be modified or tampered with in any part whatsoever.

- Use of non-original or unsuitable spare parts for the specific model

We recommend contacting the authorised sales office when purchasing spare parts and, in any case, using spare parts only recommended or supplied by the Manufacturer.

- Total or partial non-observance of the instructions for use

ATTENTION!



SHOCK HAZARD

THIS MANUAL MUST BE READ CAREFULLY AND UNDERSTOOD BEFORE INSTALLING AND USING THE DISHWASHER.

Total or partial ignoring of the instructions for use of the dishwasher may expose personnel to safety hazards and cause damage to the machine.

- Natural events

In the case of exceptional events such as earthquakes, flooding, etc., the Manufacturer does not assume any responsibility for damage to things or persons due to the use of the dishwasher in the afore-mentioned conditions or even for total or partial reconditioning of the same.

2. Installation

ATTENTION!



SHOCK HAZARD

Installation operations are to be carried out by qualified personnel in compliance with the following instructions.

2.1 Positioning and levelling

The Manufacturer delivers the dishwasher already assembled and complete with all the accessories necessary to be used properly.

If possible, place the dishwasher close to the electric and water mains connections. The machine must be levelled on a flat surface by turning its 4 adjustable feet (fig. 6).

If the machine is recessed in undercounter installations, its side and back panels may be joined to adjacent furniture or walls. The load and drain pipes may be left or right oriented, but once the machine is positioned, the pipes and the electric cable must not be bent or compressed.

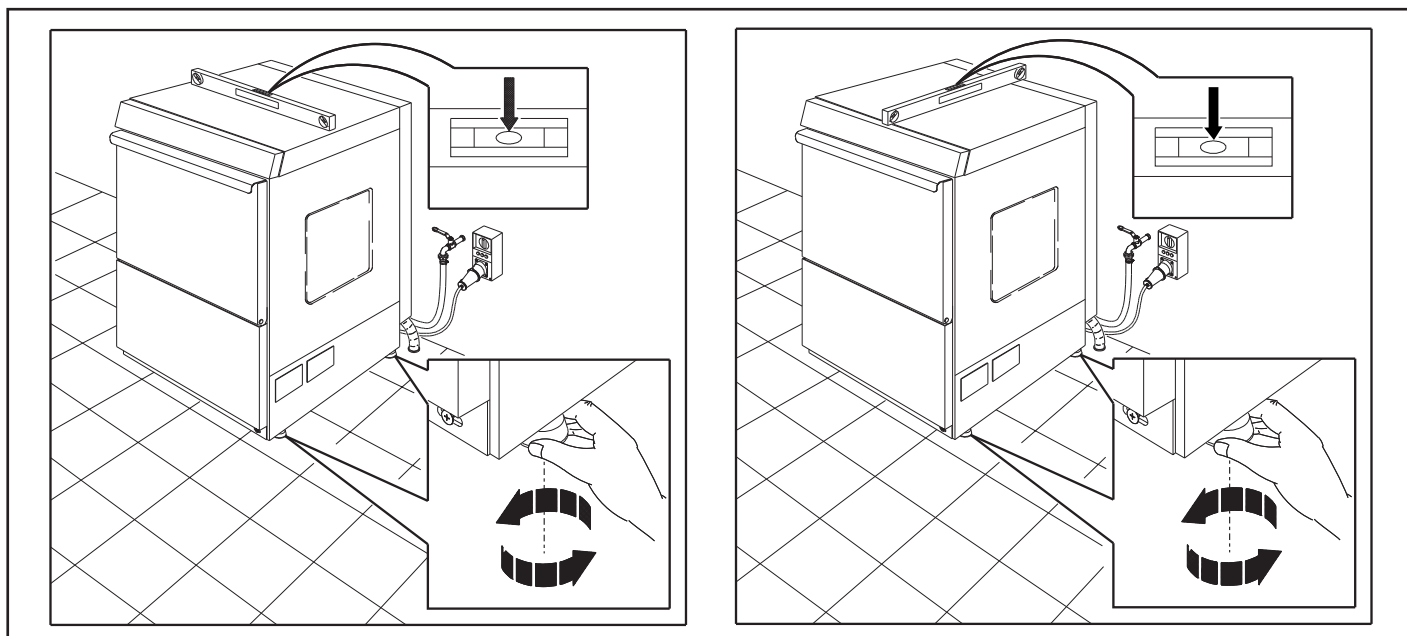


Fig. 6

2.2 Electric connection



ATTENTION!

The electrical connection must be carried out in compliance with the laws in force in the country in which the machine is installed.

Before connecting the machine, make sure that the voltage and the frequency of the electrical supply system correspond to that indicated on the plate and that the machine is connected to an efficient earthing system;

On the back of the machine there is a clamp marked with the  symbol, necessary for the equipotential connection between the different appliances.

The machine must be protected upstream against overcharges and short-circuits by an omnipolar thermal magnetic switch, with sufficient power of interruption, or by a load switch and gL-type fuses with adequate rate of flow.

A residual current circuit breaker coordinated with the resistance value of the user's earthing system against indirect contacts must be installed immediately downstream of the magnetothermal switch or of the circuit breaker/fuses.

The power cable supplied with the machine is H07RN-F-type.

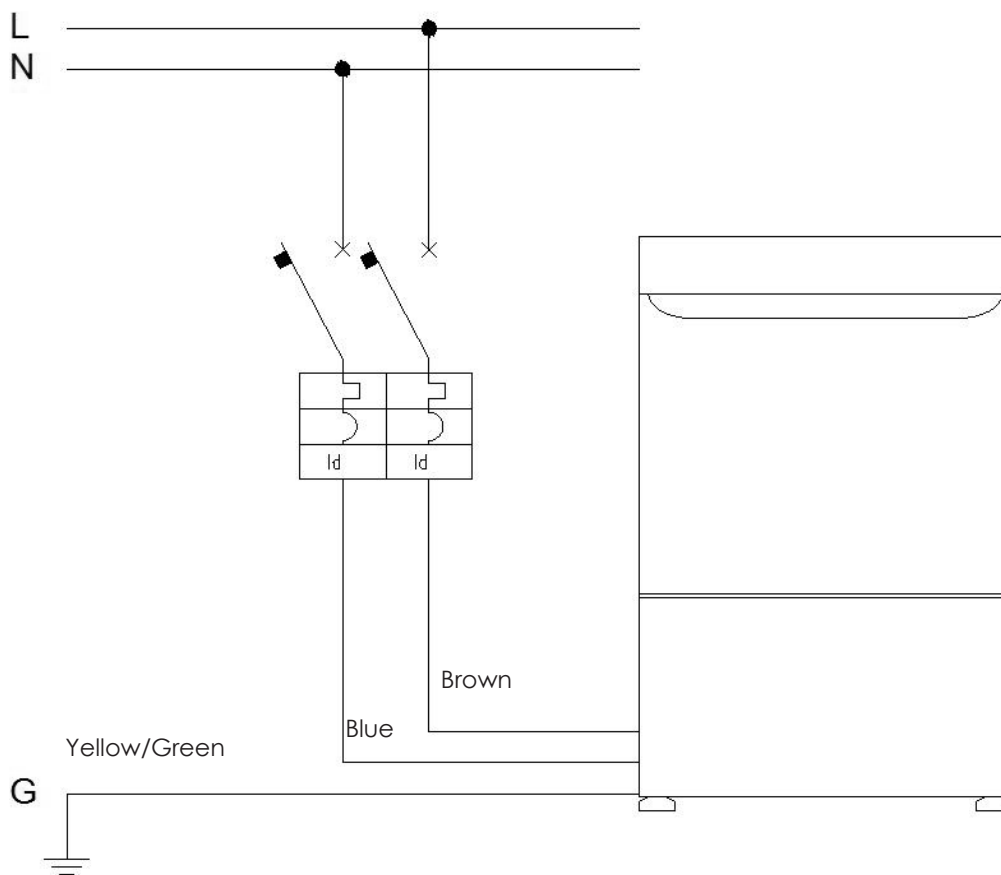
ELECTRICAL INSTALLATION OF A SINGLE-PHASE DISHWASHER

Single-phase dishwasher with Schuko 230V+T plug

If the dishwasher is fitted with a plug, insert it into the wall socket. Connect the device to the equipotential system via the appropriate terminal on the back of the dishwasher.

Single-phase dishwasher without 230V+T plug

If the dishwasher does not have an electrical plug, perform connection as follows:



Brown wire: line

Blue wire: neutral

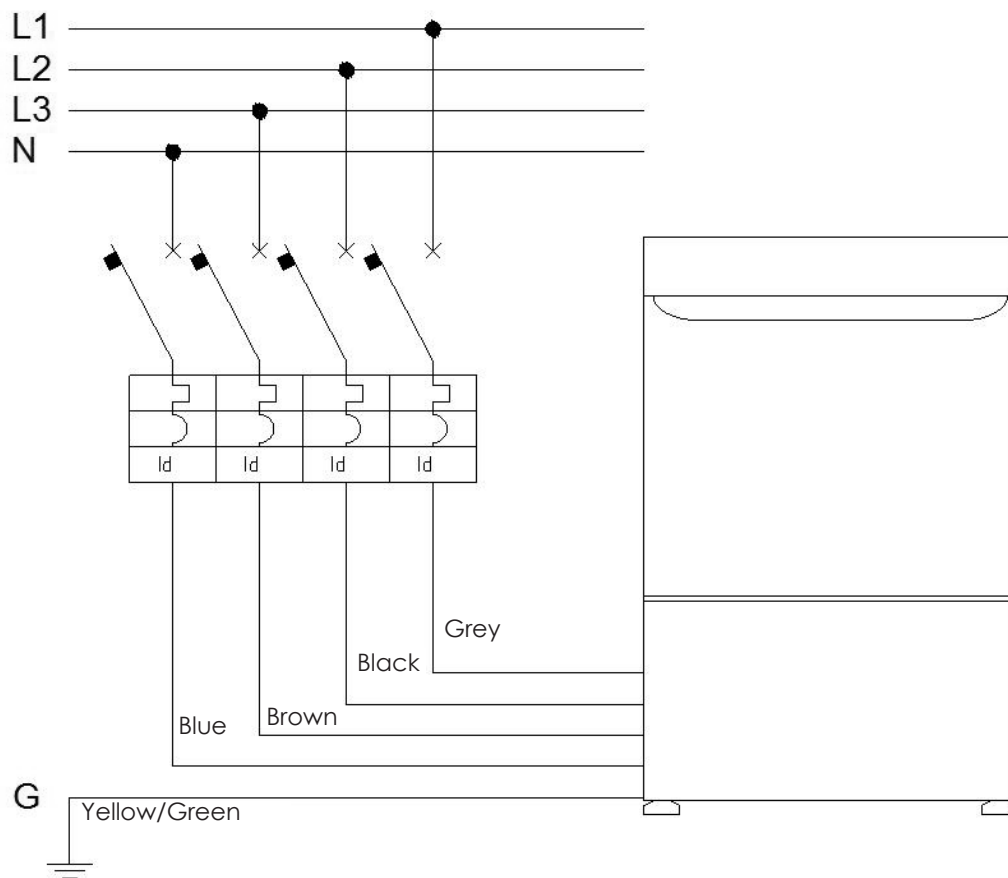
Yellow/green wire: earthing system

Connect the device to the equipotential system via the appropriate terminal on the back of the dishwasher

