

EN

## Instructions for Use and Maintenance

110567  
110557  
110597

# CE





Thank you for choosing our machine.

The instructions for installation, maintenance and use found on the following pages have been prepared to ensure a long life and perfect operation of your unit.

Please, do follow the instructions carefully.

We have designed and built this machine using the latest innovative technologies. Now you shall take good care of it.

Your full satisfaction is our greatest reward.



**READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLING THE MACHINE.**



**WARNING: FAILURE TO COMPLY, EVEN PARTIALLY, WITH THE PRESCRIPTIONS IN THIS MANUAL WILL RENDER THE PRODUCT WARRANTY NULL, AND THE MANUFACTURER SHALL NOT BE LIABLE.**

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## WARNINGS

**This instruction booklet must be kept with the machine for future consultation. If this machine is sold or transferred to other users, make sure the booklet always goes with the unit so that the new owner can have all the necessary information on operations and all relevant instructions.**

**The instruction booklet must be carefully read before installation and before starting the machine.**

- **The connection to the electrical and water networks, for installing this unit, must be carried out by qualified operators only.**
- This machine must only be used by adults. This is a professional machine to be used by qualified personnel, installed and repaired exclusively by qualified Technical Personnel. The Manufacturer declines any responsibility for improper installation, use, maintenance or repair.
- This appliance can be used by trained youth aged from 15 years and above. It cannot be used by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- Do not slam the doors when opening and closing.
- Make sure the machine is not standing on the power cable or on the filling/drain hoses. Level the machine flat, by adjusting the support feet.
- Do not use this appliance or any part of it as a stepladder or support as it has been designed exclusively to bear the weight of its rack, containing the items to be washed.
- **This machine is designed exclusively for washing dishes, glasses and crockery with human food type of residue. Do not wash articles polluted with petrol, paint, chips of steel or iron. Do not wash fragile objects or material not resistant to the washing process. Do not use acidic corrosive chemical products or alkaline and solvents or chlorine based detergents.**
- Do not open the machine door when operating. In any case, the machine has a special safety device which immediately stops the unit if the door is open, thus preventing water spillage. Always switch the machine completely off and drain the water tank, before accessing inside.
- **A suitable omni-polar automatic fuse switch shall be installed and sized according to the absorption provided, in order to completely guarantee the disconnection from the power network, with “category III” overvoltage conditions.**
- **This switch shall be included in the power network, be solely and exclusively used for this purpose and be installed in the immediate vicinity of the machine.**

- **Always turn off the machine by this switch: only this switch gives a full warranty of a complete insulation from the electric network.**
- **Make sure the appliance is linked to an efficient ground connection.**
- The user shall not carry out any repair and/or maintenance operations. In any case contact qualified personnel.
- Servicing of this machine must be performed by authorized personnel only.  
**N.B.: Use genuine spare parts only. Non-genuine parts will void the warranty and the manufacturer will take no responsibility for any damage.**
- **Do not use old water hoses, but new ones only.**
- Some important rules must be followed for using this appliance:
  - 1) never touch the appliance with wet hands or feet;
  - 2) never use the appliance when barefooted;
  - 3) do not install the appliance in places exposed to water splashes.
- Do not dip bare hands into water containing detergent. If this should occur, wash them immediately with plenty of water. Check the emergency instructions on the detergents containers.
- Follow the instructions given in the manufacturer's booklet for cleaning operations (chap. 4).
- **This machine must be disconnected from the main electrical supply after use at the end of the day and for any service/maintenance operation following this procedure:  
Switch the machine off from the control panel.  
Drain the tanks by removing the overflow pipes.  
Disconnect the electrical supply by the omni-polar switch (main switch located on the wall).  
Shut the water supply valve(s).  
Disregarding the aforesaid prescriptions is a serious misuse and can cause damages and injures to property and people, and will relieve the manufacturer from whatever liability.**
- This appliance is designed to work at room temperatures from 5°C up to a max. 35°C, in a suitable room.
- Do not use water to extinguish fires on electrical parts.
- Do not cover the intake or dissipation grids.
- Only qualified personnel can access the control panel, when the main power switch is OFF.
- The machine has an IPX3, protection rating against accidental water splashes and is not protected against pressurized water jets. Pressure-cleaning systems shall, therefore, not be used on this machine.



**ATTENTION: INTERNAL CLEANING OF THE MACHINE SHALL BE CARRIED OUT AT LEAST 10 MINUTES AFTER THE POWER SWITCH HAS BEEN TURNED OFF.**

