# MANUAL DE ISTRUCCIONES PARA LAVAVAJILLAS PROFESIONAL

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TARGA DATI/RATING LABEL



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#### 10. INDEX

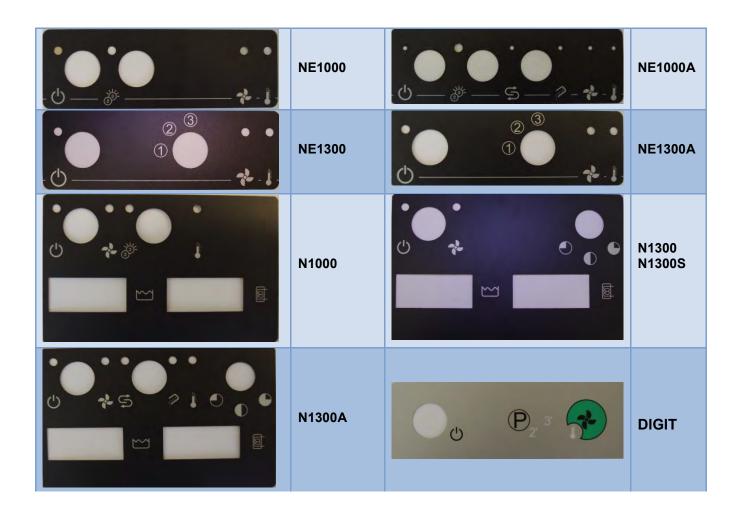
### Comandi / Commandes / Controls

- 1.2 Control chart
- 2 Key features
- **3 USE AND SAFETY WARNINGS**
- 3.1 Installation
- 3.2 Use
- 3.3 Non-compliant use
- 3.4 Safety notes
- 3.5 Waste recycling
- 4.1 Integrity of Packaging

## **INSTALLER'S INSTRUCTION**

- 4.2 Before installation
- 4.3 Connection diagram
- 4.4 Installation and positioning
- 4.5 Electrical connection
- 4.6 Water supply and drain
- **4.7 Set up**
- 5 Rinse aid and detergent
- 5.1 Safety warning
- 5.2 Rinse aid
- **5.3 Detergent**

- 5.4 Filling and dosing
- 6 Water softener (optional)
- **6.1 Low salt warning (optional)**
- 6.2 Refilling the supply of regenerating salt
- 7 Operating Instructions
- 7.1 First start up
- 7.2 Loading phase
- 7.3 Use on models NE1000 NE1300
- 7.4 Use on models N1000 N1300 N1300S
- 7.5 Use on models DIGIT
- 8.1 Regeneration cycle
- 8.2 Early interruption
- 9 Cleaning and maintenance
- 9.1 Draining
- 10.1 Daily cleaning
- 10.2 Cleaning the filter during operation
- 10.3 After washing
- 10.4 Periodic checks
- 10.5 Prolonged inactivity
- 11 Troubleshooting
- 11.1 Main problems and anomalies chart



#### 1.2 Control chart

<u> </u>	On/off	<b>~</b>	Rigenera
$\mathbf{O}$		\$	Régénération
			Regeneration (optional)
þ	Termometro		Avvio
181 🗈	Thermomètre		Demarrage
	Thermostat (optional)		Start (DIGIT version)
- 1	Ciclo di lavaggio		Risciacquo a freddo
	Cycle de lavage		Rincage a froid
•	Washing cycle		Cold rinse (optional)
	Selezione ciclo	1	Segnalazione mancanza sale
$(\mathbf{P})$	Selection du cycle		Manque du sel
•	Cycle selection		No salt (optional V. 5.2)

#### 2 Key features

Please, refer to the sheet on the top of this manual.

Thank you for having chosen this product.

We recommend that you read all the instructions in the manual carefully in order to become familiar with the most suitable conditions for the correct use of the dishwasher.



THIS MANUAL IS PART OF THE DISHWASHER; PLEASE STORE IN A SAFE PLACE CLOSE TO THE MACHINE.