THREE-PHASE DISHWASHER ELECTRICAL INSTALLATION

400V3N+T three-phase dishwasher

The 400V three-phase dishwashers are always 5-pole and therefore fitted with a neutral conductor. Perform connection as follows:



Brown wire: line 1

Black wire: line 2

Grey wire: line 3

Blue wire: neutral

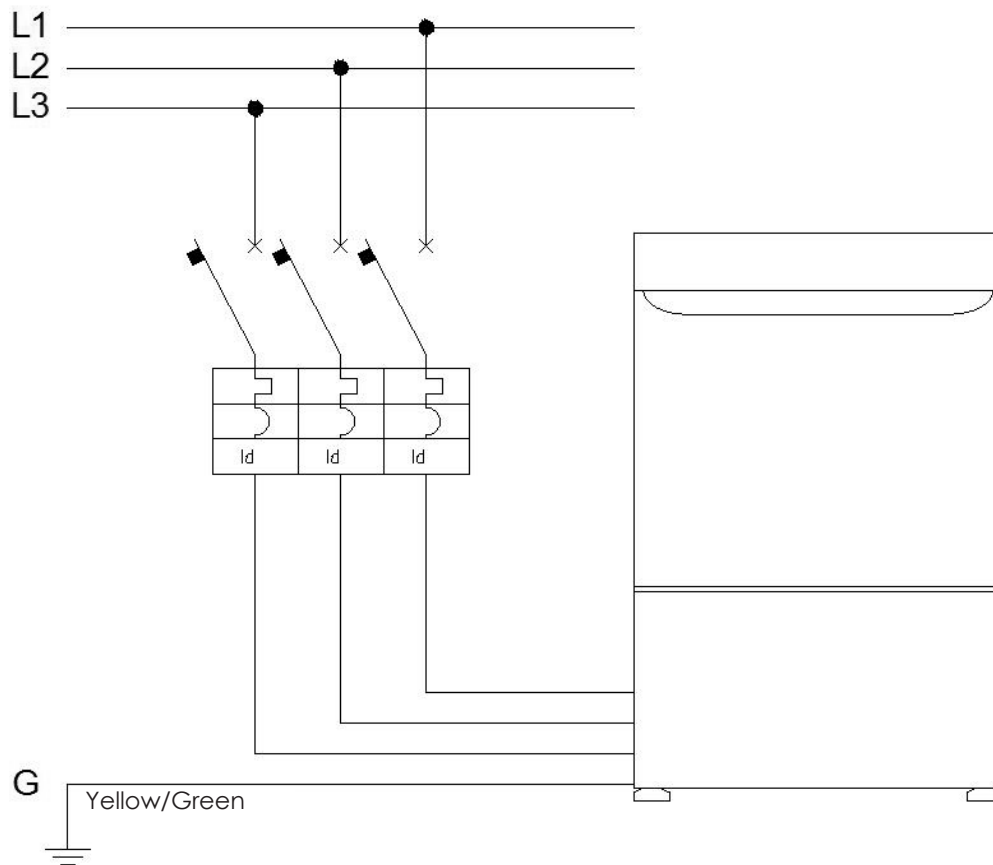
Yellow/green wire: earthing system

If the dishwasher is provided with a three-phase motor, check for correct rotation of the pump following the instructions supplied with the dishwasher.

If the pump should rotate in the direction opposite to the arrow on the pump cover, invert L1 and L2. Connect the device to the equipotential system via the appropriate terminal on the back of the dishwasher.

230V3+T three-phase dishwasher (optional upon request)

230V three-phase 4-pole dishwashers are only provided upon express request when ordering. Subsequent transformation of the dishwasher may require the replacement of certain components. Perform connection as follows:



Brown wire: line 1

Black wire: line 2

Grey wire: line 3

Yellow/green wire: earthing system

If the dishwasher is provided with a three-phase motor, check for correct rotation of the pump following the instructions supplied with the dishwasher.

If the pump should rotate in the direction opposite to the arrow on the pump cover, invert L1 and L2. Connect the device to the equipotential system via the appropriate terminal on the back of the dishwasher.

Dishwasher without power cord

If the dishwasher is supplied without an electric cable, follow the attached instructions to connect it to the mains.

Connect the device to the equipotential system via the appropriate terminal on the back of the dishwasher.

2.3 Earthing

The dishwasher must be connected to the earthing system of the building or to another tested and approved system in compliance with the safety regulations.



ATTENTION!

It must however be understood that an efficient earthing system is not enough on its own to ensure safe conditions. It will therefore be necessary to install suitable safety devices capable of interrupting the mains power supply with intervention times in compliance with the IEC 64-8 Regulations or with the other equivalent European Standard referring to electrical systems in public buildings.

2.4 Water supply

Connect the load pipe supplied with the dishwasher to a $\frac{3}{4}$ " water intake, using it to replace any existing pipes.

The highest water supply temperature is 55°C.

The water supply pressure must respect the limits indicated in the technical data (200/350kPa).

Further indications:

- *It is advisable to use the pressure regulators if hydraulic supply takes place through autoclave at a pressure greater than that of normal operation of the water mains.*
- *If the water pressure available is less than 1.5 bar, to ensure rinsing it is necessary to install an external pump to increase pressure.*
- *If the water has a hardness above 14°f, a water softener should be used to prevent external lime deposits and unsatisfactory washing results.*
- *If water hardness is higher than 14°f, limestone forms.
If water hardness is lower than 8°f, the dishes will not be rinsed properly.*

The connection to the water supply is to be carried out by means of a normal screw-on attachment to a water valve fitted with a handle or hand wheel (fig. 8).

It is advisable to place a suitable gasket in the connection between the supply hose and the tap (fig. 8).

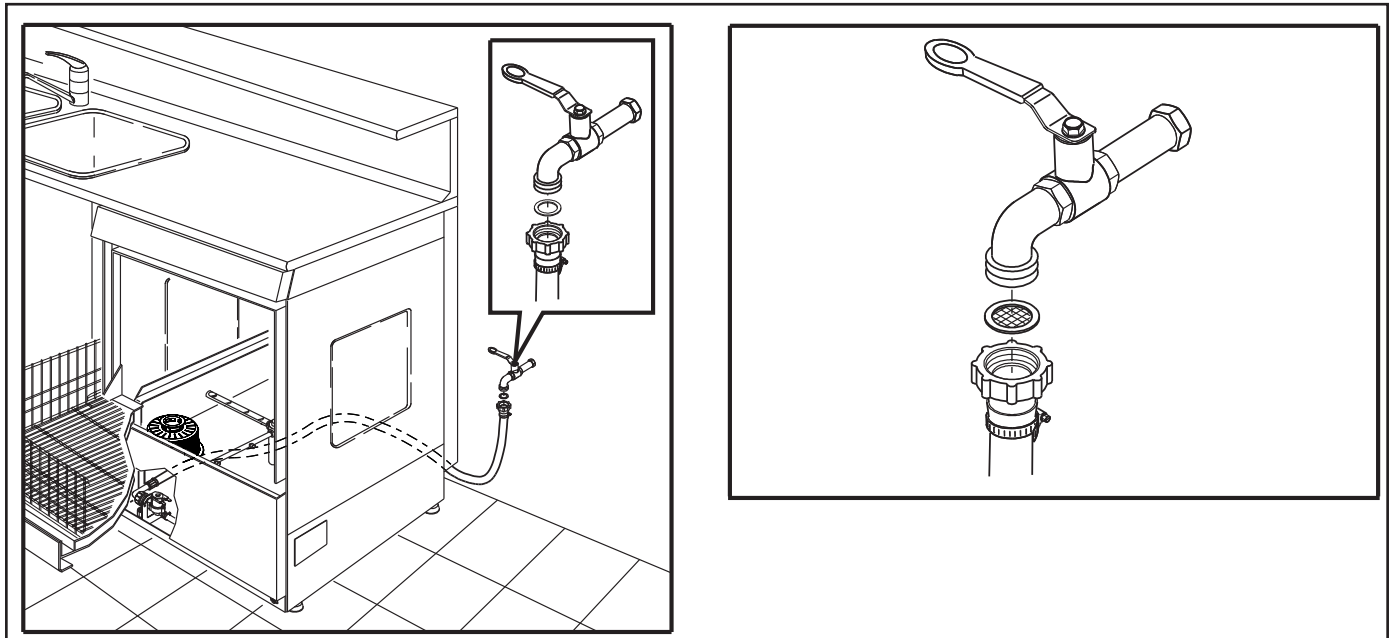


Fig. 8

2.5 Connection to the water drain

On the back of the machine there is an elbow connector which can be easily orientated towards the nearest drain well.(fig.9)

Whenever water drain cannot be by gravity, the model with a built-in drain pump must be specifically requested (fig.10): see in this regard para. 2.6 - PART 2.

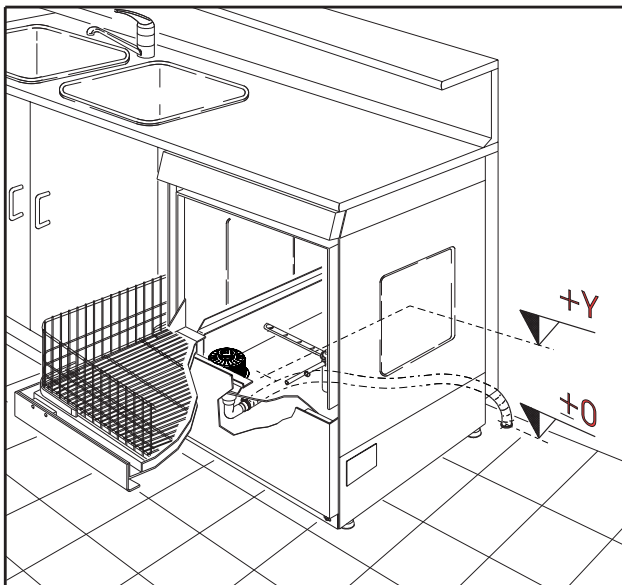


Fig. 9

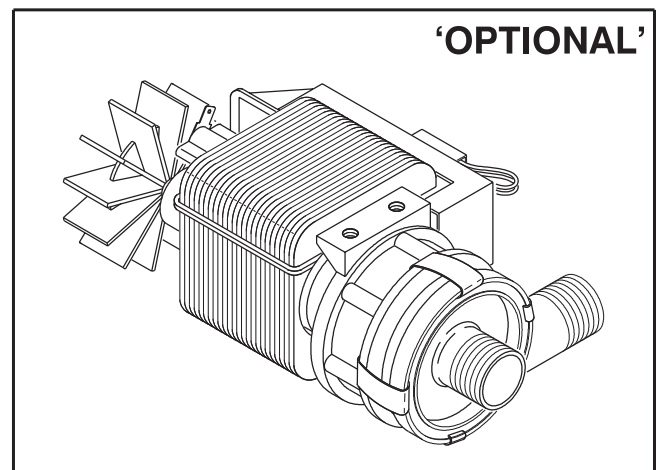


Fig.10

2.6 Model with drain pump

The end of a drain hose can be hooked-up to the edge of a sink, or connected to an outlet in the wall; this outlet must be provided with an air breather or have a diameter larger than that of the drain hose to allow the passage of air.