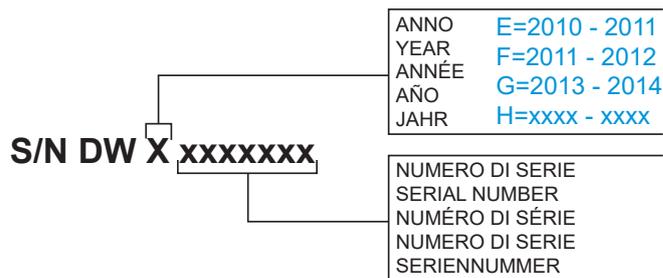
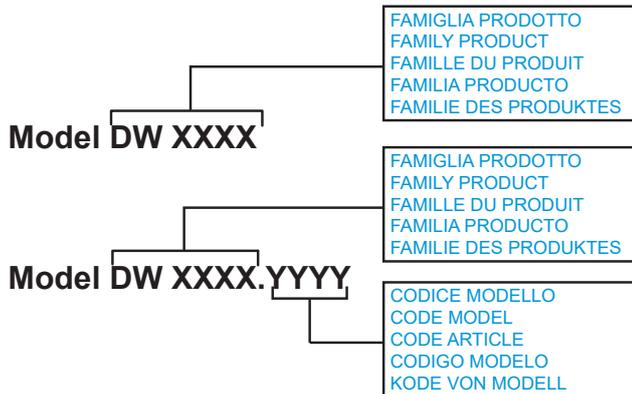
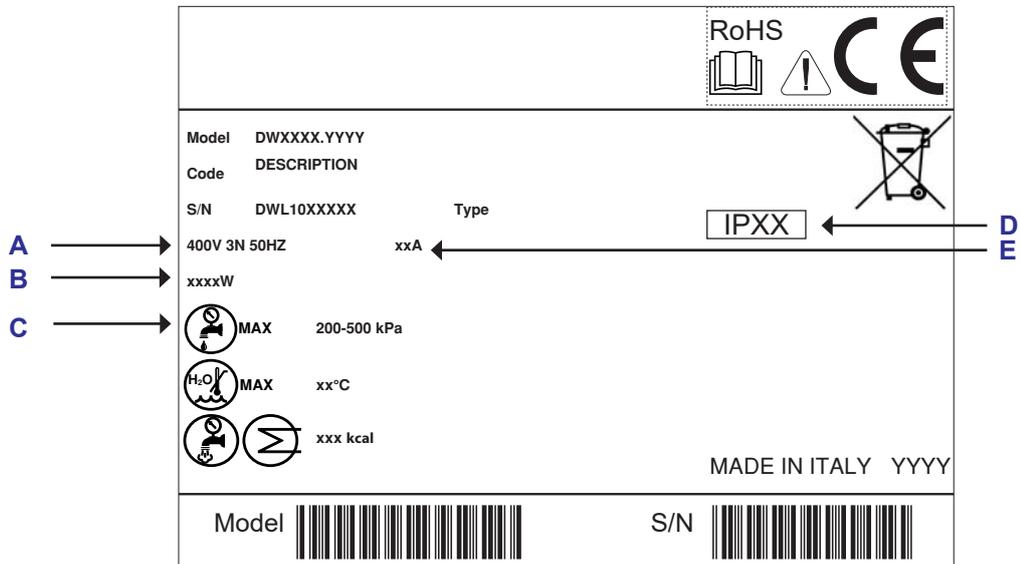


**ATTENTION: DO NOT INSERT HANDS AND/OR TOUCH THE PARTS LOCATED AT THE BOTTOM OF THE WASH TANK AND/OR AT THE END OF THE WASH CYCLE.**

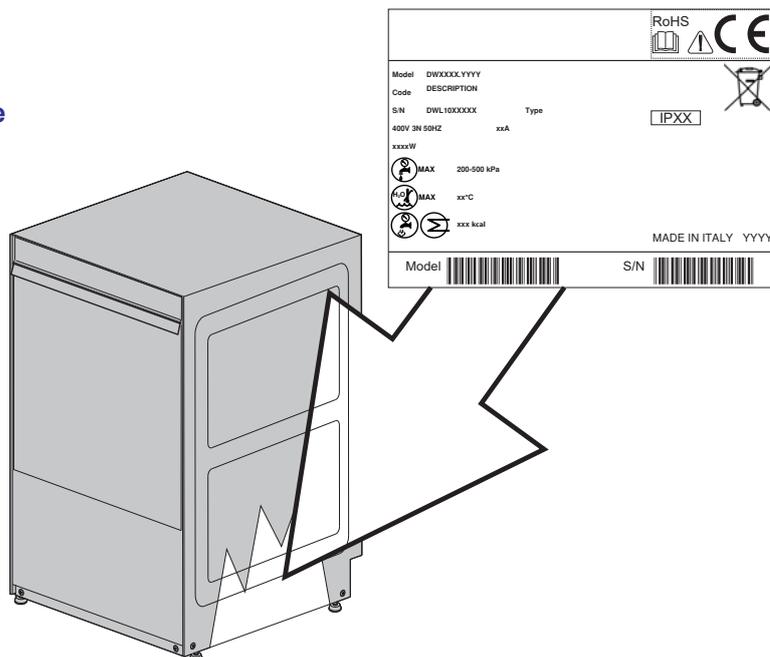
**NOTE: The manufacturer declines any responsibility for accidents to people or any damage deriving from failure to observe the above listed instructions.**

# 1. MACHINE INSTALLATION

## 1.1 Serial number data



- A** Power source
- B** Total power installed
- C** Dynamic pressure
- D** Envelope protection degree
- E** Total electricity absorption



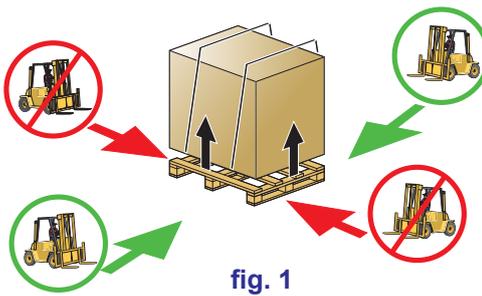


fig. 1

**1.2 Receiving the machine**

Before accepting the machine, verify that all the data on the data-plate corresponds to the required ones (as shown on par. 1.1) and to the ones of the available electrical supply.

After removing the packaging, make sure that the machine was not damaged during transportation. Should this be the case, please notify the seller immediately. If safety has been compromised, do not install the machine.

The installation and the starting of the machine must be carried out by trained operators only, even if the machine is coming from another site and it has been used, already.

Adaptation of the electrical and water system for dishwasher installation must be carried out by only qualified operators.

See par. 6.2 for disposing the packing material.

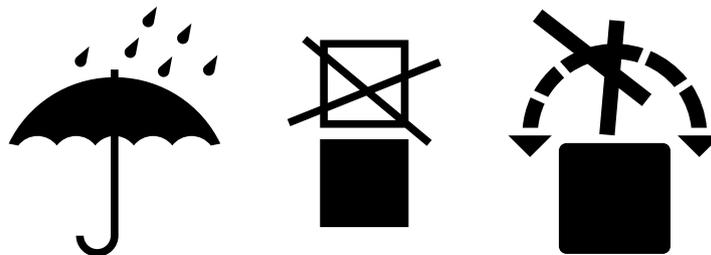
This machine has to be used in a place with room temperature between 5°C and 35°C max. The room has to be dry and ventilated.

**1.3 Storage**

Storage temperature: min. +4°C – max. +50°C – humidity <90%.

The stored parts should be checked periodically to detect any sign of deterioration.