#### 3 USE AND SAFETY WARNINGS

#### 3.1 Installation



POSITIONING, CONNECTIONS, ACTIVATION, TROUBLESHOOTING AND REPLACEMENT OF THE POWER CABLE MUST **BE PERFORMED BY QUALIFIED PERSONNEL**.



THE GROUNDING CONNECTION IS OBLIGATORY, IN ACCORDANCE WITH THE METHODS PRESCRIBED BY THE SAFETY NORMS OF THE ELECTRICAL SYSTEM

#### 3.2 Use

THE DISHWASHER IS INTENDED EXCLUSIVELY FOR PROFESSIONAL USE AND MUST BE USED BY AUTHORIZED PERSONNEL. IT IS DESIGNED TO WASH DISHES (PLATES, CUPS, BOWLS, TRAYS, SILVERWARE) AND SIMILAR ITEMS USED IN THE GASTRONOMIC OR PUBLIC CATERING INDUSTRIES, IN CONFORMITY WITH INTERNATIONAL ELECTRICAL, MECHANICAL SAFETY (CEI-EN-IEC 60335-2-58/61770) AND ELECTROMAGNETIC COMPATIBILITY (CEI-IEC-EN 55014-1/-2, 61000-3;4, 50366) NORMS.

#### 3.3 Non-compliant use

THE MANUFACTURER **DECLINES ALL AND ANY LIABILITY** FOR DAMAGE TO PERSONS OR PROPERTY CAUSED **BY FAILURE TO COMPLY WITH** THE INSTRUCTIONS SET FORTH BY THIS MANUAL, **INCORRECT USE**, **TAMPERING** EVEN WITH A SINGLE PART OF THE MACHINE, AND USE OF **NON-ORIGINAL SPARE PARTS**. IN CASE OF DAMAGE TO THE POWER SUPPLY CABLE, THE SAME MAY BE REPLACED ONLY BY MANUFACTURER OR AN AUTHORIZED CUSTOMER CENTER OR A QUALIFIED TECNICIAN.

#### 3.4 Safety notes



DO NOT PLACE SOLVENTS SUCH AS ALCOHOL OR TURPENTINE IN THE MACHINE, SINCE THESE COULD CAUSE AN EXPLOSION. DO NOT PLACE DISHES CONTAINING ASH, WAX OR RESIDUES OF VARNISH IN THE MACHINE.



NEVER USE THE DISHWASHER OR ANY PARTS THEREOF AS A STEPLADDER OR SUPPORT FOR PERSONS, PROPERTY OR ANIMALS.

LEANING OR SITTING ON THE OPEN DOOR OF THE DISHWASHER MAY CAUSE THE MACHINE TO TIP ENDANGERING PERSONS CLOSE TO THE SAME.



DO NOT LEAVE THE DISHWASHER DOOR OPEN TO AVOID TRIPPING.
DO NOT DRINK WATER WHICH REMAINS ON DISHES OR THE DISHWASHER AFTER A
WASH CYCLE.



THE MACHINE MAY NOT BE USED BY CHILDREN OR PERSONS WITH PHYSICAL, SENSORIAL OR MENTAL DISABILITY, WHO LACK THE NECESSARY EXPERIENCE AND KNOWLEDGE TO USE THE SAME. THE MACHINE MAY BE USED BY SUCH PERSONS ONLY UNDER THE SUPERVISION OF A PERSON RESPONSIBLE FOR THEIR SAFETY.

#### 3.5 Waste recycling

THIS MACHINE IS MARKED IN CONFORMITY WITH EUROPEAN DIRECTIVE **2002/96/EC**, WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT DIRECTIVE (WEE).

