

WASHING MACHINES

INSTRUCTIONS FOR INSTALLATION USE AND MAINTENANCE

KEEP FOR FUTURE REFERENCE



Summary

INDEX

1. CONTENT OF THE MANUAL	3
2. SAFETY REGULATIONS.....	3
3. RESPONSIBILITY OF THE MANUFACTURER	6
4. TRANSPORT, STORAGE AND UNPACKING	6
5. INSTALLATION AND POSITIONING.....	8
6. MACHINE IDENTIFICATION.....	8
7. INDICATIONS ON SOUND EMISSION.....	9
8. FIXING TO THE GROUND	9
9. ELECTRICAL CONNECTION	11
10. HYDRAULIC CONNECTION: WATER LOAD	15
11. HYDRAULIC CONNECTION: WATER DRAIN.....	16
12. STEAM CONNECTION	16
13. COMPRESSED AIR CONNECTION.....	17
14. USE OF DETERGENTS	18
15. MACHINE START-UP AND TESTING	18
16. USE OF THE WASHING MACHINE.....	18
17. PREPARING THE GARMENTS	20
18. LOAD THE MACHINE AND CLOSING OF THE DOOR.....	21
19. MANUAL OPENING OF THE DOOR	21
20. TURNING ON THE MACHINE	24
21. SELECTING A PROGRAM	24
22. RECENT PROGRAMS	25
23. DELAYED START	25
24. RUNNING A PROGRAM	26
25. PAUSE OF A PROGRAM	27
26. FAST FORWARD	27
27. END OF A PROGRAM EXECUTION.....	27
28. END OF WORKING DAY	28
29. PROGRAMMING	28
30. DISPLAY REPORTS.....	29
31. PROGRAMS IN MEMORY	31
32. OTHER FUNCTIONS.....	32
33. MAINTENANCE OF THE WASHING MACHINE.....	32
34. WASHING PROBLEMS.....	33
35. USE OF THE TILTING MACHINE	33
36. EASY DOWNLOAD	35
37. PROCEDURE FOR CHECKING SAFETY DEVICES.....	35
38. SCRAPPING	35
39. WARRANTY CONDITIONS	36

1. CONTENT OF THE MANUAL

This manual is dedicated to the use of industrial washing machines. It shall be drawn up in the consideration of the Community directives in force. The information is addressed to the installer and the user, who must be sure to have fully understood it before operating on the machine. The user manual must always be available for consultation. In case of loss or damage, ask the manufacturer for a new manual. The manufacturer is not liable for the consequences deriving from a careless use of the machine due to a failure or incomplete reading of this manual. The manufacturer reserves the right to modify the specifications mentioned in this manual or the characteristics of each machine. Some figures in this manual may show details that are partially different from those assembled on the machines. Drawings and technical data may be modified without notice.

The manual and its annexes are an integral part of the apparatus; therefore, they must be kept and accompany the apparatus, even in the case of transfer to another utilizer.

The same attachments and the exploded with the related spare parts can be found in the technical area of the manufacturer's website. Before accessing the site, it is essential to have the serial number of the machine available.



ATTENTION!

The manufacturer declines all responsibility for possible inaccuracies contained in this manual due to printing or transcription errors. It reserves the right to make any changes to its products as it deems necessary or useful, without prejudice to its essential characteristics. It is forbidden to reproduce, even partially, texts or images of this manual, without the prior authorization of the manufacturer.

2. SAFETY REGULATIONS



ATTENTION!

Failure to comply with the following safety regulations may cause damage to people, properties, and animals.



ATTENTION!

The installation and maintenance of the machines described in this manual must be done by authorized personnel who know the product and comply with European industry standards. Incorrect repairs can seriously endanger the user's safety.



ATTENTION!

Before starting the machine, read these instructions carefully: make the instructions accessible to all persons in charge of using the washing machine.



ATTENTION!

The intended use of the washing machines described here is the professional washing of clothing and water linen: any other intended use is therefore prohibited unless it has been previously authorized in writing by the manufacturer. Never use dry cleaning products.



ATTENTION!

It is forbidden to wash garments that are soaked in substances manifestly harmful to the health of operators, poisons, or carcinogenic products.



ATTENTION!

Do not approach the machine with combustible or flammable products to avoid the risk of fire and explosion.



ATTENTION!

Always follow the washing instructions on each item of linen with great care.



ATTENTION!

It is forbidden to use the machine to children under the age of 16.



ATTENTION!

Additional connections to the machine from the outside, not carried out in a workmanlike manner, relieve the manufacturer of any responsibility.



ATTENTION!

Do not spray or wash the machine with water.



ATTENTION!

Do not exclude the porthole locking device.



ATTENTION!

Do not let children play with or inside the washing machine. Children should be kept under close surveillance, when close to the washing machine.



ATTENTION!

Machines with heating systems imply a potential risk of fire. All precautions related to this risk must therefore be taken: the environment must be free from combustible materials; provide for an adequate and easily accessible fire extinguisher near the machine.



ATTENTION!