Do not store the machine exposing it to atmospheric agents (rain, sun, cold, etc.). Do not place material on the packed machine. Do not rotate the machine in the storing phase (see pict. 2).



pict. 2

**1.4 Machine equipment**

Use and maintenance manual

Wiring diagrams

Plastic coated maintenance diagram

A copy of the wiring diagrams must be kept inside the electrical board.

**1.5 Water connection**

Water connections must be carried out in compliance with current local standards.

The Water system must have characteristics between the parameters specified in table 1.

Water characteristics table	Min	Max
Static Pressure*	200Kpa	400Kpa
Dynamic Pressure	150Kpa	350Kpa
Water hardness**	2°f	8°f
Cold water-supply temperature***	5°C	50°C
Hot water-supply temperature****	50°C	60°C
Capacity	10lt/min	

table 1

**Connect the machine water supply with a stop valve that can quickly and completely shut the water flow.**

\*If less than 2 bar dynamic pressure (200 kPa) a pressure pump must be installed to guarantee optimal machine operation (the dishwasher can be supplied with that pump, upon request).

However, should the water supply pressure be more than 400 kPa, a pressure reducer must be installed.

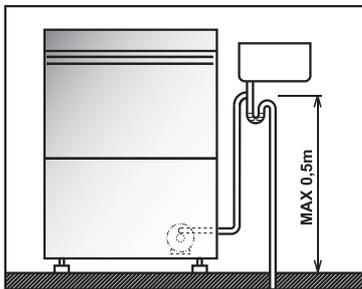
\*\*It is compulsory to install a water-softener, in case of water with average hardness above 8°f. Washed objects will be cleaner and the machine will last much longer.

The machine can be equipped with a water softener, on request. If the machine is equipped with a water-softener, a regeneration of the resins shall be done on regular basis (see par. 3.5).

**N.B.:** Any damage caused by limestone (calcareous water higher-up than 8°f and without water-softener) will not be covered by warranty.

A periodical check of the supplied water hardness is highly recommended.  
In order to ensure the best performance, the water supply temperature must be within the range given in table 1.

\*\*\*Machines shall be made with extra power in case of cold water infeed.



pict. 3

\*\*\*\*The water supply temperature shall never exceed 55°C.

Each machine is supplied with a rubber water load hose with a 3/4" threaded connection. Connect the supplied machine draining tube to the connector located under the tank, making sure that the water flows freely (giving, therefore, minimum slope). Should not be possible to empty the water at a level lower than the drain of the appliance, it is advisable to install a draining pump, which can be provided on request.

Maximum drain height = cm. 50 (see pict. 3).

The drain tube shall always be connected to a siphon in order to prevent the release of odors.

In those machines equipped with "water softener" the water supply temperature shall not exceed 40°C, to avoid damages to the filters' resins.

### 1.5.1 Water supply characteristics

The machine water supply must be potable, in compliance with Directive 98/83/EC.

The inlet water must also meet the parameters given in the table 2.

Water parameters table	Min	Max
Chlorine <sup>1</sup>		2mg/l
pH	6,5 <sup>1</sup>	8,5 <sup>3</sup>
Water hardness		8°f <sup>2-3</sup>
Iron <sup>3</sup>		0,2 mg/l
Manganese <sup>4</sup>		0,05 mg/l

table 2

<sup>1</sup> Out of range values might lead to corrosion and jeopardize the life of the machine.

<sup>2</sup> Should the water hardness is higher **it is compulsory** to install a water softner and check periodically its operation.

<sup>3</sup> Out of range values might lead scaling and sediments with a consequent lower performance, functionality, and expected life of the machine.

<sup>4</sup> Desired value: Out of range values might lead stainless steel blackening/tarnishing.

It is recommended a water test once a year.

### 1.6 Electrical connection

Only qualified and properly trained personnel can operate on the electric board and connections.

#### Before the installation:

Make sure that the voltage is the same as reported on the data-plate.

Make sure the line voltage matches the machine power and voltage indicated on the machine data-plate (as shown on par. 1.1).

Electrical connection must be carried out in compliance with the current local standards.

Use the data reported on the data-plate to check dimensions and electrical connections.



**It is necessary to install a suitable omni-polar automatic fuse switch sized according to the absorption that assures the complete disconnection from the network in an overvoltage category III condition.**

**This switch must be incorporated in the supply network, dedicated only and exclusively to this circuit and installed in the immediate vicinity.**

**The machine has to be absolutely turned off by this switch: only this switch gives the full warranty of complete detachment from the electric network.**

**Make sure the appliance is linked to an efficient ground connection.**



**WARNING:** check very carefully if the “ground connection” of the machine is properly sized and fully efficient, and that not too many units are connected to it. An undersized or poor “ground connection” might lead to corrosion and/or pitting effect on the stainless steel plates, even to perforation.

The machine has a terminal on the back panel indicated by the symbol  that is meant to link the metal structures of different appliances, to prevent electro-static shocks (see electrical safety standards).

**IMPORTANT:** connect the clamp to other appliances.

To dimension supply cables and switches, please refer to the maximum power expressed in Watts (W) and Amperes (A) specified on the machine serial number plate.

**Feed cable:** the retailer - importer - installer must ensure that the feed cable complies with the cable insulation category of the workplace, in conformity with current Technical Standards.

Should the electrical supply cable get damaged it shall be changed by the Manufacturer, or his Authorized Service, or other technician with equivalent qualification, to prevent any risk.

### 1.7 Steam evacuation

In accordance with regulations of environmental hygiene, for the proper functioning of the machine and a healthy environment for the operator who working in there, it should be at least 10 air volume changes per hour in the room where the machine is installed.

For small wash rooms we recommend at least 15 air volume changes per hour.

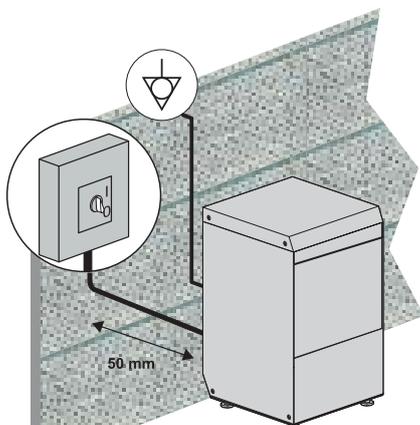
### 1.8 Positioning the machine

Position the machine as shown on the installation diagram (lay-out) approved at the time of the offer.