PROPER DISPOSAL OF THIS PRODUCT HELPS TO PREVENT ANY POTENTIAL NEGATIVE IMPACT ON HEALTH AND THE ENVIRONMENT. WE DECLARE THAT THE SOUND EMISSION PRESSURE LEVEL LPA IS 62 DB/A WITH UNCERTAINTY EQUAL TO KPA  $\pm$  1 DB. THE SOUND POWER LEVEL IS LWA 73.79 WITH UNCERTAINTY EQUAL TO KWA + 1 DB

THE SYMBOL SHOWN ON THE PRODUCT OR CCOMPANYING DOCUMENTATS, INDICATES THAT THIS PRODUCT MAY NOT BE TREATED AS DOMESTIC WASTE, BUT MUST BE TAKEN TO A WASTE DISPOSAL SITE THAT RECYCLES ELECTRIC AND ELECTRONIC EQUIPMENT.
THIS PRODUCT MUST BE DISPOSED OF IN CONFORMITY WITH THE LOCAL WASTE DISPOSAL LAWS. FOR MORE INFORMATION REGARDING THE PROCESSING AND RECYCLING OF THIS PRODUCT, PLEASE CONTACT YOUR LOCAL OFFICES, THE LOCAL WASTE COLLECTION SERVICE PROVIDER OR THE STORE WHERE THE PRODUCT WAS PURCHSED.

#### 4 Installer's instructions

The following instructions are addressed to qualified technicians, who are the only persons authorized by the manufacturer.

THE MANUFACTURER **DECLINES ANY RESPONSIBILITY** FOR DAMAGE TO PERSONS OR PROPERTY CAUSED BY INSTALLATION BY UNQUALIFIED INSTALLERS, AND/OR BY THE USE OF **NON-ORIGINAL SPARE PARTS**.

#### 4.1 Integrity of Packaging

Please check that the packaging is undamaged and after unpacking the machine check that it has no dents. In case of visible damage, please contact your seller.

#### 4.2 Before installation

Before the installation, please ensure that:

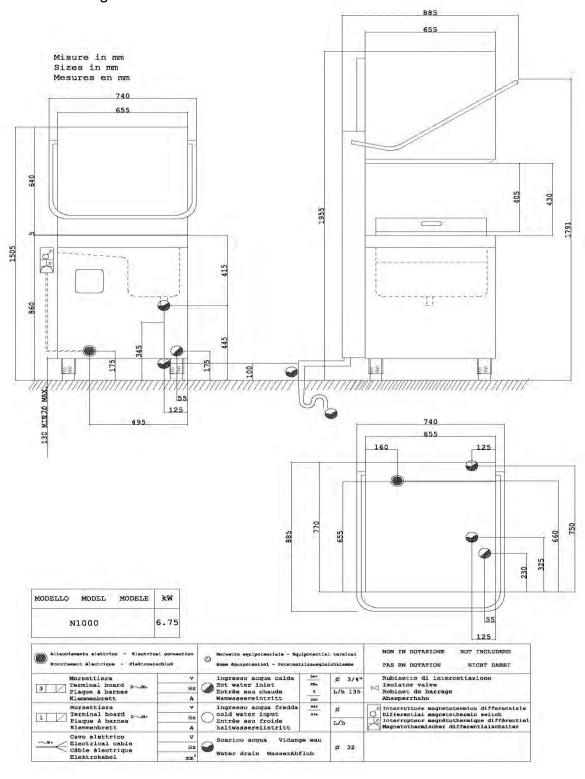
- 1) The floor has a drain hole with Ø of 100 mm.
- 2) You use a **H07RN-F** type power cable (supplied by the factory) and ensure that there is a mains electrical power switch, complying with the characteristics of the machine, within easy reach of the dishwasher, so that you may disconnect the machine from the mains after use (see 6.5)
- 3) You connect the water supply to a ¾" threaded gas outlet.
  Use only new pipes for connection to the water supply; old or used tubes must not be used.
  A general faucet must be installed on the water supply input tubing; the faucet must be accessible after installation. Do not install the faucet behind the dishwasher.