If an extension is required, it must not exceed 2 m in length. Avoid exceeding the difference of 40 cm between the point of connection of the drain hose and the base of the dishwasher.



ATTENTION!

In the case of attaching to the edge of a sink, position the free end of the hose so that drain water cannot reach plugs or electrical equipment

2.7 Detergents installation

The dishwasher is equipped with a blue tube for drawing of the rinse aid and a yellow tube for drawing of the detergent. Before inserting the tubes into their respective tanks, it is advisable to apply the weight and the filter supplied with the dishwasher to the end of these tubes (fig.A). The ceramic weight ensures drawing of the product from the bottom of the tank.

Important: never place the tubes into the tanks without having installed the filter; any crystallised parts of the product will seriously damage the dispensers.

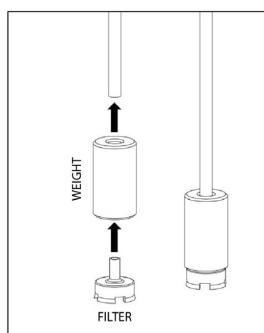


Fig. A

It is advisable to keep the detergent and rinse aid tanks in sight in order to continuously verify the presence of the product. Replace the tanks as soon as the product runs out.

2.8 Dishwasher with built-in water softener

If the machine is equipped with automatic water softener; this will regenerate during the wash cycle with a frequency set by the installer during installation of the dishwasher. Regeneration takes place automatically and no specific action is required by the user.

Until initial installation, the display will show the message "NO SALT". Introduce into the tank (fig. B) 1 kg of salt and add warm water to facilitate dissolution of the salt. The message will only disappear when the salt has completely dissolved.

Every time the display shows the message "NO SALT" it will be necessary to top up the salt. It is advisable to use a specific salt for dishwashers with coarse grain (1-4mm), taking care not to disperse it on the bottom of the tank to prevent oxidation of the steel which could impede correct functioning of the dishwasher. After filling the container, screw the cap back on tightly. Autonomy with 1 kg of salt depends on the hardness of the incoming water, which is set by the installer during installation of the dishwasher. It is advisable to immediately restore the salt as soon as the message "NO SALT" appears on the display to avoid lime scale formation which could compromise the machine components, in this case not covered by warranty.

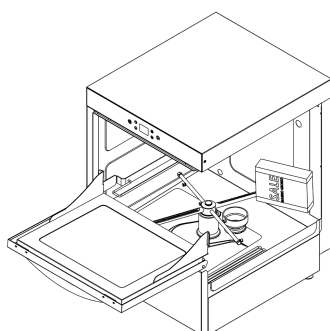
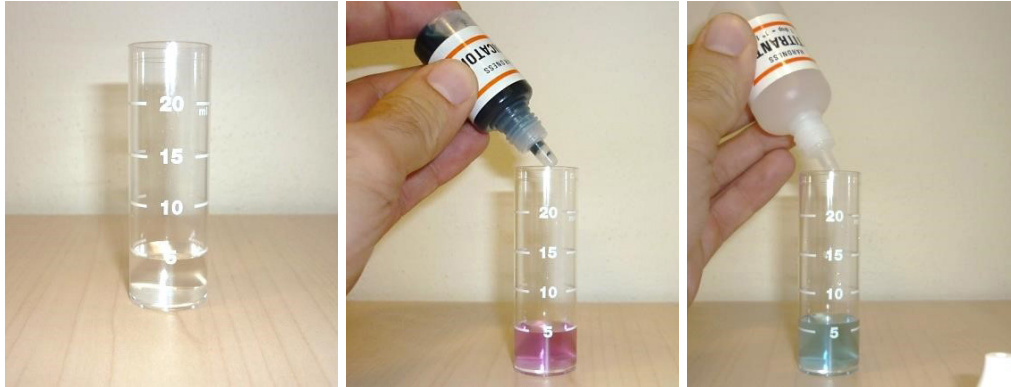


Fig. B

2.9 Water hardness measurement

Use the kit supplied with the dishwasher to measure the incoming water hardness:

- Remove 5 ml of water into the appropriate cup
- Pour into the water sample 1 drop of indicator (blue vial)
- Add the titrating solution (transparent vial) drop by drop and shake the tube after each drop, counting the necessary drops to make the water turn clear blue. Every drop added corresponds to 1°f
- The total number of drops counted will correspond to the hardness of the water being tested. This value must be entered in the menu of the dishwasher as described below



2.9.1 Electronic dishwasher setting

Upon initial installation as soon as the dishwasher is powered, the user is prompted to enter a number of parameters:

- **Language selection:** Select the language with the arrow keys and confirm by pressing the **OK**key
- **Inlet water hardness:** Set with the arrows the hardness measured with the kit supplied (see paragraph 2.9) and confirm by pressing the **OK**key
- **Inlet water temperature:** Set with the arrows the inlet water temperature and confirm by pressing the **On-Off**key
- Note: it is only necessary to confirm a temperature range between 4÷30°C, or between 31÷40°C, or >41°C
- **Filling of detergent and rinse aid tubes:** upon the request for tube filling, tap the **YES** key to proceed with filling (see next point) or tap **NO** to exit programming of the dishwasher
- After introducing the tubes into the respective tanks confirm with the **On-Off**key. Filling now takes place which lasts for approximately 5 min. To cancel the procedure, press and hold the **back arrow**key.

When the wizard finishes the dishwasher shows "**Stand-by**"

3 How to use the dishwasher

3.1 Type of use

The dishwasher has been designed for washing dishes commonly used in bars and restaurants.

3.2 Use conditions

The dishwasher may be used under any condition, providing that the operating temperature range is between +10 and +50°C.

It must only be used with an operator present.

In any case, avoid using the dishwasher in open spaces, such as in uncovered areas, improvised sheds, or other temporary installations. The operating temperatures of dishwashers are 55/60°C for the tank and 85°C for the boiler

3.3 Dishwasher types

Items that can be washed:

- *for the glass washer model: glasses, cups, coffee cups, wine glasses, saucers and fruit plates, in compliance with the paragraph on Use Limits (para. 1.8.1 – PART TWO).*
- *for all the other models: all types of dishes, crockery and glasses within the limits determined by the size of the baskets, in compliance with the standards stated in the paragraph on Use Limits (para. 1.8.1 – PART TWO).*

3.4 Use limits

The dishwasher must be used for washing dishes stacked flat in the basket inside the machine, up to its full carrying capacity, with no overlapping (fig. 11).

Moreover, make sure that the dishes do not prevent the rotors from turning.

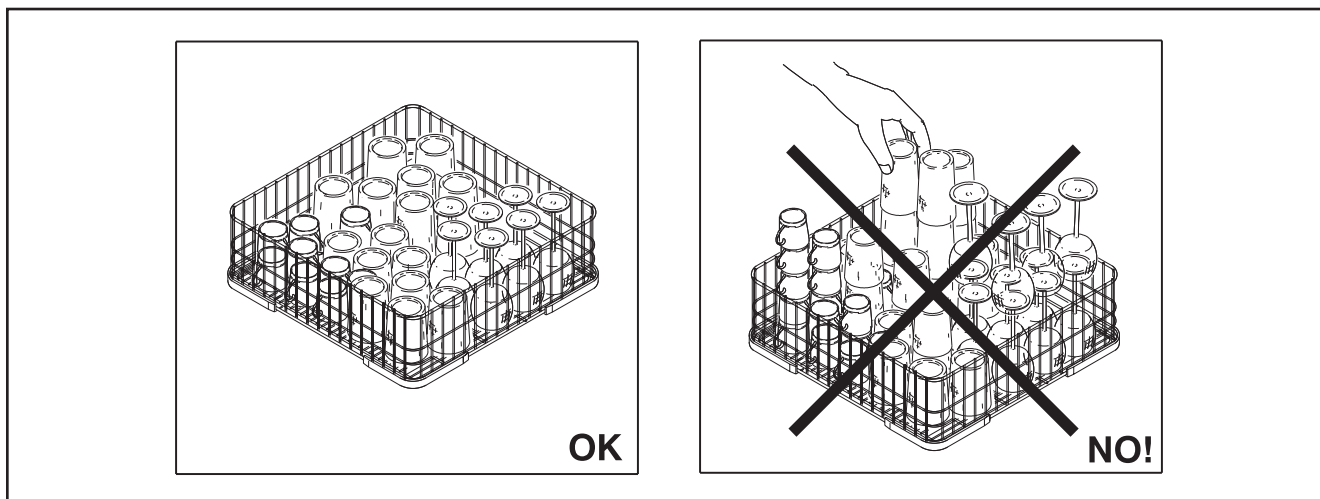


Fig. 11

3.5 Operator

The operator should have sufficient experience in the use of equipment commonly supplied to public businesses to prevent incorrect handling.

In any case, the simple commands and ease of operation when using the dishwasher facilitate acquiring of the necessary experience in a very short space of time.

The operator must always be aware of the risks (i.e. shock and burn hazards) due to use of any dishwasher.

The operator must be trained with special attention in the following cases:

- *temporary employees, with little or no experience;*
- *personnel with little or no service practice;*
- *personnel with local language comprehension difficulties;*
- *physically disabled personnel with limited movement capabilities.*

4 Instructions for use of the electronic dishwasher with UNIKO display

This appliance must only be used by trained personnel and employed solely for the washing of glasses, saucers, cups and similar item, in compliance with the Use Limits described in par. 1.8.1 – PART TWO).

4.0 Day and time setting

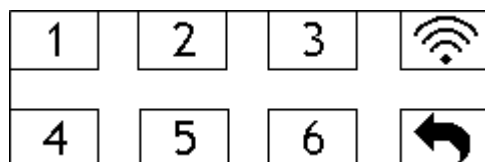
The dishwasher is equipped with an internal clock and a calendar. In case of power failure the settings are retained as the electronic card is equipped with a back-up battery.