It is forbidden to work with the shelters of open machines! Danger of hand crushing.



ATTENTION!

To avoid sunburn or crushing of the limbs, it is absolutely forbidden to remove, even temporarily, the protection panels and security systems!



ATTENTION!

It is forbidden to introduce bars, slats, or metal objects inside the basket. In the event of an emergency, always perform the following procedures:



ATTENTION!

Always check the correct functioning of the safety devices every time the machine is started! It is obligatory to register the operation of the machine and its emergency systems!



DANGER OF BURNS

The machine, by the very nature of the activity for which it is intended, presents the danger of burns. Any burns can be caused:

- From prolonged contact with the porthole during the execution of a high temperature wash.
- From contact with the components that convey the steam

The following plates have been affixed to the machine, in case of damage to them, the user must replace them with identical ones.



The machine must always and only be used by properly trained personnel and in the presence of at least one other operator!

CAREFULLY READ AND INFORM ALL OPERATORS ABOUT INTERVENTION SYSTEMS IN CASE OF SUDDEN POWER FAILURE



DANGER OF ELECTROCUTION

Any intervention on the electrical parts of the machine must be carried out only by qualified personnel and after removing the power supply to the machine.

The power and control circuits can only be tampered with by the manufacturer's staff, under penalty of forfeiture of the warranty conditions.

On the electrical panel there is the following monitor plate which must be replaced with an identical one if it has been damaged or removed.



It should be noted that, with reference to electrical hazards, the machine has been designed in accordance with the regulations and described in the certificate of conformity delivered with the machine.



PSYCHOPHYSICAL CONDITION OF THE OPERATOR

The operator in charge of the machine must be in perfect psychophysical condition; during the work the vertical posture in front of the machine must be assumed. Abrupt movements or uncontrolled gestures must be avoided, for example during the removal and insertion of the fabrics to be washed to avoid dangerous collisions with the machine frame.

If other operators or other personnel are present, these must not be a source of distraction for the operator in charge of the machine.

During the use of the machine, the operator must not be distracted by televisions, radios, etc. nor be subject to any other source of distraction.

The apparatus is not intended for use by persons whose physical or mental capacities are reduced, or with a lack of experience or knowledge.

**LIGHTING!**

In the room where the machine is installed, there must be uniform illumination of intensity 300-500 lux, annoying glare must also be avoided.

**ATTENTION!**

These warnings do not cover all possible risks. The user must therefore proceed with the utmost caution in compliance with the rules.

3. RESPONSIBILITY OF THE MANUFACTURER

The instructions in this manual do not replace but supplement the obligations for compliance with current legislation on safety and accident prevention standards. With reference to what is reported in this manual, the manufacturer declines all responsibility in the event of:

- use of the machine contrary to the laws in force on safety and accident prevention.
- incorrect installation of the machine.
- lack of periodic and scheduled maintenance
- failure or incorrect observance of the instructions provided in the manual.
- defects in voltage and mains supply.
- unauthorized modifications to the machine.
- use of the machine by unauthorized personnel.

4. TRANSPORT, STORAGE AND UNPACKING

The machinery must be transported and stored in rooms where temperature and humidity do not exceed the following values:

- TEMPERATURE: -10°C / +50°C.
- RELATIVE HUMIDITY: max 90% without condensation.

The storage of the machine in environments and methods different from those indicated above can compromise the electronic components contained within it.

It is recommended to check the machine upon receipt, taking care to report to the carrier any damage caused during transport, both to the internal components and to the external bodywork.

The machine must be completely unpacked near the place of installation.

The packaging materials must not be dispersed in the environment and must be stored in the appropriate collection spaces according to current regulations.

Remove the fixing bolts to the pallet with a wrench.

**ATTENTION!**

Check on the technical sheet, attached to the machine documentation, the net and gross weight: check the compatibility with the available lifting equipment.

**ATTENTION!**

The pallet should not be used as a normal machine holder! The machine must always be taken off the pallet and positioned as described in the relevant paragraph.

**ATTENTION!**

The machine must be moved only when it is fixed to its pallet: the handling through the forklift must be carried out only by qualified and competent personnel.

The super centrifugation machines during transport are locked inside them (the cradle at the base) with stops, to avoid the stress of the shock absorbers.

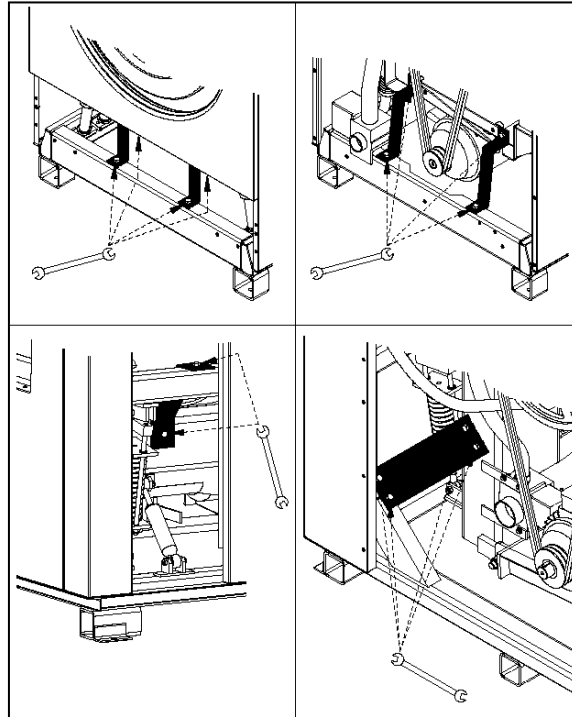


ATTENTION!