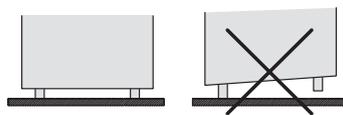
Maintain a minimum distance of about 50 mm from the walls, so that motors are ventilated (see pict. 4). Install suction hoods to assure proper ventilation of the room, in order to eliminate steam and excessive humidity.

Check that the machine is properly levelled, by adjusting the legs (see pict. 5).

Make sure the machine is not standing on the power cable or on the filling/drain hoses. Level the machine flat, by adjusting the support feet.



pict. 4

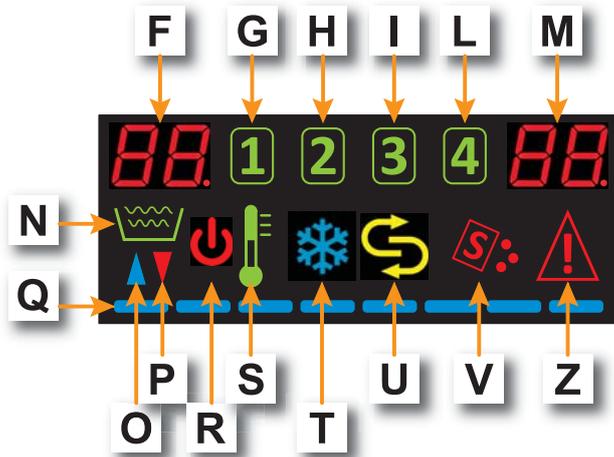


pict. 5

## 2. CONTROL PANEL AND RELATIVE SYMBOLS



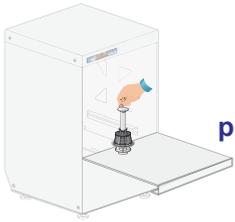
pict. 6



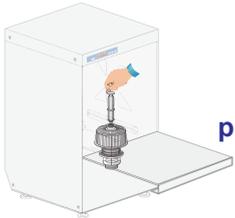
pict. 7

- A) Switching - On / STAND BY button
- B) Regeneration push-button (optional)
- C) Supplementary cold rinse push-button (optional)
- D) Drain push-button (optional)
- E) START push-button to start up cycle / select cycle
- F) Tank temperature display
- G) Washing type 1 (60 seconds)
- H) Washing type 2 (90 seconds)
- I) Washing type 3 (120 seconds)
- L) Washing type 4 (180 seconds)
- M) Boiler temperature display
- N) Tank filling/draining indicator
- O) Tank filling indicator
- P) Tank draining indicator
- Q) Cycle scrolling bar
- R) STAND BY indicator
- S) Set temperature reached indicator
- T) Supplementary cold rinse indicator
- U) Regeneration cycle indicator
- V) Salt shortage indicator
- Z) Machine alarm indicator

### 3. OPERATION



pict. 8



pict. 9

- Check that the filter is correctly fitted in its seat (pict. 8-9). Filter must be cleaned every 20 wash-cycles or whenever necessary. **DO NOT use the appliance without the filter.**
- Insert the overflow tube in the special seat inside the sump (pict. 8-9).
- Shut the dishwasher door.
- Insert the special rinse aid dispenser tube in the canister and check that the quantity of additive is enough for the day (see paragraph **3.3 Use of rinse aid**).
- Open the water supply valve.
- Turn the main power switch ON. The machine is on **STAND-BY** mode (indicator **R** ON).



- Turn the button **A** (see chap. 2). The power-on of the machine will be displayed by the indicator **R** switching OFF and by the indicators **F** and **M** and by the one of the washing cycles switching ON. Make sure that the overflow pipe is correctly inserted and that the door is shut. The machine will automatically start filling the sump. The indicators **N**, **O** and the scrolling bar **Q** switch on.

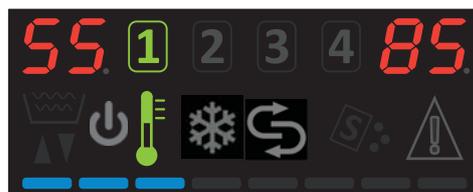


Then, when the sump is full, the push button **START E** switch on and the heating step will start. Should the machines be equipped with the WRAS certified Break Tank, the tank filling phase is extended.

Indicator **S** (see chap. 2) switches on when the washing and rinsing water temperature is reached. The indicators **F** and **M** show the tank and boiler temperatures, respectively.



- Insert the rack filled with objects to wash. The objects must be correctly placed in the rack (see par. 3.1).
- Select the wanted washing cycle (**1 - 2 - 3 - 4**) by pushing the button **START E** (see chap. 2); after a few seconds (about 5 seconds) the indicators **G**, **H**, **I**, **L** (see chap. 2) will start scrolling. Release the button when the cycle light indicator desired is ON.
- Before starting the wash-cycle, in absence of an automatic dosing system, put the detergent in the sump. When the temperature indicator **S** will turn ON, press the **START E** button for at least a second. The beginning of the cycle is indicated by the flashing of the selected cycle indicator, by the increasing of the brightness of the button **START E** and by the progress of the scroll bar **Q**.



At the end of the washing cycle, a hot rinse cycle will take place.

The button **START E** will flash when the cycle is completed.

**N.B.:** At cycle-end, keeping the door closed, objects will not dry. Take out the rack or keep the door open to allow the evaporation, helping the drying of the objects.

- For machines equipped with **supplementary cold rinse:**

For the supplementary cold rinse, push the button **C** until the relative light indicator **T** is on and start the cycle by pushing the button **START E**.



After this cycle, the glasses will remain wet. At any switching on and off of the machine, the function **final cold rinse** will be automatically disabled.

Repeat this operation when this function is needed.