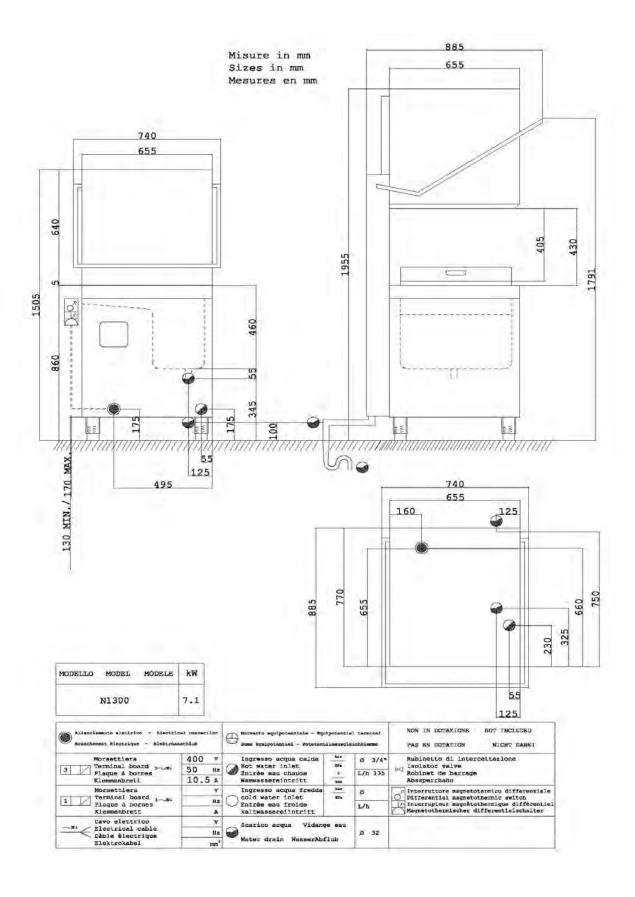
Check the amperage and voltage rating of the machine you intend to buy (see datasheets on our website), to ensure that your power supply is appropriate.

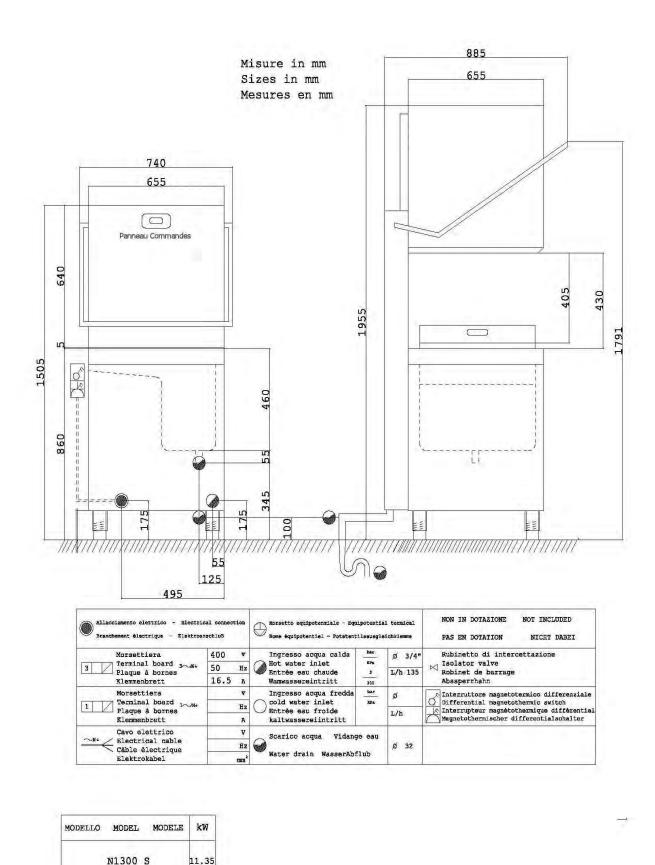
Pursuant to applicable laws, the user must install a mains electrical power switch and differential switch compatible with the characteristics of the machines.

These switches must be installed near the dishwasher, be easily accessible after installation and guarantee complete disconnection from the power supply in category III overvoltage conditions.