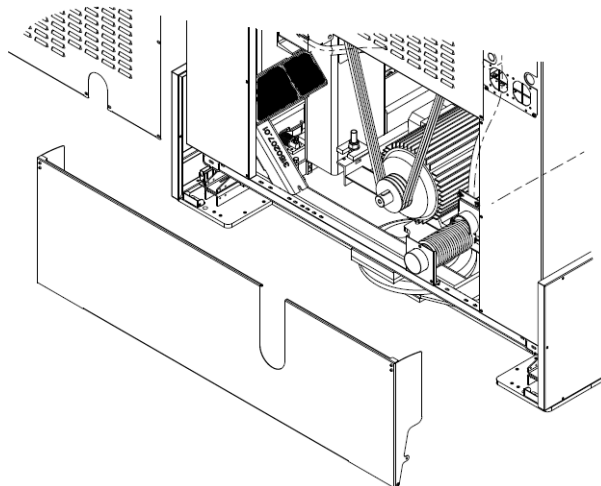
The latches must be removed, after the machine has been placed at and before it is fed.

To disassemble the latches, perform the procedure described below, referring to the figure. The figures are indicative of the type of stops and not of the machine.

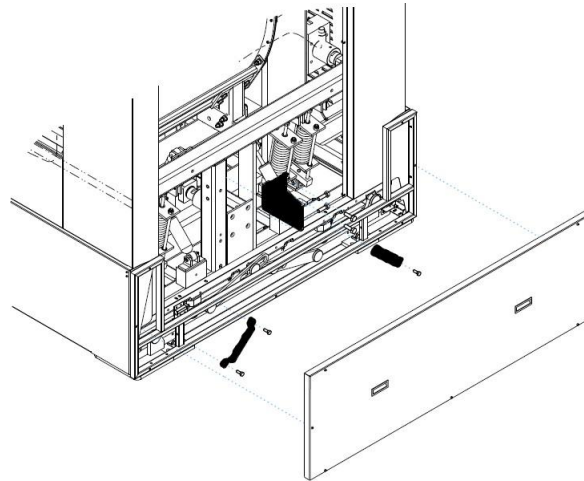
- remove the back and front rings
- unscrew the bolts that block the transport stops
- dismantle transport stops
- reassemble the panels in the original position



For "tilting" machines operate as described below:



Remove the back panel and the lower backrest, proceed to the removal of the transport stops.



Remove the side panel and the side and proceed to remove the latches.

All panels must be reassembled in the original position before the machine can be started. After removing them, the retainers must be stored and reused whenever the machinery is to be transported. Transport stops are not present in rigid washer-washing machines.

5. INSTALLATION AND POSITIONING

All positioning and installation operations must be performed by professionally qualified personnel and according to the instructions in the relevant installation manual.



ATTENTION!

If the machine cannot be installed respecting the criteria below, it is necessary to request the appropriate transformations from the manufacturer.

Please note that for proper use, operation, and maintenance, you must leave a free space of at least 600 mm around the machine. For battery machines, for example in self-service installations, the necessary side space can be reduced to 10mm.

The ambient temperature must be between +5°C and +40°C.

The regular operations of the machinery are guaranteed in environments where the residual humidity is not higher than 50% at a temperature of +40 °C.

The environment in which the machinery is installed must have sufficient air exchange. The machinery may not be installed at altitudes above 1000 m above sea level.

The degree of protection is IP24.



ATTENTION!

Do not use or store gasoline, petroleum, or other flammable materials in the vicinity of the car. It could cause fires or explosions.



ATTENTION!

In the case of tilting machines there are external elements of the machine itself, moving during the loading and unloading phases of the linen.

For the dimensions of the machine and the moving elements in the different positions, refer to the technical sheet.

6. MACHINE IDENTIFICATION

The equipment is identifiable by an adhesive plate bearing the serial number, model, power, and technical characteristics: it is positioned on the back.

Make sure that the power supplies present (electrical, hydraulic, steam, compressed air) correspond to the license plate data.

Spare parts and / or interventions presuppose the exact identification of the model for which they are intended.

Tampering, removal, lack of identification plates or anything else that does not allow the safe identification of the machine, makes any installation and maintenance operation difficult and automatically voids the warranty.

The washing machines described here are intended exclusively for water washing of fabrics and are intended for commercial, professional, and industrial sectors.