- Drain cycle:** remove the overflow pipe.  
For machines equipped with drain pump see paragraph 3.4.
- At the end of the day, clean the machine (see chap. 4 Maintenance).
- Switch the machine off by pushing button **A** and shut the water valve. When the indicator **R** turns ON, the machine is on STAND-BY mode.
- Switch the main power switch OFF.

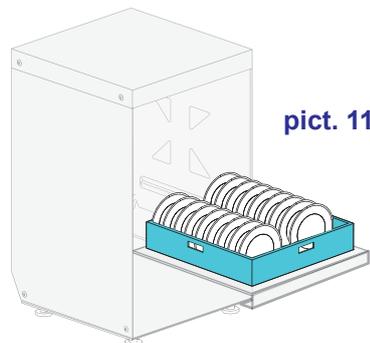
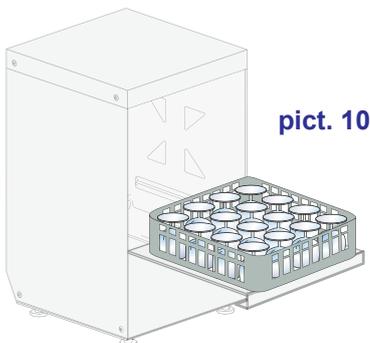
### 3.1 Cutlery and crockery loading

Before cutlery and crockery loading in the machine, coarsely clean them from the leftover food.

It isn't necessary to rinse the cutlery and crockery under water.



**ATTENTION: Do not wash articles polluted with petrol, paint, chips of steel or iron, ash, sand, wax, lubricant grease. These substances damage the machine. Do not wash fragile objects or material not resistant to the washing process.**



Note the following recommendations :

- Crockery and cutlery should not be inserted inside one another, covering each other.
- Place the crockery in order to all surfaces can be reached by water; otherwise the dishes are not washed.
- Make sure all the crockery are in a stable position and that the hollow containers don't overturn (cups, glasses, bowls, etc.) .
- Place in the rack all the hollow containers such as cups, glass, etc. **upside-down**.
- Place the crockery with deep hollow with upper face downwards, so that water can flow out.
- Make sure the smaller crockery do not fall from the rack.
- Check all the wash arms runs freely and they are not blocked by too tall or too prominent crockery. Eventually, run a manual rotation of the arms to check it.

Some foods, such as carrots, tomatoes, and others, may contain some natural dyes substances, that in large amounts, can alter the crockery and plastic parts colors.

Any discoloration does not mean that the plastic is not heat resistant.

### Crockery and cutlery not suitable for dishwasher

Not suitable for dishwasher:

- Wooden crockery and cutlery or with wooden parts; water at high temperature causes deformation to wood. Also the adhesives used are not suitable for treatment in the dishwasher; a consequence could be the handles detachment.
- Crafts, precious vases or decorated glasses.
- Not heat-resistant plastic crockery.
- Copper, brass, pewter or aluminum objects: they may become discolored or opaque.
- The decorations on glass, after a certain number of washes, can lose gloss.
- Fragile glasses or crystal items, if often washed, can become opaque.

We recommend to buy exclusively crockery and cutlery suitable for dishwashing.

After several washes, the glass can become opaque.

**It is mandatory to repeat the washing cycle if at the end of the cycle the crockery are not well clean or if there are washing residues (glasses, cups, bowls, etc. with liquid inside).**

### 3.2 Detergent use

The detergent shall be the NO FOAM type, suitable for industrial dishwashers.

The use of good quality liquid detergents is recommended.

The detergent shall be placed in the sump. Follow manufacturer recommendations for dosage. The machine can be ordered with an adjustable automatic detergent dispenser (always recommended).

1cm of the product drawn into the tube is equal to about 0.15 g. A correct amount of detergent is very important for a successful wash.

**Lack or poor quality of detergent, in this machine will cause bad wash results and clogging.**

### 3.3 Rinse aid use

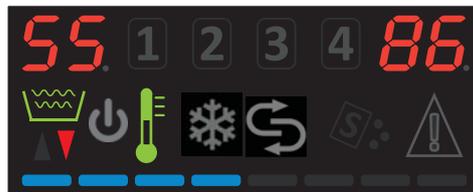
The machine has a standard rinse aid dispenser. The machine automatically sucks the product.

The rinse-aid chemical, shall be suitable for professional glass and dishwashers. It is advisable to rely on specialized retailers in the sector.

### 3.4 Discharge pump system (optional)

To drain completely the wash-tank keep the machine ON, extract the overflow pipe and shut the door. Press the button **D** (see chap. 2) for at least one second: the discharge pump will automatically drain the wash-tank.

The indicators **N**, **P** and the scrolling bar **Q** switch ON.



Once the machine is completely drained, the machine will turn off and the indicator **R** switch ON (**stand-by mode**).

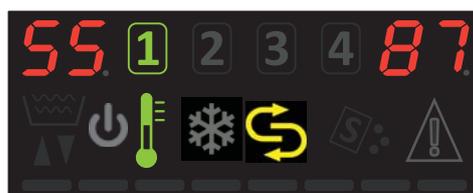
If you want to refill the machine for a new cycle, wait for 5 seconds before to switch it on by pressing the button **A**.

During the wash-rinse cycle the water in excess is automatically drained.

### 3.5 Regeneration function (optional)

Should the machine be equipped with a water-softener circuit, this will be fully automatic. When needed, a 120" regeneration cycle will automatically activate. During this phase, the regeneration indicator **U** lights up.

If needed the Regeneration cycle can be activated even during the wash-tank loading.



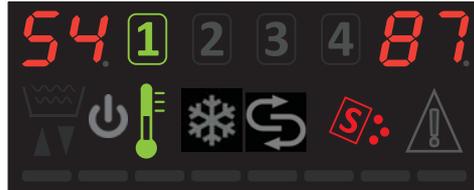
If the activation happens during the wash-cycle, this will be elongated.

The circuit board is designed to call periodically for a 20 min. manual regeneration cycle (according with the water hardness adjusted). The indicator **U** will start flashing. This regeneration cycle can also be activated by the user, should the rinse quality be dissatisfactory.