## 4.3 Connection diagram







## 4.4 Installation and positioning

Position the dishwasher in the required position and remove the wrapping Ensure that the four feet of the dishwasher are perfectly level (using a level), regulating the feet so that the dishwasher is perfectly stable; any other solution must be approved by the manufacturer. Once the position has been positioned correctly and stably, we recommend that you fix all legs to the ground as shown by the picture



below.

Please, refer to the point 4.3 for correct wiring.

#### 4.5 Electrical connection

For the electrical connection, use only the electric cable supplied by the factory



### **CONNECT THE APPARATUS TO THE USAGE EQUALIZER**

The connection clamp is at bottom on the back of the machine.

The earthing conductor (PE) is yellow-green, the neutral conductor (N) is blue and the phase conductors (L1, L2, L3) are black, gray and brown

#### 4.6 Water supply and drain

The water pipes are on the back of the machine (V. 6.3).

The water supply should be connected to a 3/4" threaded gas outlet.

**Drain:** The machine is fitted with drainpipe, which should be connected to the drain. If the drain is on the floor, the machine may be connected to a  $\emptyset$  100 mm drain hole.

If the hole is higher (on the wall), you should install a Drain Pump (installation of a Drain Pump is mandatory when the drain hole is higher than that of the machine).



<u>Caution:</u> after completing installation ensure that the water supply and drain pipes are not bent or compressed.

## Water Supply characteristics:

#### Pressure:

For your machine to function efficiently the water pressure should be between 2 and 4 bar.

If the water pressure is lower, Rinse Booster Pump (internal or external) should be installed.

If the water pressure is higher, a restrictor valve should be installed.

#### Water Hardness:

The ideal hardness is between 7 and 12°.

If the water hardness is above these values, an internal or external softener should be used (see 5)

#### Temperature:

**Hot water supply:** recommended, provided the temperature does not exceed 60° C.

Do not use hot water (>30 ° C) if the machine is equipped with a water softener.

**Cold water supply**: OK, provided the electrical power supply is sufficient to guarantee the wash and rinse cycles at a temperature of between 55°C and 82°C, that may be guaranteed by an Atmospheric Boiler and a Rinse Booster Pump.

NB, please note that if the washing machine is equipped with a water softener, the temperature of the water inlet must not exceed 30° C.

#### **OPERATING TEMPERATURE**

Wash / Rinse: 55°/ 85°C

#### DO NOT TAMPER WITH THE TEMPERATURE ON THE THERMOSTATS

#### 4.7 Set up

#### Important:

The rinse-aid dosing unit is a standard on all models while the detergent dosing unit is optional.

If your machine is equipped with both dosing units, insert the external detergent and rinse-aid containers and insert their respective suction tubes at the back of the machine.

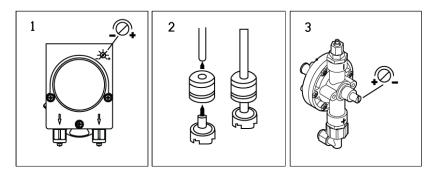
Red tube: detergent

Transparent tube: rinse-aid

Before inserting the tubes into the containers, apply the weights (necessary to keep the tubes at the bottom of the container) and the filters as indicated in the diagram (2).

For adjustments, use the adjustment screws as indicated by the diagram.

The adjustments should preferable be made by personnel of the company who supplies the detergent.



#### 5 Rinse aid and detergent

5.1 Safety notes



ALWAYS FOLLOW THE MANUFACTURE'S DIRECTIONS



USE ONLY PRODUCTS SUITABLE FOR INDUSTRIAL WASHING MACHINES
NEVER MIX DIFFERENT PRODUCTS

#### 5.2 Rinse aid

The Rinse aid ensures almost instant drying of your dishes, and is always supplied as a standard part of the machine. It is dosed by a pump

(Set up 4.7)

#### 5.3 Detergent

The Detergent doser is generally supplied as an optional.