MODELS AND MAXIMUM LOAD CAPACITY MODELS AND MAX LOAD CAPACITY	
SUPERCENTREFUGEES / HIGH SPIN: S... CENTRIFUGES / LOW SPIN: R... TANDEM: O... ASEPTIC / ASEPTIC BARRIER: H...	CAPACITA' DI CARICO / LOAD CAPACITY (Kg)
S8 - R8	8 Kg (*)
S11 - R11 - O11	11 Kg (*)
S14 - R14	14 Kg (*)
S18 - R18 - O18	18 Kg (*)
H18	18 Kg
S23 - R23	23 Kg (*)
H 23	23 Kg
S26	26 Kg (*)
R30	30 Kg
H30	30 Kg
S32	32 Kg
S40 - R40	40 Kg
S55 - R55 -	55 Kg
H55	55 Kg
S70 - R70	70 Kg
S85 - R85	85 Kg
S100	100 Kg
S125	125 Kg

Models with capacities marked with (*) can be produced and equipped for installation in self-service stores with coin, token or other automatic payment systems. For some machines the heating system is served hot water.

7. INDICATIONS ON SOUND EMISSION

The airborne noise produced by the machine produces an A-weighted continuous sound pressure level of less than 72 dB.

8. FIXING TO THE GROUND

Suspended super-fire-aging machines with a capacity of up to 32 kg does not need to be fixed to the ground. They are supplied with rubber feet that must be screwed to the relative threaded holes on the base.

Poor adjustment of such feet can give rise to strong vibrations of the external structures of the machine. The machine must therefore be perfectly installed in a bubble on a floor that has no elastic reaction.

Suspended super centrifuge machines with capacities from 30 kg upwards, must instead be fixed to the ground with dowels through the through holes in the bases. Machines must be installed perfectly in a bubble on a floor that has no elastic reaction.



ATTENTION!

It is forbidden to interpose elastic materials of any nature or size between the base of the machine and the floor.



ATTENTION!

Do not install the washing machine on floors without verification by a competent technician able to assess the impact of the dynamic load on the floor and on the building.

In these installations the manufacturer declines all responsibility for possible damage caused by vibrations.

Rigid washer-dryers must all be fixed to the ground.

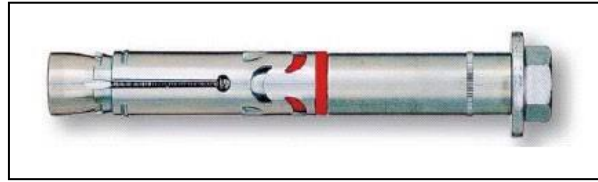
Rigid machines with capacities from 30kg and above, are supplied with a steel subframe.

- the subframe must be drowned in a concrete basement properly anchored to the floor.

- before anchoring the machine to the basement make sure that the concrete has taken hold and, very importantly, that the subframe is perfectly bubbled.
- place the machine in the appropriate anchor holes and tighten all the coupling bolts well.

From the attached technical sheet, the measures of the counterframe and the concrete base can be noted.

Rigid machines with a capacity of up to 23kg are delivered with the equipment of anchors.



Steel anchor

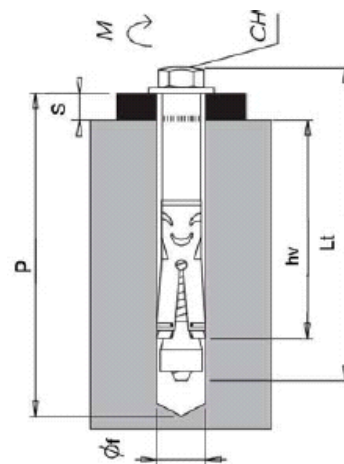
The equipment necessary for installation are:

- Percussion drill or electropneumatic dowel.
- Hammer.
- Blower for cleaning.
- Pipe cleaner.
- Key dynamometer.

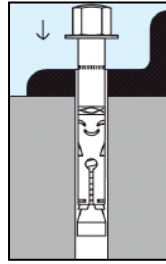
Follow the steps below:

- Prepare a concrete base suitably anchored to the floor, according to the minimum dimensions shown in the technical sheet.
- To make sure that the concrete base is anchored to the floor, that it has taken hold and that the surface made is perfectly bubbled.
- To get the machine off the pallet and place it in its final position above the concrete base.
- Through the open panels mark on the concrete base the points where the steel anchors must be positioned, corresponding to the holes in the metal base of the washing machine.
- Spot the machine to clear the drilling areas.
- And follow the drilling (see-figure) at the points previously identified and based on the technical data contained in the following table.

Lt	Anchor length	138	Mm
S	fixable object thickness	25	Mm
Øf	tip diameter	18	Mm
P	minimum hole depth	140	Mm
Hv	minimum anchorage depth	80	Mm
Ch	Key	19	-
M	Tightening torque	80	Nm
-	thread	M12	-



- And to extract the concrete residues with a brush from the hole just made and con a pump to completely free the hole or from the dust residue;
- Hypoxic the machine to match the holes made to the holes in the base of the washing machine.
- Insert the steels anchors through the holes of the base of the washing machine, inside the holes made in the concrete



- Close with torque wrench the anchor, according to the data given in the table above



ATTENTION!