To start the regeneration cycle, switch the machine OFF with the key **A**.



**IMPORTANT:** Before starting a regeneration cycle check if there is salt in the special container. Fill the special salt container (max 0,500kg) with tank empty and machine off. Rinse the tank immediately if salt is spilled in it. When the indicator **V** flashes add salt in the container in the wash-tank (only with optional water softener).

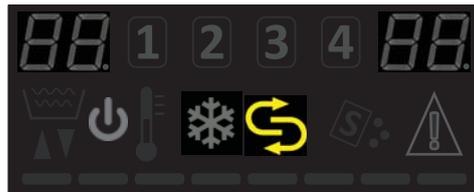


Remove the overflow. Empty the tank.

For machines equipped with drain pump see par. 3.4.

Press the button **B**. The regeneration indicator **U** lights up and the machine carries out with the various phases.

The cycle is finished when the indicator **U** goes off, after around 20 minutes.



**Note:** Regeneration times will be blocked only if the door is opened.

The optional regeneration is not allowed in the following conditions:

- during programming
- during the wash cycle
- during manual draining
- if the door is open; in this case the message **door** will be displayed for about 4 seconds.
- if the machine is ON.

**In the case of water hardness above 35°f it is advisable to install an external water softener.**

### 3.6 H.A.C.C.P. and hygiene regulations

- The machines are equipped with a temperature indicator (LED **S** - chap. 2) which lights up when the boiler and the tub have reached the preset temperature (values set by the manufacturer). It is recommended to wait for this light to go on before starting the next cycle.
- Scrape food from the dishes carefully in order not to clog the filters, nozzles and pipes.
- Unload the wash tub and clean the filters at least twice a day.
- Check that the amount of detergent and rinse aid dispensed is correct (as suggested by the supplier of the product). In the morning before starting up the machine, check that there is enough product in the containers for daily use.
- Always clean the support floor of the dishes.
- Remove the rack from the dishwasher with clean hands or gloves so as not to dirty the cutlery.
- Do not dry or polish the dishes with non-sterilized cloths, brushes, or dusters.

### 3.7 Machine features

The machine's sound level is  $L_{pa} = 70\text{dBA} \pm 2.5\text{dB(A)}$ \*\*

\*\*test made according to EN 60335-2-58/A11

## 4. MAINTENANCE



**WARNING:** The machine is not protected against pressurized water jets. Do not use pressure cleaning system against the machine.

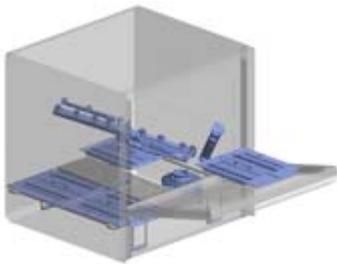
It is recommended to contact seller for cleaning instructions, in order to have detailed indications on methods and products for the correct periodical machine sanitation.

Do not use bleach or chlorine based detergents.

### 4.1 Routine maintenance

Daily cleaning is needed to ensure that the machine runs perfectly. The following shall be carried out:

- Turn the machine in stand-by mode, by pressing the button **A** (see chap. 2).
- Turn off the wall-mounted main switch.
- Drain the water by removing the overflow pipe. For appliances provided with emptying pump follow the indications as described on paragraph 3.4.
- Remove the filter and clean it with a rigid brush underneath a powerful water jet.



pict. 12

- Remove the arms by loosening the fixing screws. Thoroughly clean the wash and rinse arms and the nozzles underneath running water.
- If presents, remove the surface filters and clean them with a brush under running water (see pict. 12).
- Reassemble all the parts and replace the arms in their seats, fixing them with the relative screws. Take extreme care to re-assemble the nozzles in the right position (open and / or closed nozzles) and that the arms are installed with the right axial angle.
- Clean the tank very carefully, using a water shower.
- It is suggested to leave the door of the machine open at the end of the day.

#### • **Automatic cycle of machine self-cleaning/ rinsing:**

The machine should be in stand-by mode (red-lighted indicator **R**), remove the overflow pipe and close the door. Push the button **START E** for 5 seconds. An automatic cycle of 15 seconds will start, after this the machine will be in stand-by mode.



- When flashing the indicators **N - P - Z** means that the tank is not empty.



- When displaying **door** means that the door is open



- Shut the water valve.
- Turned the machine off by switching the main power switch OFF.

**N.B.:** It is recommended to change the water in the wash-tank at least every 20 wash cycles, or twice a day. Do not use metal-wool for cleaning and/or corrosive products, which will damage the machine.

#### 4.2 Extraordinary Maintenance – by qualified Service Personnel only

Once or twice per year, the machine should be checked by qualified Service Personnel:

- 1 Clean the intake filter of the solenoid valve
- 2 Remove scaling from the heating elements
- 3 Check the status and the tightness of all gaskets
- 4 Check the perfect state and/or wear of the components
- 5 Check the efficiency of the dispensers
- 6 Tighten firmly all electrical connections at least once per year.

#### 5. ALARMS

Alarms will be displayed by the lighting of LEDs. according to their typology.

TYPE OF ALARM	CAUSE	REMEDIES
B2	BOILER PROBE FAILED	Contact Technical Service
B3	BOILER HEATING ALARM	Contact Technical Service
B5	BOILER OVERHEATING	Contact Technical Service
E1	WATER LOAD FAILED	Open the water supply valve and check the overflow pipe
E2	TANK PROBE FAILED	Contact Technical Service
E5	TANK OVERHEATING	Contact Technical Service
E6	TANK DRAINING FAILED	Check the overflow pipe. Contact Technical Service
10	BREAK TANK FILLING FAILURE	Contact Technical Service

## 6. ENVIRONMENTAL ASPECTS

### 6.1 Packaging



Packaging is made of the following components:

- a wooden pallet;
- a nylon sack (LDPE);
- a multi-layer carton;
- polystyrene (PS) strips (PS);
- polypropylene (PP) banding.

All above materials, shall be disposed and treated in accordance with the Local Laws in force.