If the machine does not have a detergent doser, you may buy a separate kit (request information from the technical assistance department).

#### 5.4 Filling and dosing

During refilling, do not mix products, since this may affect washing results

Never mix different detergents, since this may damage the dosers

# Industrial detergents may cause irritation, before handling, read the instructions on the package.

**Dishwashers without detergent doser**: place the detergent into the washing tank, every 4-5 washing cycles (for quantities, refer to your supplier)

#### 6 Water softener (optional)

If water hardness is above 12°F, we recommend the use of a water softener.

(remember, that the temperature of the water inlet should be <30°C)

### 6.1 Low salt warning (optional)



To ensure the best from your machine, we recommend filling the tank, as soon as the "low salt warning lamp" turns on (6.2).

#### 6.2 Topping up the regenerating salt



## Warning: use only specific regenerating salt and never cooking salt.

The tank has a capacity of 1kg

The container is on the top of the box. Unscrew the cap and refill when there is no water in the tank in order to keep wash water from entering the water softener device; always unplug the power cable from the socket before performing this operation. Remember to plug the power cable into the socket after performing this operation.

## 7 Operating Instructions

#### 7.1 First start up

#### **WARNING:**

Open the		Verify:	
water supply faucet (usage).	The levels of detergent and rinse-aid in the containers.	That the filters are correctly positioned, the proper rotation of the sprinklers, that there are no foreign objects in the dishwasher.	Turn on the main switch (usage)







#### 7.2 Loading



## Water should be loaded, with the hood is closed

Plates: The basket can contain 12 bowls or 18 flat plates.

Remove solid residues from the dishes (bones, peels, cores, etc.); before washing, soak dishes with residues of dried cheese, egg etc. in cold water.

Glasses: Position glasses upside down.

**Cutlery:** Use the cutlery basket. Large amounts of silverware should be placed with the handles facing down, making sure that you do not injure yourself with the fork prongs and knife blades.

#### 7.3 Use on model NE1000 - NE1300

The panel shown in the manual and graphics may contain functions that are not present on your machine.	What to do and what happens
	Turn on the wall switch, lift the hood, insert the overflow filters and lower the hood:  Press the button  The power led turns on and water starts filling into the boiler, then into the tank. Once the boiler and tank are filled, the boiler led (optional) turns on.
	Lift the hood and insert the rack.
	Select the desired program: 75" 120" or 180"
	Wait for the boiler led to turn off (optional).  Lower the hood to start the wash cycle.

-b	Once the cycle has started, the wash cycle led turns on. If the hood is lifted during the cycle, the program stops and resets itself; lower the hood again to restart the cycle.
- d	Once the program has finished, the wash cycle led turns off and the boiler led (if installed) turns on.
	Lift the hood and remove the rack.