For all installed rigid machines, test by having the washing machine perform a centrifuge at full load (maximum speed and nominal load), verifying that:

- there are no vibrations.
- there is no noise.
- there are no points of contact or sliding between the basket and the tank of the machine.

IMPORTANT: If one of the problems listed above occurs, it means that the machine has not been properly fixed to the ground. Re-verify:

- the correct bubble execution of the concrete base.
- the correct anchoring of the concrete base to the rest of the floor.
- the correct closure of the steel anchors.

9. ELECTRICAL CONNECTION

The electrical connection must be carried out by professionally qualified personnel and must meet the requirements of current local and national rules and / or regulations.



ATTENTION!

Check that the supply voltage corresponds to that indicated in the license plate data.

For the connection use a cable of type H05 VV – F or higher sized as reported in the license plate data and in the following tables. Interpose upstream of the appliance an omni polar disconnection device, i.e., capable of disconnecting all the poles that make up the power supply of the machinery. A differential circuit breaker with opening between the contacts is recommended, which allows complete disconnection under the conditions of surge category III and complies with current regulations.

Make sure that the main switch of the machine is in the "0" position. Open the inlet door for the power supply. Pass the appropriately dimensioned power cable (see no table and below) through the cable press supplied with the machine.

The electrical power cables must be connected to the on-board disconnecter.

Depending on the type of power supply provided by the serial number plate of the machine, connect the wires to the disconnecter contacts marked as follows:



PE : terminal for the equipotential connection with the grounding system of the user.

L1, L2, L3: phase terminals

N: neutral terminal

When installing or replacing the power cord, the ground conductor must be at least 5 cm longer than the others.

**ATTENTION!**

The appliance must be connected to an effective earthing system: the manufacturer declines all responsibility if this connection is not made in accordance with the provisions of the relevant regulations in force. If the washing machine is installed on a metal surface, this surface must be connected to the ground system with a conductor independent from the grounding of the washing machine.

**ATTENTION!**

For tilting machines make sure that the movement of the machine does not compromise the connection to the power supply panels.

**ATTENTION!**

For machines equipped with a servo-ventilated motor, make sure that the direction of rotation of the fan agrees with the direction printed on the motor label. If it should be inconsistent, reverse the order of connection of the phases directly from the main terminal board of the machine.

Before any maintenance operation, disconnect the power supply: for maintenance, refer to the wiring diagram of the machine, inserted inside the machine or available on the manufacturer's website.

The minimum sections for power cables and ground cables, expressed in mm², are as follows:

Electric heating or mixed electric+steam (mm²)

CAPACITA'		1ph 208V-240V	3ph 208V-240V	3ph 380V-440V
Rigida	8	6	4	
Sospesa				
Rigida	11 14	10	6	4
Sospesa				
Rigida	18	16	10	6
Sospesa		NO		
Rigida	23	16	10	6
Sospesa		NO		
Rigida	30		16	10
Sospesa				
Rigida	40		25	16
Sospesa				
Rigida	55 70	25	16	
Sospesa				85

Steam or hot water heated (mm²)

CAPACITA'		1ph 208V-240V	3ph 208V-240V	3ph 380V-440V
Rigid	6 8 11 14	2,5		
Suspended				
Rigid				
Suspended				
Rigid	23	NO	2,5	
Suspended				
Rigid	30		4	
Suspended				
Rigid	40		6	
Suspended				
Rigid	55		6	
Suspended				
Rigid	70		10	6
Suspended				
Rigid	85 100	10	6	
Suspended				125



ATTENTION!

The minimum sections listed above may vary depending on the length of the link. For lengths longer than 5 meters, increase the section proportionally to the additional length.



ATTENTION!

The connection of the machine must always be carried out according to the matricular data (power, supply voltage, frequency). For supply voltages other than those envisaged, request information from the manufacturer.



ATTENTION!

If the power supply comes from a diesel generator, the inverter requires the application of an additional inductance.

**ATTENTION!**

If the machine operates with coin, coin or equivalent systems, the emergency stop device is not present. The installer must provide and install an emergency stop device positioned remotely and connected to each machine in the installation.

**ATTENTION!**

All washing machines are equipped with speed regulation and therefore equipped with a frequency variator: it is specifically necessary to provide differential protection through a type B RCD device (sensitive to the average current value).

**ATTENTION!**

The machinery must be protected by an appropriate circuit breaker of the magneto thermic type, installed outside the machinery. The interrupting power must be at least 10 kA. The magnetic protection, i.e. against short circuits, can alternatively be performed by means of an omni polar fuse disconnecter, of the same size. The characteristics of the flow rate of the circuit breaker, as well as the current $I\Delta n$ of the differential, are listed in the table below.