To adjust the date and time follow these steps:

Switch the dishwasher off (Stand-By displayed)

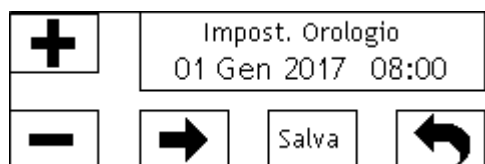


Tap the Menus icon.



Type the password 3-3-3-3-3-3

The date and time setting screen will appear



Use the right arrow to scroll "day" – "month" – "year" – "hour" – "minutes"

Use "+" and "-" to change the selected value

Leave the menu by pressing the "Save" key

Attention: the Save button allows exiting from the menu after saving the date and time, while the back arrow button leaves the operation and exits the menu without saving.

4.1 Check general operation

Before starting up normal operation, the User should check the functional characteristics of the installation by a visible inspection of connections to the dishwasher.

Regular inspection is also recommended regarding the conditions of connection of hoses and electric power supply cables (see chap.6 – PART TWO).

4.2 Safety devices

4.2.1 General safety devices

The dishwasher is enclosed inside metal cabinets that can only be opened using appropriate tools.

4.2.2 Alarm signals

In the event of a fault, the display shows an alarm code and a brief description of the type of error that has occurred.

4.2.3 Indicators and warning lights

The display may show messages indicating the status of the dishwasher. Messages may include error messages (consisting of a code followed by the description of the type of error), dishwasher status (filling, heating, cycle in progress ...), notices (no salt, maintenance required)

4.2.4 Interlock devices

As an interlocking device, a microswitch is used, fitted on the dishwasher door and positioned in such a way that it cannot be tampered with

This micro switch stops the water intake in the event that the door is opened, without switching off the power supply on the machine. If the door is opened during the wash cycle, the cycle is cancelled. Upon closing of the door it is necessary to restart the cycle.

4.2.5 Removable and adjustable safety guards

No adjustable or removable guards are provided, as they are not necessary.

4.3 Safety measures

Several basic rules must be complied with when using the dishwasher:

- The dishwasher must never be removed from its original position when working
- Make sure the water supply tap is open before turning the appliance on
- Never clean with corrosive products acids, steel wool or steel brushes
- Never wash the appliance with direct or high-pressure jets of water
- At the end of daily use, switch off the dishwasher
- Inspect the general situation of the machine before use, with particular attention to the electric power supply connections and the operation controls
- The dishwasher must be clean and possibly free from residues from previous wash cycles and in a good working condition. All the auxiliary accessories must be installed correctly and be efficient
- if the dishwasher, for any reason, must remain unused, it is advisable to display a sign with the wording "Out of Service" If necessary, disconnect the dishwasher from the mains
- Always keep the control panel clean and dry
- In the event that a spoon or other small object falls inside the tank, the tank will need to be emptied:

1. switch off the dishwasher using the ON/OFF KEY (see para. 4.6) and disconnect it from the mains
2. remove the overflow pipe (fig. 16)
3. if the dishwasher is equipped with drain pump, before turning it off, remove the overflow tube (fig. 16) and operate the pump by pressing the DRAIN PUMP KEY (see para. 4.6). When draining is finished, the dishwasher switches off. Disconnect it from the mains.

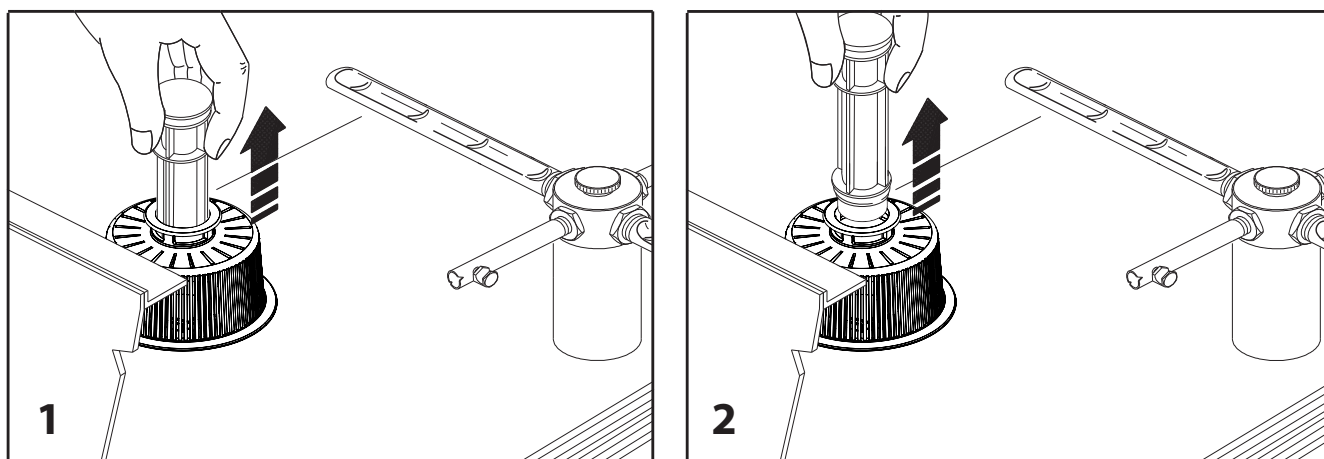


Fig. 16

Wait approximately five minutes to allow the heating elements to cool down before attempting to recover any fallen objects.

ATTENTION!



BURN HAZARD

4.4 Unladen test

Before starting the dishwasher, it is advisable to perform an unladen test to make sure that the machine was installed correctly.

4.5 Washing operations

A few basic rules must be observed to ensure correct hygiene for the items being cleaned:

- Remove any residual food from the dishes before washing them in the dishwasher (fig. 13)

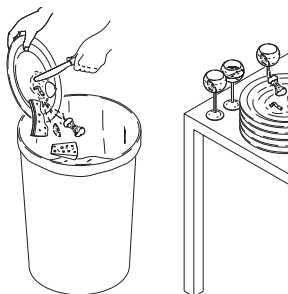


Fig. 13

- frequently replace the water in the tank according to the number of wash cycles that have been performed - at least 3 times a day.
- dry the washed dishes with a clean cloth
- do not place the dishes on rubber cloths or on other water-retaining materials
- The wash pump filter must be kept clean and positioned correctly.
- The overflow must be positioned correctly

4.6 Operation of electronic dishwasher with UNIKO display

Fig. 14 shows the control panel of the dishwasher and command references

CONTROLS	REF.
CYCLE PROGRESS LEDS	1
TOUCH SCREEN DISPLAY	2
CYCLE START TOUCH MULTICOLOR KEY	3
SELECTION KEY PROGRAMME 1	4
SELECTION KEY PROGRAMME 2	5
SELECTION KEY PROGRAMME 3	6
SELECTION KEY PROGRAMME 4	7
ON/OFF TOUCH KEY	8
WI-FI ICON (IF CONNECTED)	9
TEMPERATURE DISPLAY	10
DRAIN TOUCH KEY (IF PROVIDED)	11
SELECTED PROGRAMME ICON	12
PROGRAMME INFORMATION TOUCH KEY	13
EXTRA RINSE TOUCH BUTTON	14
PREVIOUS SCREEN TOUCH KEY	15

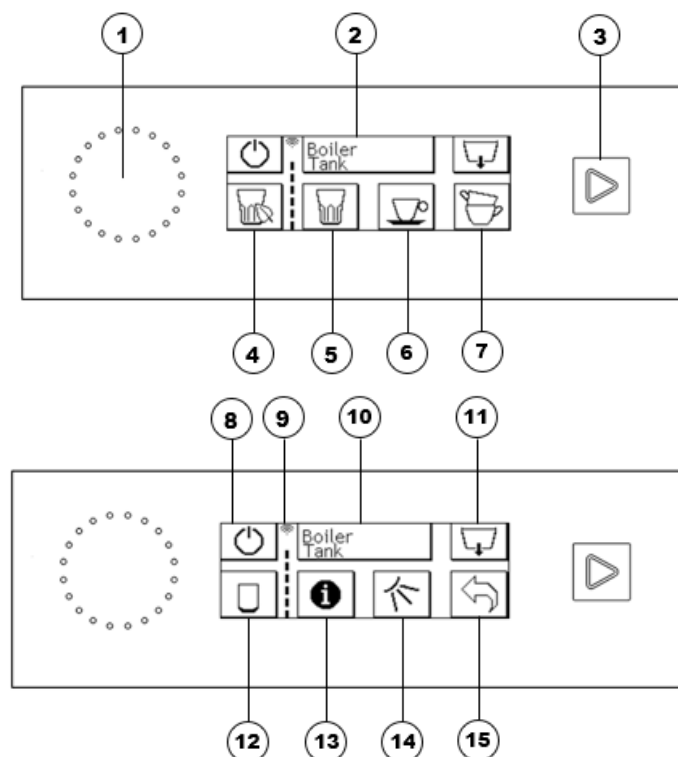


Fig. 14a

The following pages contain the instructions on the washing operations; some of them are automatically carried out by the dishwasher.



ATTENTION

**PAY ATTENTION WHEN THE OPENING AND CLOSING THE DOOR/LID OF THE DISHWASHER.
DO NOT USE THE DISHWASHER WHEN WEARING CLOTHING/ITEMS THAT COULD BECOME CAUGHT IN THE DISHWASHER COMPONENTS, LIMITING CAPACITY FOR NORMAL MOVEMENT.**

PHASE	DISHWASHER TYPE/REFERENCES FIGURE	
	Front loading dishwasher	Dish washer with lid
0. Initial checks	Check that the tank is completely empty and clean Check that the rotors are clean and free to turn Check that the filter is clean and reaches the bottom of the container. Check that the overflow tube is properly inserted in its housing	
1. Switch-on	Close the door of the dishwasher. Tap the TOUCH DISPLAY (2); the display comes on and shows STAND-BY. Touch the ON/OFF KEY (8); the dishwasher will come on	Close the lid of the dishwasher and push the handle downwards. Tap the TOUCH DISPLAY (2); the display comes on and shows standby. Touch the ON/OFF KEY (2); the dishwasher will come on
2. Water loading	The water is automatically loaded into the wash tank until it automatically reaches the top overflow pipe. During filling the filling icon is shown as well as the temperatures of the wash tank and of the boiler.	