## 7.4 Use on model N1000 - N1300 - N1300S

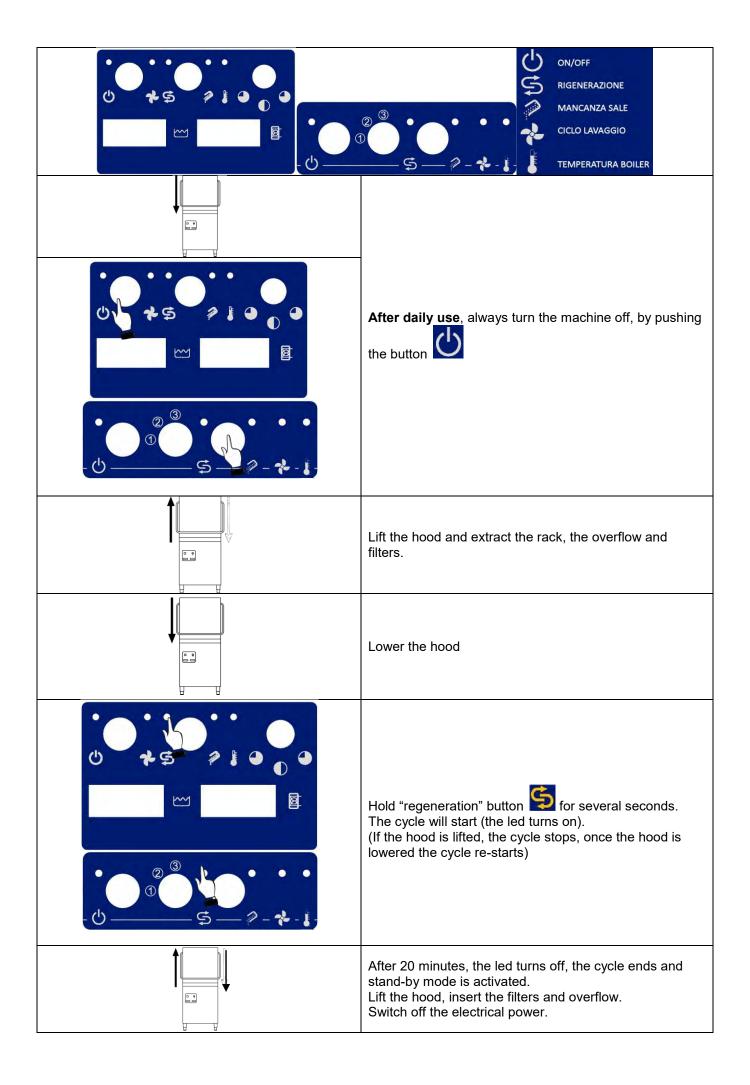
the panel shown in the manual and graphics may contain functions which are not present on your machine.	What to do and what happens
	Turn on the wall switch, lift the hood, insert the overflow, filters and lower the hood.  Press the button  The power led turns on and water starts filling into the boiler and into the tank.
	Lift the hood and insert the rack. Select the desired program if available: 75", 120" or 180"
	Wait for the boiler thermometer to indicate the temperature of 84°C and tank temperature 50°C Lower the hood to start the wash cycle.
	Once the cycle has started, the wash cycle led turns on. If the hood is lifted during the cycle, the program stops and resets itself; lower the hood again to restart the cycle.
	Once the program has finished, the wash cycle led turns off.  Lift the hood and remove the rack.

## 7.5 Use on model DIGIT

the panel shown in the manual and the graphics may contain functions which are not present on your machine	What to do and what happens
	Turn on the wall switch, lift the hood, insert the overflow, filters and lower the hood:  Press the button water starts filling into the boiler and tank. Once the boiler and tank have been filled, the boiler led (optional) turns on.
	Lift the hood and insert the rack.
	Choose the desired cycle: 120" or 180".  Wait for the led to turn off Lower the hood to start the wash cycle.
-U -U - I -	Once the cycle has started, the wash cycle led turns on. If the hood is lifted during the cycle, the program stops and resets itself; lower the hood again to restart the cycle.
- d	Once the program has finished, the wash cycle led turns off. And the boiler led turns on  Lift the hood and remove the rack.
	At the end of the cycle, the led will stop flashing Lift the hood and remove the rack

## 8.1 Regeneration cycle





N.B. DIGIT machines are equipped with an automatic regeneration system: simply turn off the machine and remove the overflow.

#### 8.2 Early interruption

SILANOS machines are equipped with a safety micro switch, if you lift the hood during the cycle, the machine stops automatically and will re-start only once the hood is down

#### 9 Cleaning and maintenance

#### 9.1 Complete drainage at the end of the day

WARNING: at the end of the workday, always turn off the water mains and power supply.

#### MECHANICAL VERSION

#### Complete drainage at the end of the day:

Turn the machine off by pushing the on/off button in order to start the emptying the tank automatically. The drain pump will run until the tank has been completely drained. In order to restart the machine, place the overflow back into the tank, lower the hood and press the on/off button. If you have finished for the day, turn off the mains wall switch.

### Models without drain pump:

Turn the machine off by pushing open the hood, remove the overflow and wait for the tank to empty. Place the overflow back into the tank and close the hood. Turn off the mains wall switch.