Modello e capacità Model and capacity	Tipologia riscaldamento Heating type	VOLTAGGIO ALIMENTAZIONE POWER SUPPLY VOLTAGE		
		Protezione magnetotermica e differenziale suggerita Recommended magneternmic and differential protection		
		3ph400-480V (+N) 50-60Hz	3ph230V 50-60Hz	1ph230V 50-60Hz
LM8 – RC8	ELETTRICO/ELECTRIC	16A - 0,03A	20A - 0,03A	32A - 0,03A
LM8 – RC8	VAPORE/STEAM HOT WATER	-	-	6A - 0,03A
LM11 – RC11	ELETTRICO/ELECTRIC	16A - 0,03A	25A - 0,03A	63A - 0,03A
LM11 – RC11	VAPORE/STEAM HOT WATER	-	-	6A - 0,03A
LM14 – RC14	ELETTRICO/ELECTRIC	20A - 0,03A	32A - 0,03A	80A - 0,03A
LM14 – RC14	VAPORE/STEAM HOT WATER	-	-	6A - 0,03A
LM18 – RC18	ELETTRICO/ELECTRIC	25A - 0,03A	40A - 0,03A	100A - 0,03A
LM18 – RC18	VAPORE/STEAM HOT WATER	-	-	6A - 0,03A
D2W18	ELETTRICO/ELECTRIC	25A - 0,03A	40A - 0,03A	100A - 0,03A
D2W18	VAPORE/STEAM HOT WATER	10A - 0,03A	10A - 0,03A	-
LM23 – RC23	ELETTRICO/ELECTRIC	32A - 0,03A	63A - 0,03A	100A - 0,03A
LM23 – RC23	VAPORE/STEAM HOT WATER	-	-	6A - 0,03A
D2W23	ELETTRICO/ELECTRIC	32A - 0,03A	63A - 0,03A	100A - 0,03A
D2W23	VAPORE/STEAM HOT WATER	10A - 0,03A	10A - 0,03A	6A - 0,03A
LM26	ELETTRICO/ELECTRIC	40A - 0,03A	80A - 0,03A	-
LM26	VAPORE/STEAM HOT WATER	10A - 0,03A	16A - 0,03A	-
RC30	ELETTRICO/ELECTRIC	63A - 0,3A	80A - 0,3A	-
RC30	VAPORE/STEAM HOT WATER	16A - 0,3A	20A - 0,3A	-
D2W30	ELETTRICO/ELECTRIC	63A - 0,3A	80A - 0,3A	-

D2W30	VAPORE/STEAM HOT WATER	-	16A - 0,3A	20A - 0,3A	-
LM32	ELECTRICO/ELECTRIC	-	63A - 0,3A	80A - 0,3A	-
LM32	VAPORE/STEAM HOT WATER	-	10A - 0,3A	16A - 0,3A	-
LM40 – RC40	ELECTRICO/ELECTRIC	-	63A - 0,3A	100A - 0,3A	-
LM40 – RC40	VAPORE/STEAM HOT WATER	-	16A - 0,3A	25A - 0,3A	-
LM55 – RC55	ELECTRICO/ELECTRIC	-	63A - 0,3A	100A - 0,3A	-
LM55 – RC55	VAPORE/STEAM HOT WATER	-	16A - 0,3A	25A - 0,3A	-
D2W55	ELECTRICO/ELECTRIC	-	63A - 0,3A	125A - 0,3A	-
D2W55	VAPORE/STEAM HOT WATER	-	20A - 0,3A	32A - 0,3A	-
LM70 – RC70	ELECTRICO/ELECTRIC	-	63A - 0,3A	125A - 0,3A	-
LM70 – RC70	VAPORE/STEAM HOT WATER	-	20A - 0,3A	32A - 0,3A	-
LM85 – RC85	ELECTRICO/ELECTRIC	-	100A - 0,3A	125A - 0,3A	-
LM85 – RC85	VAPORE/STEAM HOT WATER	-	25A - 0,3A	40A - 0,3A	-
LM100	ELECTRICO/ELECTRIC	-	-	-	-
LM100	VAPORE/STEAM HOT WATER	-	25A - 0,3A	-	-
LM125	ELECTRICO/ELECTRIC	-	-	-	-
LM125	VAPORE/STEAM HOT WATER	-	25A - 0,3A	-	-

10. HYDRAULIC CONNECTION: WATER LOAD

The washing machines are equipped with solenoid valves for loading cold water and hot water (and hard water for the models that provide for it): each water inlet is identified: for the connection quotas refer to the relative technical sheet.

Upstream of each hydraulic supply pipe must be provided a gate that allows at any time to interrupt the flow of water to the machine, both for any emergency situations and for normal maintenance operations. An inspectable water filter must be installed upstream of each inlet: it is also a good idea to check the filters of the load solenoid valves, after a short period of use of the machine, especially if the pipes to which the connection has been made are old or not used for a long time.



ATTENTION!

The water supply pressure must be between a minimum of 0.05 MPa and a maximum of 1 MPa. The water inlet temperature must never be below 5°C and above 60°C.

(The minimum and maximum values consider all the different models of valves present in the different sizes of machinery).