### 6.2 Disposal

The symbol WEEE/RAEE used on this product indicates that it cannot be treated as domestic waste. Proper disposal of this product contributes to protecting the environment. For more information on product recycling, contact the local authorities, domestic waste authorities or the dealer where the product was purchased.

For product or parts disposal, follow the Council directives 2011/65/UE and 2012/19/UE as amended and/or application legislative decrees.

The present product or parts cannot be disposed of as urban waste but shall be collected in separate containers (see the waste bin on wheels symbol with an X on the product).

At the time of product disposal, the user shall refer to the waste electrical and electronic equipment (WEEE/RAEE) specification. The manufacturer guarantees the absence of dangerous substances in the EEA used in conformity to the directive 2011/65/UE. If the user does not comply with the regulations he/she shall be subject to the penalties foreseen by each member state. Disconnect electricity and water before disposal.

Cut away the electrical cable to ensure that further use is impossible.

All metal parts are recyclable as they are made of stainless steel.

Recyclable plastic parts are marked with the plastic material symbol.

## 7. ECOLOGICAL ASPECTS



### 7.1 Recommendations for optimal use of energy, water and additives

**Salt dosing:** A pre-set (by the manufacturer) quantity of salt is injected in the resins at each regeneration cycle.

It is important to observe the number of regeneration cycles recommended in paragraph 3.5 in order to avoid salt spills or lime deposits.

**Use the machine fully loaded when possible:** This shall prevent detergent, rinse aid, water and energy consumption waste.

**Detergent and rinse-aids:** Use detergents and rinse-aid chemicals with high biodegradability, to best respect the environment. Verify proper dosage in relation to water hardness at least once a year. Excess product pollutes rivers and seas while an insufficient dose results in unsatisfactory objects washing and/or hygiene.

**Boiler and Wash-Tank temperatures:** The boiler and tank temperatures are set by the manufacturer in order to obtain the best washing results with detergents on the market. The temperatures can be reset by the installer in relation to your detergent.

**Pre-washing:** Carefully pre-wash with a moderate amount of water at room temperature to facilitate the removal of animal fats. To remove encrusted materials warm water soaking is recommended.

**Note:** Wash objects as soon as possible to avoid deposits from drying and compromise effective washing.

For effective washing routine dishwasher cleaning and maintenance is advised (see chap. 4).

**Disregarding the points listed above and of any the information contained in this manual can cause energy, water and detergent waste with a subsequent increase in running costs and/or performance reduction.**



## 8. TROUBLESHOOTING

Type of Problem	Possible Causes	Cure
The machine does not turn on.	Main switch not ON.	Turn switch ON.
The machine does not load water.	Water valve shut.	Open the hot and/or cold water valve.
	Rinse area nozzles or solenoid-valve filter blocked and/or scaled with limestone.	Clean the rinse arm nozzles, conductors and solenoid-valve filter. If the machine is equipped with a water softener check the salt content or regenerate the resins more often
	Defective pressure-switch.	Contact the Technical Assistance
Washing results are unsatisfactory.	The washing nozzles are obstructed or the rack does not rotate.	Clean the nozzles carefully, and check the right positioning of the wash-arm, tightening firmly.
	Foam is present.	Use no-foam detergents or reduce the dose in use. Check the rinse-aid dosage.
	Fats or starches not removed.	Insufficient detergent concentration.
	Filters are dirty.	Remove filters, clean with brush under a jet of water and replace in original position.
	Check tank temperature (which must be between 55°C and 60°C).	Contact the Technical Assistance
	Wash time insufficient for the type of dirt.	Select a longer wash-cycle, if possible, otherwise repeat the wash cycle.
	Wash water is dirty.	Drain the tank water, clean the filters; refill the tank and replace the filters correctly.
Objects are not properly dried.	Not enough rinse aid.	Increase dosage. Contact the Technical Assistance
	The rack is not suitable for the objects	Use the suitable rack which gives the objects an inclined position so that water can rinse away.
	The washed items may have been sitting in the wash chamber too long.	As soon as the cycle stops, remove the rack with pots and tools so that they can dry more quickly in the air.
	Rinse temperature under 80°C.	Contact the Technical Assistance
	Surface of objects too rough or porous for material wear.	Replace type of objects used. If the dirt on the objects is dry and old, soak before washing.
Streaks and spots on objects.	Too much rinse-aid chemical.	Reduce the rinse aid amount. Contact the Technical Assistance
	Too hard water.	Check the water quality. Water must not exceed 8°f in hardness.
	For appliances with softener: too little salt in the salt container or the resins have not been properly regenerated.	Fill the salt container (coarse salt: 1-2 mm grains) and regenerate the resins more often. If lime deposits are also observed on the body of the machine, have a qualified technician check the operation of the water softener.
	Salt present in dishwasher sump.	Thoroughly clean and rinse the appliance, and avoid spilling salt when filling the container.
The machine suddenly stops during operation.	The machine is connected to an overload device.	Contact the Technical Assistance
	A machine safety device was triggered.	Check the electrical devices. Contact the Technical Assistance

Type of Problem	Possible Causes	Cure
The machine stops during the wash stage and starts refilling water.	The previous day's water was not changed.	Drain the tank totally and refill.
	Excessive water temperature in tank.	Contact the Technical Assistance
	Defective pressure switch.	
	Overflow pipe improperly positioned.	Remove and reposition the overflow pipe properly.
The booster pump can't prime.	Scarce pressure on the water intake.	Remove the boiler pipe and prime the pump.
The washing pump doesn't work	The pump is blocked	Contact the Technical Assistance

**N.B.: For any other question, please contact your Service provider.  
The manufacturer has right to modify any technical characteristics without prior notice.**

## 9. EU DECLARATION

The machine purchased is in compliance with the norms stated in the EU declaration attached to the machine in original. Please find attached below the facsimile of this declaration, with the general data of the machine purchased. For the absorption data refer to the data-plate on the machine.