#### 10.1 Daily cleaning

The dishwasher has a protection rating of IPX1, but must not be washed with a water jet.

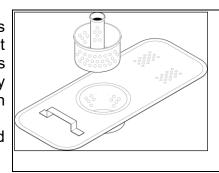
#### 10.2 Cleaning the filter

In case of particularly heavy usage we recommend cleaning the filter every 30-40 wash cycles in order to maintain the machine in efficient running condition; Use "partial Tank draining" in order to Clean the filter.

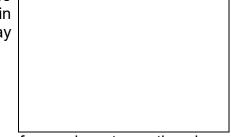
**N.B:** The factory declines all and any damage caused by negligence or failure to comply with the instructions shown by the manual.

Remove the filters (simply lift them out of their housings as shown by the figure), ensuring that any greasy residues do not fall into the opening under the filters. Clean away any residues and rinse the filters thoroughly before replacing them correctly into their housings; Do not use pointed or sharp objects to clean the filters.

Remember to remove any calcium deposits in order to avoid build up:



 Clean the surfaces frequently with a damp cloth; use neutral, non-abrasive detergents which do not contain chlorine-based substances. Corrosive products may damage the stainless steel parts.



In order to avoid drops or vapour from damaging the steel surfaces, do not use the above products to clean the floor under or around the dishwasher.

#### 10.4 Periodic checks

Disassemble the wash arms (lower and upper 2-3) by removing the central screw (1). Clean the holes and the nozzles under a jet of clean water. <u>Do not use utensils which could damage the sprinklers</u>. Carefully reassemble the sprinklers.



Clean the outside of the machine with neutral soap and a damp cloth. Rinse and dry carefully.

#### 10.5 **Prolonged inactivity**

If the dishwasher is not used for a relatively long period, it is necessary to drain the detergent and rinse-aid dispenser in order to avoid crystallization and damage to the pump: Remove the suction tubes from the detergent and rinse-aid containers and place them in a container filled with clean water. Perform a few wash cycles and drain the machine completely.

Finally, turn off the main switch and shut the water supply faucet. The detergent and rinse-aid suction tubes should be inserted in the containers when you are ready to use the machine again, but remember not to invert the tubes (red tube = detergent; transparent tube = rinse-aid).

Do not leave the machine on and inactive for long periods of time.



## 11 Troubleshooting



## TROUBLESHOOTING (USER)



PROBLEM	POSSIBLE CAUSE	POSSIBLE REMEDY
THE POWER LED DOES NOT	There is no electrical current	Verify the electrical current connection.
THE WASH PROGRAM DOES NOT START	The dishwasher has not finished loading	Waiting for the end of the load
	Sprinkler wash holes are clogged or encrusted	Disassemble and clean the sprinklers (7.2 Periodic checks)
	Detergent or rinse-aid insufficient or inadequate	Verify detergent type and quantity.
	Plates / glasses poorly positioned	Arrange plates / glasses correctly.
POOR WASHING RESULTS	Low wash temperature	Verify the temperature shown on the display, if below 50°C call Assistance.
	Inadequate cycle setting	Increase the duration of the wash cycle, particularly if dishes are very dirty or contain partially dried residues.
POOR RINSING RESULTS	Sprinkler nozzles clogged Calcium encrustations in the boiler	Verify that the nozzles are clean and the any water softener device installed is functioning correctly.
GLASSES AND SILVERWARE ARE STAINED	Rinse-aid inadequate or not dispensed correctly.  Water hardness is above 12°dF or contains a high quantity of dissolved salts	Verify the rinse-aid container and ensure that it is adequate for use with the water supply. If the problem persists contact assistance.
WATER IS PRESENT IN THE TANK AFTER DRAINING	Drainage tube is positioned poorly or is partially plugged	Verify that the dishwasher tube and drain are not plugged and that the drain is not too high; see the connection diagram. Remove the overflow