The lower the supply pressure, the higher the loading times will be.

In the presence of several washing machines, the water load line must have a diameter that allows a rapid influx even in the case of simultaneous loading of all washing machines.



ATTENTION!

All water loading valves must always be connected! If the system does not have hot water served, use cold water to also feed the valve identified with "HOT WATER" and where present also the one identified as "HARD WATER".



ATTENTION!

For tilting machines make sure that the movement of the machine does not compromise the connection to the water load collectors.



ATTENTION!

The HOT WATER heating system does not provide other autonomous or external forms of heating except the same hot water served to the machinery. The thermoregulation is however guaranteed by the alternating activation of the inlet of hot and cold water.

11. HYDRAULIC CONNECTION: WATER DRAIN

The solenoid valves used for the drain are of the normally open type, that is, they drain the water in case of sudden power failure.

In the presence of several washing machines, the drain line must have a diameter such as to allow a rapid outflow of the simultaneous drains of all washing machines; the exhaust manifold must be made in such a way as to make it impossible for the water discharged from a washing machine to re-enter an adjacent washing machine.

The discharge is by natural fall, so the exhaust pipes must not have depressions and counter-slopes: a minimum slope of 2% is required for a correct outflow.

The exhaust system must meet the requirements of current local and national rules and/or regulations.



ATTENTION!

For tilting machines make sure that the movement of the machine does not compromise the connection to the drain well.

12. STEAM CONNECTION

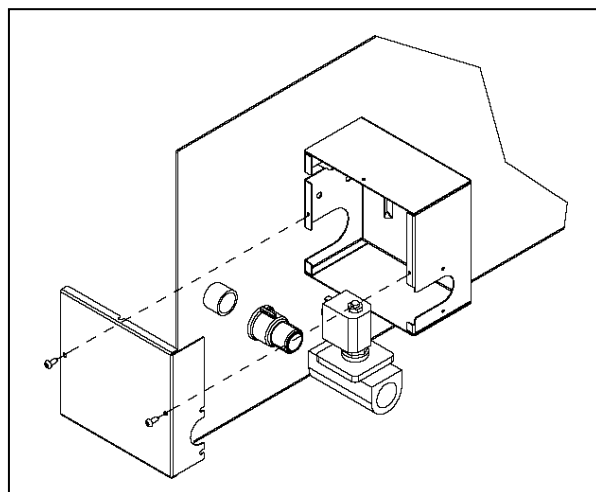
Only for machines equipped with steam heating, it is necessary to make a connection to the steam network. The connection must be carried out by professionally qualified personnel and must meet the requirements of current local and national rules and/or regulations. Verify that the steam has the characteristics reported in the technical data sheets, and that all the plant components are certified.

The steam valve is delivered undesiring: its electrical and hydraulic connection is by the installer.



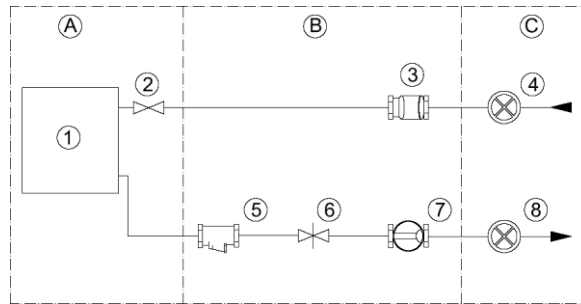
ATTENTION!

Once the valve has been connected to the outside of the machine, the assembly must be protected by the metal box supplied with it: see figure below.

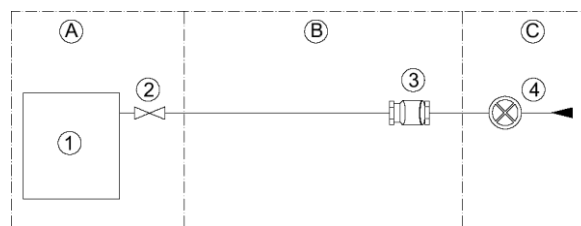


The steam supply system must be made according to the following scheme. Finally, all the connections between the system and the appliance must be subjected to a leak test.

- A) machine
- B) external system
- C) steam supply system



Heating: indirect steam:



Heating: direct steam

The elements of the plant are identified as follows in the diagrams:

- 1) washing machine
- 2) steam valve (supplied)
- 3) filter
- 4) steam inlet gate
- 5) condensate trap
- 6) non-return valve
- 7) passage indicator
- 8) condensate outlet gate



ATTENTION!

The machine can operate with a steam pressure from 0.5bar to 4.5 bar, but the lower the steam pressure, the better the water heating times in the washing phases.



ATTENTION!

For tilting machines make sure that the movement of the machine does not compromise the connection to the steam collectors.

13. COMPRESSED AIR CONNECTION

The connection to the compressed air system is necessary only for some machine models: check the technical data sheet in this regard.

The plant must be carried out by professionally qualified personnel and must meet the requirements of current local and national rules and / or regulations.