DICHIARAZIONE DI CONFORMITA' UE  
EU DECLARATION OF CONFORMITY  
DÉCLARATION EU DE CONFORMITÉ  
EU-KONFORMITÄTSEKTLÄRUNG  
DECLARACIÓN EU DE CONFORMIDAD  
DECLARAÇÃO EU DE CONFORMIDADE



Il sottoscritto (1), autorizzato dall'azienda (2), dichiara che la lavastoviglie elettrica per uso collettivo (3) è stata progettata e costruita in conformità alle norme armonizzate (4) secondo quanto prescritto dalle seguenti direttive e successivi emendamenti (5) e in applicazione a quanto previsto dalle direttive citate, è stata dotata di Marcatura CE e sono stati predisposti i fascicoli tecnici presso la nostra sede (2). Tale dichiarazione riguarda esclusivamente la macchina nello stato in cui è stata immessa sul mercato, escludendo i componenti aggiunti e/o le operazioni effettuate successivamente dall'utente finale. Declina ogni responsabilità per sinistri a persone, a cose o ad animali derivanti da manomissione della macchina da parte di terzi, ovvero da carenze di manutenzione, di riparazione o di installazione della stessa da parte di personale non qualificato. (\*)

The undersigned (1), authorized by the company(2), hereby declares that the commercial electric dishwashing machine (3) is in compliance with the harmonised standards (4) according to the following directives and further amendments (5) and pursuant of the above mentioned directives, the CE Marking have been applied. Furthermore, adequate technical files have been prepared and are available at our offices (2). This declaration relates exclusively to the machinery in the state in which it was placed on the market, and excludes components which are added and/or operations carried out subsequently by the final user. Declines all responsibility for damages to people, properties and animals resulting from bad servicing of the machine by third parties as from inadequate maintenance or repairs or installation by unskilled technicians.

Le soussigné (1), désigné par la société (2), déclare que le lave-vaisselle électrique à usage collectif (3) est conforme aux normes harmonisées (4) selon les prescriptions et directives suivantes et les amendements successifs (5) et en application des directives citées, il porte le Marquage CE. Les dossiers techniques sont déposés dans notre siège (2). Cette déclaration concerne exclusivement la machine dans l'état dans lequel elle a été mise sur le marché et exclut les composants ajoutés et/ou les opérations effectuées par la suite par l'utilisateur final. Décline toute responsabilité pour tout sinistre à personnes, choses ou animaux résultant de l'endommagement de la machine par un tiers, c'est-à-dire dû à une maintenance, des réparations ou une installation inadéquates effectuées par du personnel non-qualifié.

Der Unterzeichnete (1) berechtigt von der Firma (2), erklärt, daß die elektrischen Spülmaschinen für den gewerblichen Gebrauch (3). In Übereinstimmung mit den harmonisierten Normen ist (4) gemäß folgender Richtlinien und deren nachfolgenden Änderungen (5) und daß in Übereinstimmung mit den erwähnten Richtlinien die CE-Kennzeichnung angebracht wurde und daß die relevanten technischen Unterlagen zusammengestellt wurden (2). Diese Erklärung bezieht sich nur auf die Maschine in dem Zustand, in dem sie in Verkehr gebracht wurde; vom Endnutzer nachträglich angebrachte Teile und/oder nachträglich vorgenommene Eingriffe bleiben unberücksichtigt. Jede Verantwortung für an Personen, Sachen und Tieren verursachten Schäden, die durch die Manipulation seitens Dritten, beziehungsweise auf mangelhafte Wartung und Reparaturarbeiten oder Installation von unqualifiziertem Personal zurückzuführen sind, werden abgelehnt.

Quien subscribe (1), elegido de la empresa (2), declara que el lavavajilla eléctrico de uso colectivo (3) es conforme a las normas armonizadas (4) como la prescripción de la siguientes directivas y sucesivas enmiendas (5) y, conforme con lo previsto en las citadas directivas, han recibido el Marcado CE. Existe asimismo los específico expediente técnico relativo disponible en nuestro domicilio (2). Esta declaración se refiere únicamente a las máquinas en el estado en que se comercialicen, con exclusión de los elementos añadidos y/o de las operaciones que realice posteriormente el usuario final. Declina toda responsabilidad por daños a personas, cosas o animales producidos del mal servicio de la máquina por terceras partes así como por reparaciones o mantenimiento inadecuados o de instalaciones por parte del personal no cualificado.

O abaixo-assinado (1), autorizado pela empresa (2), vem por este meio declarar que a máquina de lavar louça para uso comercial (3) esta de acordo com as normasharmonizadas (4) de acordo com o previsto pelas seguintes diretivas e posteriores alterações (5) a Marcação CE foi aplicada no seguimento das diretivas mencionadas. Os processos técnicos estão preparados e adequados e encontram-se disponíveis na nossa sede (2). Esta declaração diz respeito apenas à máquina tal como se encontra no momento da colocação no mercado, excluindo-se os componentes adicionados e/ou as operações efectuadas posteriormente pelo utilizador final. Declina toda e qualquer responsabilidade por danos causados a pessoas, bens e animais, resultantes do mau manuseamento da máquina por parte de terceiros assim como manutenção incorrecta ou reparações inadequadas ou instalação por pessoal não qualificado.

(\*) **Lingua originale / Original language / Originalsprache / Langue originale / Idioma original / Idioma original**

2)	3)
4) EN 60335-1:2012; EN 60335-2-58:2005; EN 55011:2009; EN55014:2006; EN 61000 3-2:2006; EN 61000 3-3:2008; EN61000 3-11:2000; EN 61000 3-12:2005; EN 61000 4-2:2009; EN61000 4-4:2010; EN 61000 4-5:2006; EN 61000 4-6:2009; EN61000 4-11:2004	5) 2014/30/EU; 2006/42/EC; 2011/65/EU; 2012/19/EU
1) Preposto/Person in Charge	Firmato in originale e conservato presso la nostra sede (2). Original document signed and available at our office (2). Dieses Dokument ist im Original unterzeichnet und bei uns aufbewahrt (2). Signé en original et gardé à notre siège (2). Firmado en original y conservado en nuestro domicilio (2). Original assinado e armazenado na nossa sede (2).