PHASE	DISHWASHER TYPE/REFERENCES FIGURE	
3. Water heating	<p>The water is automatically heated.</p> <p>The display shows the temperature of the tank and boiler. Next to the temperatures, the flashing °C icon is shown to indicate which electrical heating element is operating: boiler or tank.</p> <p>The heating elements never work simultaneously but precedence is always given to the boiler.</p> <p>Heating ends when on the display the °C icons disappear and stop flashing.</p>	
4. Detergents and rinse additive dosage	<p>All dishwashers are equipped with automatic systems for the dosing of detergent and rinse aid; the settings are imposed by the installer at the time of installation.</p> <p>both the detergent and the rinse aid are dosed automatically after loading of the tank and at the end of each wash cycle.</p>	
5. Selection Wash programme	<p>Tap the icon of one of the 4 wash programs. The wash programme is identified by an icon representing the type of dishes to be washed.</p> <p>See at the bottom of this table the list of wash programmes available depending on the dishwasher model.</p>	
6. Washing	<p>Make sure that the dishwasher is in standby mode (CYCLE START KEY (3) green).</p> <p>Open the door, introduce the basket with the dishes (making sure the arrangement of the dishes respects the description contained in para. 3.4 – PART 2), close the door and press the CYCLE START KEY (3) to start the wash cycle.</p> <p>THE CYCLE PROGRESS LEDs (1) will show on the display the cycle progress.</p> <p>At the end of the wash cycle the display will start to flash until the basket is removed.</p>	<p>Make sure that the dishwasher is in standby mode (CYCLE START KEY (3) green).</p> <p>Raise the lid, insert the basket with dishes (making sure the arrangement of the dishes respects the description in para. 3.4 – PART TWO).</p> <p>Lower the lid and press the handle down. The wash cycle starts automatically.</p> <p>THE CYCLE PROGRESS LEDS (1) will show on the display the cycle progress.</p> <p>At the end of the wash cycle the display will start to flash until the basket is removed.</p>
7. Supplementary rinse	<p>To perform another rinse, tap the EXTRA RINSE KEY (14) to start a rinse cycle of 15 sec.</p> <p>Note the extra rinse programme is only available if the boiler has reached the operating temperature. Otherwise the box edge is dashed and the programme is inhibited.</p>	

PHASE	DISHWASHER TYPE/REFERENCES FIGURE	
8. Dishes unloading	<p>Open the door to remove the basket with the dishes.</p> <p>To eliminate any misting from the dishes:</p> <ol style="list-style-type: none"> 1. insert the basket with the dishes back into the dishwasher 2. close the door 3. perform a second rinse, pressing EXTRA RINSE (14) 	<p>Lift the lid to remove the basket with the dishes.</p> <p>To eliminate any misting from the dishes:</p> <ol style="list-style-type: none"> 1. insert the basket with the dishes back into the dishwasher 2. close the door 3. perform a second rinse, pressing EXTRA RINSE (14)

Shown below are the screen shots of wash programmes present by dishwasher type.
The programmes differ in duration, dosages and temperatures:

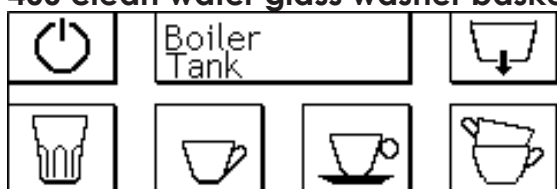
350 glass washer basket (75-90-110-130 sec.)



400 glass washer basket (75-90-110-130 sec.)



400 clean water glass washer basket (90-90-110-130 sec.)



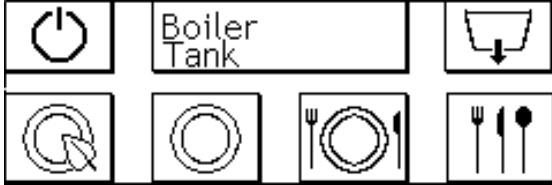
Under counter dishwasher basket 450-500-600 (90-110-120-300 sec.)



Object washer (120-150-240-540 sec.)



Lid dish washer (60-90-120-300 sec.)



4.6.1 Energy Saving

After 30 minutes of inactivity, the dishwasher goes into Energy Saving mode, lowering the temperature in the tank to 40°C and the boiler to 60°C. This way, keeping the temperature lower than the work temperature enables energy saving. During the state of Energy Saving the date and time are shown on the display.

To exit the Energy Saving state, simply press any key or open and close the door.

It is possible to adjust the amount of time to wait before the dishwasher enters Energy Saving. Contact an authorised service centre to change the settings.

4.7 End of service

Every day, after use:

If the dishwasher has no drain pump installed

1. Open the door and remove the overflow tube and re-close the door.
2. Briefly press the ON/OFF KEY (8) to switch the dishwasher off (the display will show the message prompting removal of the overflow)
3. After a few seconds a tank-cleaning cycle will start automatically that lasts approximately 2 minutes that will rinse the tank and will cool the boiler.
4. At the end of the self-cleaning cycle, the dishwasher switches off automatically.
5. To switch the dishwasher off without running the self-cleaning cycle, press and hold down the ON/OFF KEY (8)

If the dishwasher has a drain pump installed

1. Open the door and remove the overflow tube and re-close the door.
2. Press and hold the DRAIN PUMP KEY (11) until the tank drain and self-cleaning cycle starts. The self-cleaning cycle will start automatically as soon as the tank is empty. This cycle takes approximately 2 minutes and will rinse the tank and cool the boiler.
3. At the end of the self-cleaning cycle, the dishwasher switches off automatically.

As soon as the dishwasher is turned off

1. remove the electric power by turning off the main switch installed upstream of the dishwasher or disconnect it from the electric network
2. Remove and clean the wash pump filter (fig. 17) and any tank filters if present
3. carefully clean the wash tank
4. check and, if necessary, unscrew and clean the wash and rinse pipes
5. replace all the dishes removed, proceeding in reverse order
6. leave the door/lid open throughout the rest period **(N.B. If there is no power supply, with the door open the message "WARNING HOT STEAM" will be displayed indicating the presence of steam and hot tank. The message disappears as soon as the tank cools).**

ATTENTION!



INJURY HAZARD



FALL HAZARD

WHEN THE DISHWASHER DOOR IS OPEN IT CAN BE AN OBSTACLE TO PERSONS AND TO OBJECTS NEAR THE MACHINE ITSELF.

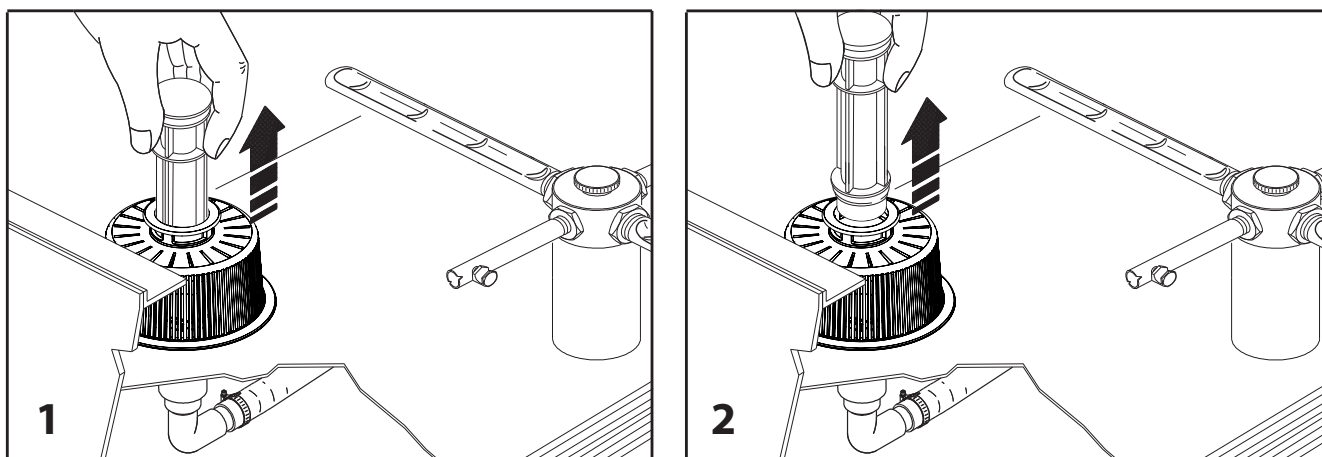


Fig. 16

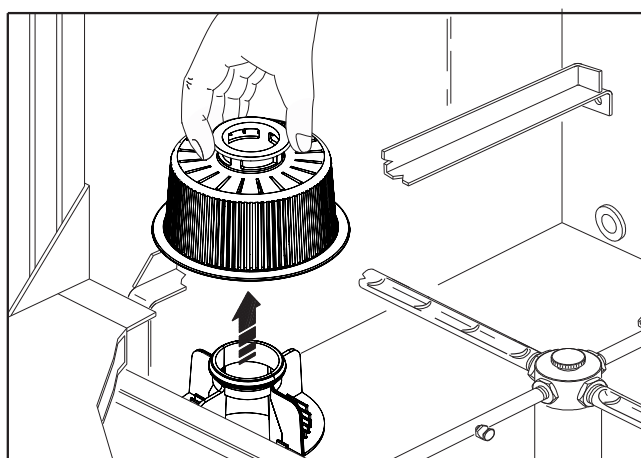


Fig. 17

4.8 List of screens

Below are the screens that may appear during normal use of the dishwasher:

Screen on



The following keys are active on this screen:

1-"ON" (8) to turn on the dishwasher

2-"MENÙ" to access the various configuration menus

3-"SELF-CLEANING" allows starting of a wash tank self-cleaning cycle

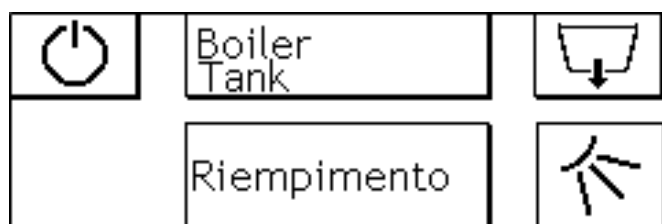
The current date and time are also displayed.

That screen remains illuminated for 10 seconds from powering of the dishwasher and then turns off.

To reactivate the screen simply touch the display in the upper left corner.

Filling screen

Pressing "ON" the dishwasher comes on and the filling screen appears



on this screen the following keys are active

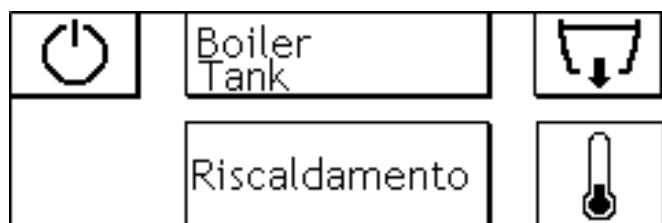
1- OFF (8) to turn off the dishwasher

2-"DRAIN" to drain the dishwasher (only visible if the dishwasher is equipped with a drain pump installed)

The START button (3) remains red until the temperatures are reached and then turns green to indicate that the dishwasher is ready for the wash cycle

During the heating phase the led circle (1) flashes.

Heating screen



After filling the heating screen appears. The water of the boiler and the water of the tank is heated to the minimum operating temperatures. The temperatures are shown in the centre of the display.

on this screen the following keys are active

1- OFF (8) to turn off the dishwasher

2-"DRAIN" to drain the dishwasher (only visible if the dishwasher is equipped with a drain pump installed)

The START button (3) remains red until the temperatures are reached and then turns green to indicate that the dishwasher is ready for the wash cycle

During the heating phase the led circle (1) flashes.

Dishwasher ready screen

Upon successful heating the screen appears with grouping of the icons corresponding to the 4 wash programs (dishwasher ready). The temperatures are shown in the centre of the display.



On this screen the following keys are active

1- OFF (8) to turn off the dishwasher

2-"DRAIN" to drain the dishwasher (only visible if the dishwasher is equipped with a drain pump installed)

The 4 active wash cycles are also displayed:

1-"PROGRAMME 1" (4) to access the first active programme

2-"PROGRAMME 2" (5) to access the second active programme

3-"PROGRAMME 3" (6) to access the third active programme

4-"PROGRAMME 4" (7) to access the fourth active programme

The 4 wash programmes can be customised to suit requirements, replacing the icons present by default with other washable dishes based on the type of dishwasher.

it is also possible to delete one or more wash programmes keeping active on the ones in use.

This operation can only be performed by an authorised technician (see section on "Choosing the wash programs")

Touching one of the 4 programs accesses the screen of the relative programme.

Screen of the programme



The following keys are active on this screen:

1- OFF (8) to turn off the dishwasher

2-"DRAIN" to drain the dishwasher (only visible if the dishwasher is equipped with a drain pump installed)

3- "INFO" to access information on the selected programme (see subsequently the information screen)

4-"EXTRA RINSE" (14) to start the extra rinse cycle.

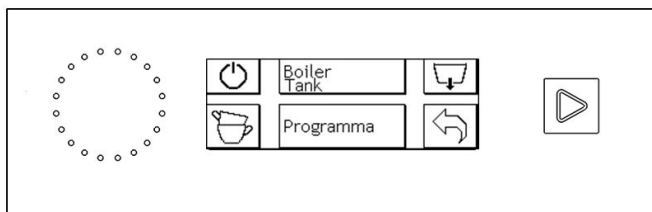
Note the extra rinse cycle is only available if the boiler has reached the operating temperature. Otherwise the box edge is dashed and the programme is inhibited.

5-"BACK ARROW" to return to the previous screen.

Pressing the GREEN START BUTTON (3) starts the wash cycle and the START screen appears.

Start screen

Work cycle in progress



On this screen the buttons are only active during the wash phase, while by starting the rinsing phase all the buttons are disabled until the subsequent opening of the door.

1- "OFF" (8) turns off the dishwasher

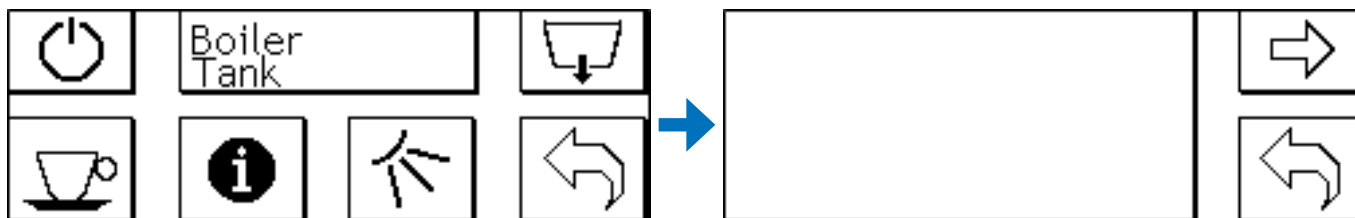
2-"DRAIN" to drain the dishwasher (only visible if the dishwasher is equipped with a drain pump installed)

3- "BACK ARROW" cancels the current cycle and returns to the programme screen.

At the centre of the display are the tank and boiler temperatures that disappear during the rinsing phase, replaced by the display of the temperature set in the boiler. Below the temperatures the messages relating to the dishwasher status are displayed (wash in progress, rinsing, thermostop, etc.) The START key is coloured BLUE and flashes for the duration of the wash cycle, while the LED circle gradually fills to indicate the progress of the cycle.

At the end of the cycle the display flashes until the door is opened and an acoustic signal is emitted to indicate the end of the cycle. At the same time the screen of the programme in use will appear on the display.

Information screen



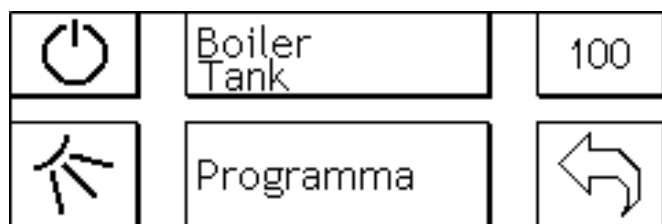
From the screen of the selected programme, pressing the "i" key shows the settings relating to the programme selected:

- a- Wash time
- b- Pause time
- c- Rinse time
- d- Boiler temperature
- e- Boiler thermostop
- f- Tank temperature
- g- Tank thermostop
- h- Initial detergent load
- i- Top up detergent
- j- Initial load of rinse aid
- l - Top up rinse aid

To scroll the various parameters tap the right arrow.

To return to the previous screen press the "back arrow" key.

Extra rinse screen



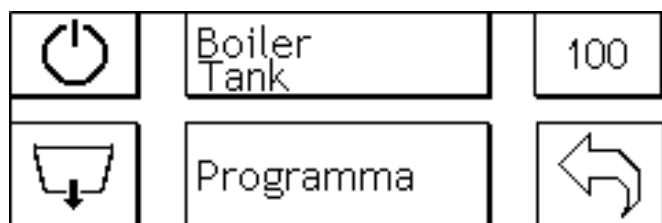
From the screen of the selected programme, pressing the rinse button starts an additional hot rinse cycle which lasts 15 seconds.

N.B. the additional rinse cycle is only available if the boiler has reached the minimum temperature set. Otherwise the box edge is dashed and the programme is inhibited.

On this screen, no key is active. In the upper right corner the seconds countdown is shown, in the middle of the screen the temperature set for the boiler and the "hot rinse" message are displayed.

At the end of the cycle the display flashes until the door is opened and an acoustic signal is emitted to indicate the end of the cycle. At the same time the screen of the programme in use will appear on the display.

Drain cycle screen



If the drain pump is installed on the dishwasher, remove the overflow before starting the drain cycle

Pressing the drain key displays the corresponding drain screen

The following keys are active on this screen:

1- OFF (8) to turn off the dishwasher

2-"BACK ARROW" to cancel the drain cycle

In the top right is the seconds countdown at the end of the drain cycle.

In the middle of the display, the tank and boiler temperatures and the "drain in progress" message continue to be displayed.

After draining, the self-cleaning cycle will start automatically, rinsing the tank and draining the water at regular intervals. The self-cleaning cycle lasts approximately 2 seconds, after which, the dishwasher switches off automatically.

ATTENTION: if at the end of the drain cycle the dishwasher is not empty, the alarm "ER12, Drain Timeout" is signalled: the dishwasher does not switch off but the heating is disabled

Check if the overflow has been removed, turn the dishwasher off and on again to reset the error, then restart an additional drain cycle.

4.8.1 meaning of START KEY colours

The START button (3) is a multi-coloured button which takes on different colours depending on the state of the dishwasher:

FILLING: red



HEATING/THERMOSTOP: red



READY: green



CYCLE IN PROGRESS: flashing blue



ALARM: red



4.8.2 meaning of the led circle

The LED CIRCLE key (1) lights up differently, depending on the state of the dishwasher:

FILLING: the LEDs light up in sequence until complete ignition of the circle and then go out in sequence until complete switching off of the circle. This functioning continues until complete filling of the dishwasher.

HEATING: the circle is completely illuminated and flashes

READY: the circle is completely illuminated and flashes

CYCLE IN PROGRESS: the circle gradually lights up to indicate the progress of the wash cycle. It will only be fully lit at the end of the wash cycle.

4.8.3 Choice of wash programs

It is possible to customise the display by choosing the 4 wash programs to be set as default according to requirements.












it is also possible to delete one or more wash programmes keeping active on the ones in use.

Each programme is assigned an icon and a given value of time, temperature and dosage depending on the intended use and the type of dishes to be washed.

The 20 programs are not present in all models of dishwasher but only the programs managed by the dishwasher itself will be present.

Contact an authorised assistance centre to change and adjust the programmes.

List of wash cycles that can be activated by type of dishwasher:

ICON	DESCRIPTION	CYCLE (sec)	BOILER (°C)	TANK (°C)	Glass washer basket 350	Glass washer basket 400	Glass washer clean water basket 400	Under counter dishwasher basket 500	Object washer	Lid dish washer
	Eco Cycle	60	70	55						
	Eco Glasses	75	65	55						
	Intensive Glasses	90	65	60						
	Beer Glasses	90	65	55						
	Wine and Balloon Glasses	120	65	60						
	Glass	110	75	55						
	Small cups	90	75	55						
	Intensive Small Cups	110	75	60						
	Full Load Small Cups	130	78	60						
	Eco Plates	60	75	55						
	Plates	90	77	55						

ICON	DESCRIPTION	CYCLE (sec)	BOILER (°C)	TANK (°C)	Glass washer basket 350	Glass washer basket 400	Glass washer clean water basket 400	Under counter dishwasher basket 500	Object washer	Lid dish washer
	Dishes and Cutlery	120	78	62						
	Intensive Plates	180	80	62						
	Cutlery	300	82	65						
	Pans	240	82	60						
	Pots	300	82	60						
	Eco Baking trays	150	82	60						
	Baking trays	540	82	60						
	Intensive Baking Trays	720	82	60						
	Intensive	900	82	65						

Programme that can be activated

Programme cannot be activated

4.8.4 Wi-Fi

The dishwasher is set up for Wi-Fi connection and can be remotely controlled via PC, tablet or Smartphone.

Contact an authorised service centre for connection.

When the dishwasher is connected to Wi-Fi, the signal strength is shown on the display with vertical bars (9).



4.8.5 Thermostop

The dishwasher is equipped with the function of serial thermostop which only ensures starting of the wash cycle if the water temperature has reached the set minimum (Tank Thermostop) and only enables rinsing if the boiler has reached the minimum temperature set (Boiler Thermostop). At the end of the wash cycle before starting the rinse, the boiler temperature is checked: If the temperature is above the minimum value, the cycle continues correctly with rinsing. If the temperature is lower than the minimum value, the wash cycle is prolonged until the minimum temperature is reached.

5 Instructions for disassembly

ATTENTION!



INJURY HAZARD

DAMAGE HAZARD FOR THE DISHWASHER

Only skilled personnel should be allowed to disassemble the dishwasher.

The dishwasher should therefore be taken to the nearest authorised dealer to disassemble all or part of the dishwasher.

6 Maintenance

ATTENTION!



INJURY HAZARD





BURN HAZARD

MAINTENANCE MUST ONLY BE CARRIED OUT WHEN THE MACHINE IS SWITCHED OFF, DISCONNECTED FROM THE POWER SUPPLY NETWORK AND THE TANK IS EMPTY.

MOREOVER, MAINTENANCE SHOULD ONLY BE CARRIED OUT AFTER THE HEATING ELEMENTS HAVE COOLED DOWN (WAIT AT LEAST FIVE MINUTES).

THE ONLY EXCEPTION TO THIS RULE IS WHEN CHECKING THAT THE MICROSWITCH IS FUNCTIONING (SEE THE TABLE BELOW).

The table below shows a list of the necessary maintenance operations and their frequency. In case of technical problems, contact your Dealer.

MAINTENANCE	FREQUENCY	NOTES
Wash tank cleaning	Daily	To be carried out with care.
Rotor cleaning	Daily	Dismantle the rotor by unscrewing the retaining nut and pulling it upwards (fig.18). Wash the rotor with water. Carry out the same operations for the upper rotor.
Wash pump filter cleaning	Daily	Remove the wash pump filter by pulling it upwards, then wash it and rinse it (fig. 19).
Cleaning of wash tank filters (if present)	Daily	Remove the wash tank filters by pulling them upwards then wash and rinse them.
Check rotor rotation	Daily	Check manually that the rotor rotates freely.
Outer surfaces cleaning	Every 1-2 days	Do not use solvents on the control panel.
Micro switch functioning check	Weekly	Check that the door microswitch works properly when the machine is on by opening/closing the door or by lifting/lowering the lid.
Power supply cable and water hose check	Every 6 months	<p>ATTENTION!</p> <p> ELECTROCUTION HAZARD</p> <p> INJURY HAZARD</p> <p><u>In case these parts are damaged, disconnect the dishwasher from the power supply without touching the electric cable</u> (turn the switch upstream of the dishwasher to the "off" position or disconnect the entire power supply network to which the dishwasher is connected). <i>Immediately contact your Dealer and have the machine repaired by qualified personnel.</i></p> <p><u>Do not use the dishwasher until it has been repaired.</u></p>

The degree of protection of the dishwasher is IPx1 therefore it is absolutely forbidden to use water jets to clean any part of the dishwasher. It is also prohibited to wash floors, walls or any other object installed near the dishwasher with a water jet or high-pressure cleaners. During normal maintenance and cleaning of the floor, do not wet the base of the dishwasher excessively. Avoid stagnating water near the dishwasher.

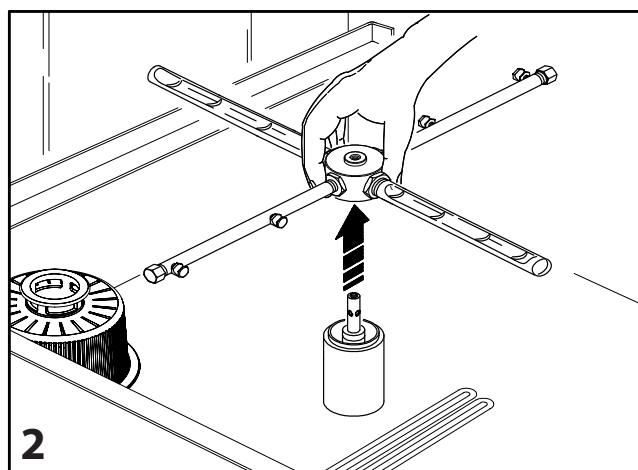
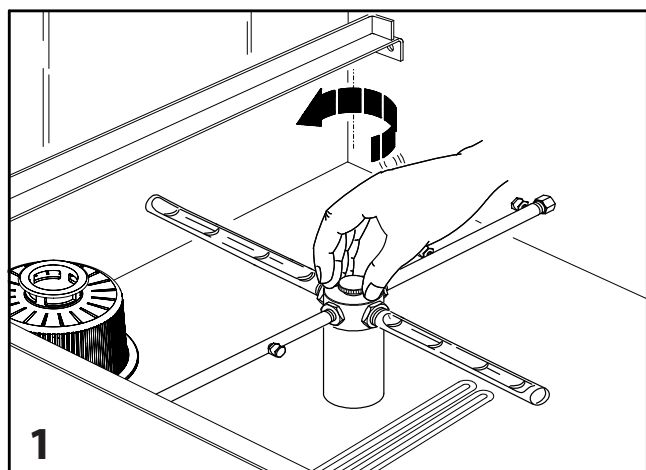


Fig. 18

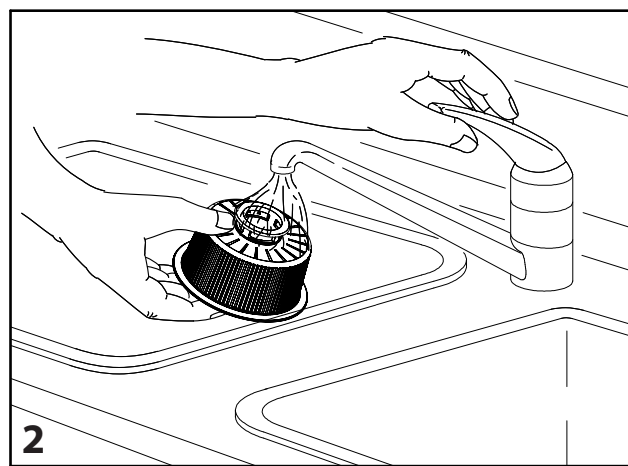
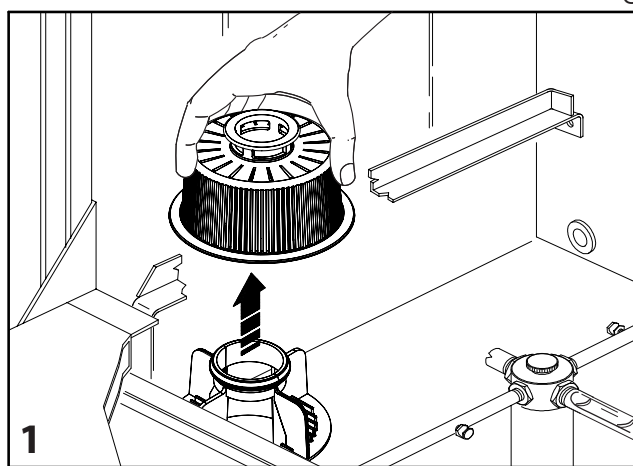


Fig. 19

6.1 UNIKO display maintenance

The sensitivity of the display changes depending on the status of the dishwasher and the degree of moisture on the glass:

- during the wash phase, the display sensitivity is halved so that in order to be able to use it, press repeatedly on the screen
- during the rinse phase the display sensitivity is cancelled so the display cannot be used.

Only after opening the door will the display return to normal operation.

If the display is very wet, the sensitivity gradually decreases to limit the water interference with the touch screen. To ensure correct operation make sure that the excess water on the screen is always carefully dried.

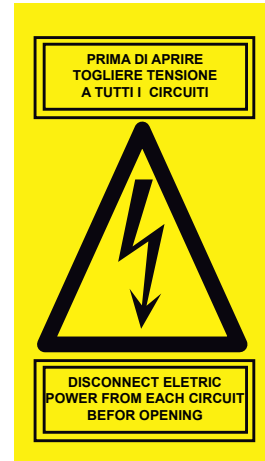
Use a soft, damp cloth to clean the glass. Use a mild detergent to remove dirt. After cleaning remove the detergent with a damp cloth. Do not use jets of water.

Do not use abrasive cleaners or any other abrasive or sharp object that could scratch the glass irreversibly. This type of damage is not covered under warranty.

7 Residual hazards

The alternating current mains power supply represents a source of residual hazard.

Warnings placed in convenient positions on the dishwasher warn operators of these hazards, in compliance with the Safety Standards, as shown here to the side.



8 Instructions for emergency situations



ATTENTION

Emergency situations that are likely to arise during use of the dishwasher are:

- *loss of insulation*
- *electric shock*

In all situations in which the dishwasher is not working, or not working properly, thus generating possible hazardous circumstances, the electric power supply must be immediately disconnected by switching off the switch upstream and by disconnecting the mains power cord.


In the event of electrocution or electric shock, carefully follow the precautions set out by the Safety Regulations. Do not touch the injured person directly, but switch off the switch upstream.

In all situations in which the dishwasher is not working, or not working properly, thus causing the hazardous situations described above, or after one of these situations has occurred, do not use the dishwasher and have it checked and repaired by qualified personnel.


9 Troubleshooting

Before leaving the factory, each machine is thoroughly tested by specialist engineers to make sure that it works perfectly.

However, in the event of a fault, before calling for service, the following trouble shooting operations may be attempted.



PROBLEM	POSSIBLE CAUSE	SOLUTION
0. The dishwasher does not turn on	The upstream switch is in the OFF position.	Turn the switch upstream of the dishwasher into the "on" position
	<p>The plug or the power cable are damaged.</p> <p>ATTENTION!</p> <p> ELECTROCUTION HAZARD</p>	<p>In the event of damage to these parts, switch off the power supply to the dishwasher without touching the electrical cable (turn the upstream switch of the dishwasher into the "off" position or remove the electrical power to the entire network to which the dishwasher is connected). Immediately contact your Dealer and have the machine repaired by qualified personnel.</p> <p>Do not use the dishwasher until it has been repaired.</p>
	The touch display does not respond to commands	Clean and/or dry the display and make sure that the door is closed
1. The dishwasher does not fill with water	There is no electricity.	Wait for electricity to return
	Dishwasher door/lid not closed	Open the water network valve
	Clogged water supply valve filter	Clean the water supply valve valve
	Supply valve closed	Open the water network
	Filling up of water softener upstream	Wait until filling is completed
2. Pressing the CYCLE START KEY the cycle does not start	Dishwasher door/lid not closed	Close the door/lid of the dishwasher
	The upstream switch is in the OFF position.	turn the switch upstream of the dishwasher into the "on" position
	The CYCLE START KEY was not pressed for at least 2 seconds.	Press the CYCLE START KEY again for at least 2 seconds.
	The touch display does not respond to commands	Clean and/or dry the display and make sure that the door is closed
3. The wash cycle is noisy	The wash pump filter (fig. 19) is clogged.	Wash and rinse the wash pump filter (fig. 19)
	The washing arms of the rotor (fig. 18) knock the parts to be washed protruding from the basket	Position the dishes so that they cannot be struck by the washing arms of the rotor by following the instructions in para. 3.4 – PART TWO
4. Inadequate rinsing	Water supply pressure is less than 1.5 bar	Contact an installer to install a supplementary pump to increase the supply water pressure
	Clogged water supply is clogged	Clean and rinse the water supply valve filter.
	The nozzles of the rotor are blocked.	Wash and rinse the nozzles of the rotor.
	The rotor arms do not turn freely	<p>- Position the dishes so that they are not struck by the washing arms of the rotor, following the instructions in para. 3.4 – PART TWO</p> <p>- Wash and rinse the rotor.</p>

PROBLEM	POSSIBLE CAUSE	SOLUTION
5. The wash produces excessive foam.	Excessive rinse aid has caused this foaming	Contact the installer to reduce the amount of rinse aid.
	Soaking of the dishes with unsuitable detergent	Avoid soaking with foaming detergents
6. The rotor does not turn freely	The washing arms of the rotor (fig. 18) knock the parts to be washed protruding from the basket	Place the dishes so that they do not become hit by the washing arms of the rotor by following the instructions in para. 3.4 - PART TWO
	The rotor needs cleaning	Wash and rinse the rotor
7. The dishwasher does not drain the water	The drain pipe (fig. 21) is blocked or compressed	Remove the blockage from the drain pipe
	The drain pump filter (if supplied – fig. 21) is clogged	Wash and rinse the drain pipe filter.
	The pump does not drain properly	Contact the installer to reduce the replacement of the drain pump
	The drain cycle does not start (only if drain pump installed)	Make sure the dishwasher door is closed properly and clean the touch display
8. The wash result is unsatisfactory	The dishwasher has not finished the phase of heating of the water in the tank	Before starting actual washing, wait for the water heating time in the wash tank. When the pre-set water temperature is reached, the WATER TEMPERATURE LIGHT comes on
	Water in the tank is excessively dirty	Change the water
	The washing arms of the rotor (fig. 18) knock the parts to be washed protruding from the basket	Place the dishes so that they do not become hit by the washing arms of the rotor by following the instructions in para. 3.4 – PART TWO
	The rotor needs cleaning	Wash and rinse the rotor
	The nozzles of the rotor are blocked.	Wash and rinse the nozzles of the rotor
	No detergent	Contact the installer to increase the amount of rinse aid.

PROBLEM	POSSIBLE CAUSE	SOLUTION
9. The water tank is full of limestone	Excessive hardness of the inlet water	Contact the installer to install a softener upstream If the dishwasher has a built-in water softener, contact the installer to increase the top up frequency of the resins
		Perform descaling of the tank with specific products for industrial dishwashers. Follow the instructions provided by the manufacturer of the descaling agent. ATTENTION!  WARNING RISK OF BURNS FROM ACID
	If the dishwasher has built-in water softener, there is insufficient salt in the tank	Add salt to the water softener tank
10. Presence of brown spots or grease in the tank after emptying	The tank is stained with coffee or grease	Increase daily water refills and contact the installer to increase the amount of detergent.
11. Spots of rust in the wash tank	Use of detergent with high content of chlorine	Change the type of detergent according to the instructions given in paragraph 11. Remove rust with specific products without scratching the surface of the steel
	Using bleach in the tank	Never use bleach. Remove rust with specific products without scratching the surface of the steel
	Introduction into the tank of crockery previously cleaned with iron scourers	Never use scouring pads or wire brushes in the manual pre-wash. Remove rust with specific products without scratching the surface of the steel
	Washing of dishes or iron items	Do not wash iron items

9.1 Electronic dishwasher warnings and alarms

During operation of the dishwasher the following warnings may appear on the display. The alert remains displayed even when the machine is switched off and the display backlight stays on.

NOTICE	ALARM DESCRIPTION	CHECKS PERFORMED BY THE END USER
Maintenance request 	This warning appears when the day count expires or the cycle count expires	Request the intervention of a technician
No salt* 	This warning appears when the salt level in the softener tank drops. Managed only for machines with built-in water softener	Add salt to the relevant tank.

* When the salt tank is filled for the first time, the no salt warning may not disappear immediately.

It is advisable to fill the salt tank with warm water to speed up the process of dissolving the salt. As the salt dissolves, the water density changes allowing the float inside the tank to change position resetting the warning.

The following are the alarms that may appear on the display if there is an operating fault. The alarm notification is accompanied by a graphic icon:






All warnings persist until the dishwasher is switched off and until subsequent switching on.

Certain serious alarms place the machine in "safe" mode (total block), others allow it to continue standard operation, though with limited functions.

If after having performed the appropriate checks and having switched the machine off and back on the alarm appears again, contact our technical service.

NOTICE	ALARM DESCRIPTION	CHECKS PERFORMED BY THE END USER
ER01	Tank loading timeout:: the tank has not filled within the maximum time expected	Water mains valve does not supply water. Overflow tube not inserted or inserted incorrectly. Rinse jets clogged Water supply hose blocked Upstream water softener not working
ER02	Boiler load timeout:: the boiler has not heated within the maximum time expected.	Water mains valve does not supply water Water supply hose blocked Upstream water softener not working
ER03	Tank heating timeout: the tank has not heated within the maximum time expected. Tank heating is disabled	Overflow tube inserted incorrectly. If the problem persists, request technical assistance

ER04	Boiler heating timeout: the boiler has not heated within the maximum time expected. Boiler heating is disabled	Overflow tube inserted incorrectly. If the problem persists, request technical assistance
ER05	Tank probe open: the tank temperature probe is not connected or is it interrupted. Tank heating is disabled	Request the intervention of a technician
ER06	Tank probe short-circuited: the tank temperature probe has shorted. Tank heating is disabled	Request the intervention of a technician
ER07	Boiler probe open: the boiler temperature probe is not connected or is it interrupted. Boiler heating is disabled	Request the intervention of a technician
ER08	Boiler probe short-circuited: the boiler temperature probe has shorted. Boiler heating is disabled	Request the intervention of a technician
ER09	Tank safety thermostat: the tank safety thermostat has intervened	Request the intervention of a technician
ER10	Boiler safety thermostat: the boiler safety thermostat has intervened	Request the intervention of a technician
ER11	Thermostop timeout: the boiler has not reached the temperature set during the thermostop phase. Boiler heating is disabled.	Switch the dishwasher off and back on again; if the problem occurs again, call for technical assistance
ER12	Drain timeout: the tank pressure switch did not open at the end of the manual drain cycle	Make sure that the overflow has been removed from its seat and start an additional drain cycle. If the alarm persists, request technical assistance. ATTENTION!  CAUTION RISK OF HOT WATER
ER14	Panel disconnected: the panel was disconnected during machine operation and therefore it is no longer controllable by the keyboard	Request the intervention of a technician

ER20	Overttemperature alarm: The display shows the message "remove the plug". All dishwasher functions are blocked and the display flashes rapidly.	Switch the dishwasher off, empty it and allow it to cool. Try running an additional fill. If the problem persists, request technical assistance <div style="text-align: center;">  ATTENTION! CAUTION RISK OF HOT WATER </div>
ER21	Tank not empty: at the end of the manual self-cleaning cycle the tank is full of water (only for machines without drain pump)	Make sure that the overflow has been removed from its seat and start another self-cleaning cycle. <div style="text-align: center;">  ATTENTION! CAUTION RISK OF HOT WATER </div>
ER22	Clock to be adjusted: the internal clock is set with an invalid date	Set the clock.
ER23	Wi-Fi module not in Station mode: the dishwasher is not correctly configured to connect to Wi-Fi	Enter the Wi-Fi menu and follow the procedure to connect the dishwasher.
ER24	No Wi-Fi connection: The module is not connected to the network	Check for correct functioning of the router
ER25	Wi-Fi module not connected to the server: the dishwasher is connected to the router but does not receive any data from the server	No Internet network. Wait until the network returns
ER26	Wi-Fi module not working: the Wi-Fi module seems to be operating incorrectly	Enter the Wi-Fi menu, reset the module and re-do connection
ER27	Non-functioning memory: it is not possible to write data to the dishwasher in the memory card	Request the intervention of a technician

10 Personnel training

The personnel must be trained regarding the operations for loading, unloading and preparation for use of the machine.

All these operations are relatively simple and require normal prudence in order to avoid injuries and accidents.

11 Useful tips

Here are some useful tips to complete dishwasher operation:

Check the level of rinse aid and detergent in the outer container, and replace if necessary (fig. 22)

The washing and rinsing arms must be clean and equipped with jets and taps

Use only industrial and low-foam detergents

Use only industrial detergent and rinse aid that we supply or equivalent

Use the doses recommended by the detergent manual (para. 4.6 – PART II) or by the manufacturer of the detergent itself

Do not fill the detergent and rinse aid containers with new product to prevent crystallisation of the product which, aspirated by the dispensers, damages the tubes

Upon each tank change clean the tubes. In this regard, before inserting the tubes into the new tanks, place the suction tubes into a basin filled with warm water and perform 2 cycles of vacuum cleaning.

The detergent and rinse aid tubes must be replaced at least 1 time per year or as soon as the maintenance request message appears (only for electronic dishwashers)

Make sure that the detergent and rinse aid intake filters are always installed in the respective tubes and thoroughly clean. Replace them if they are excessively dirty and clogged with crystallised detergent.

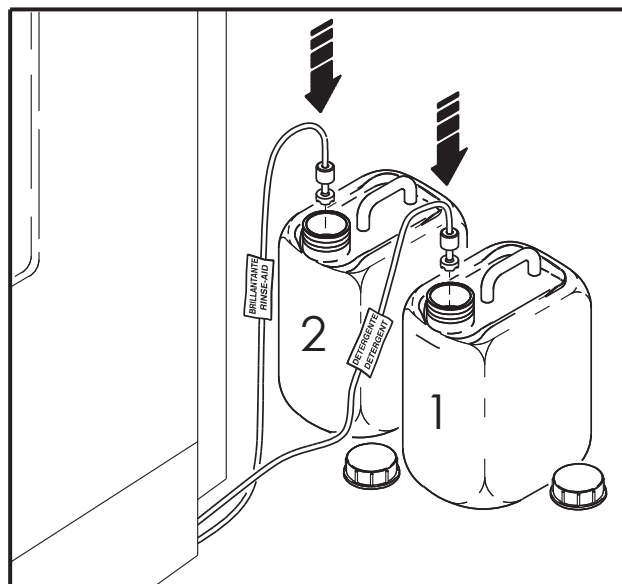


Fig. 22

12 Instructions for disposal

Instructions for the disposal of electrical devices.

The label shown to the right is applied to electrical devices you have bought and means that the appliance cannot be disposed of as common waste but must be disposed of separately.

In fact, waste deriving from electrical or electronic devices must undergo special treatment in order to prevent the pollutants contained in the devices from being dispersed and to protect the environment and human health. Moreover, it will be possible to reuse/recycle part of the material of which this waste is made up, thus reducing the depletion of natural resources and the quantity of waste to be recycled.

WARNING

**DUE TO ITS POLICY OF CONTINUOUS PRODUCT IMPROVEMENT, THE MANUFACTURER RESERVES THE RIGHT TO MAKE ANY CHANGES DEEMED NECESSARY.
THE MANUFACTURER CANNOT BE HELD RESPONSIBLE IF THE INSTRUCTIONS CONTAINED IN THIS MANUAL ARE NOT OBSERVED.**