All fittings between the system and the appliance are to be subjected to a leak test. For this operation it is recommended to use spray for leaks. If there are leaks, proceed to their elimination.

**ATTENTION!**

For tilting machines make sure that the movement of the machine does not compromise the connection to the air system.

14. USE OF DETERGENTS

The user should contact his chemical supplier to be aware of the risks related to the individual products and their combinations.

It must have insurance the products and their combinations are compatible and do not cause oxidation or damage to people and the washing machine.

In this regard, the following are the elements that meet detergents:

- stainless steel AISI304;
- polypropylene PP;
- EPDM, NBR and silicone rubbers;
- borosilicate glass;

**ATTENTION!**

Attention is drawn to the fact that the use of hypochlorite (bleach) generates corrosion that can cause defects on certain parts of the machine, under certain conditions of use.

15. MACHINE START-UP AND TESTING

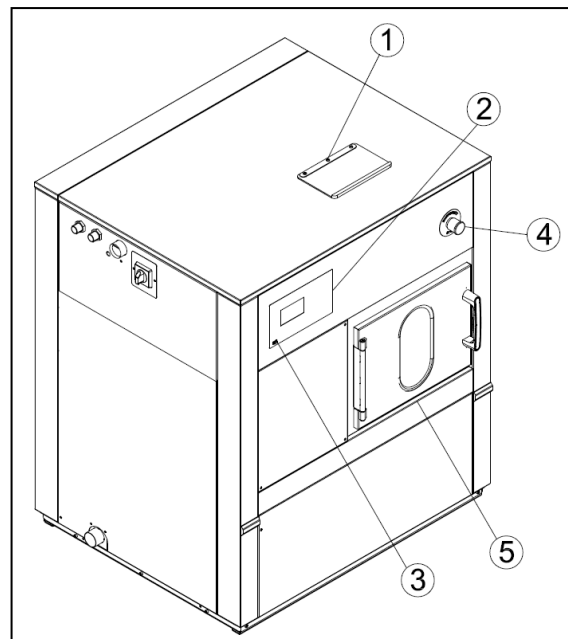
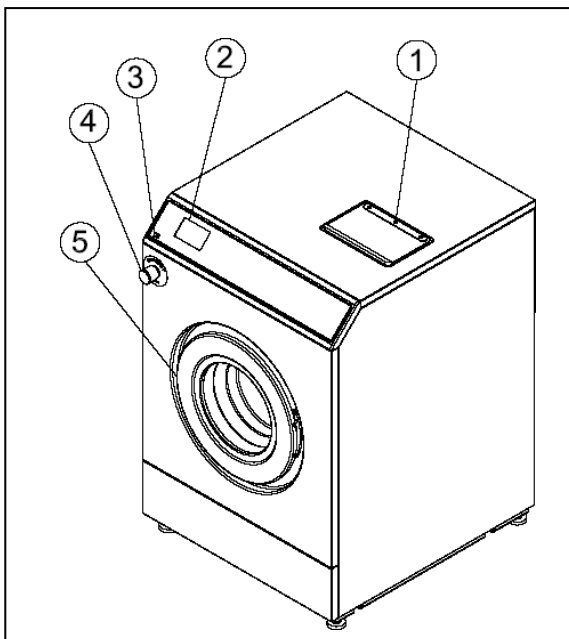
Once all connections have been made, the machinery must be started in the manner provided for by its control equipment. The machine must be tested in all its parts: it is suggested to attend at least one complete program, performed at full load.

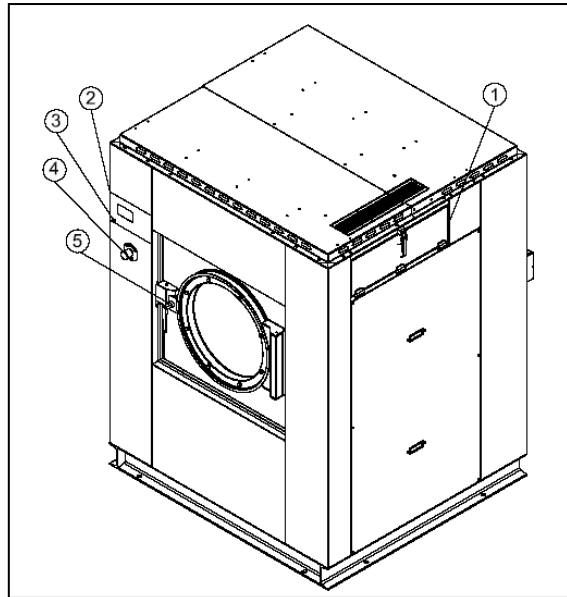
The first time you turn it on, you are prompted to select the language, date, and time. These items can still be modified later by pressing the MENU key and typing the password 1234567.

In addition, attach ignition will be offered the possibility of connecting the machine to a Wi-Fi or wire internet network. By pressing the green button, you can access the configuration menu of your network. The message disappears once the connection is made or in any case after pressing the red button to cancel the request.

16. USE OF THE WASHING MACHINE

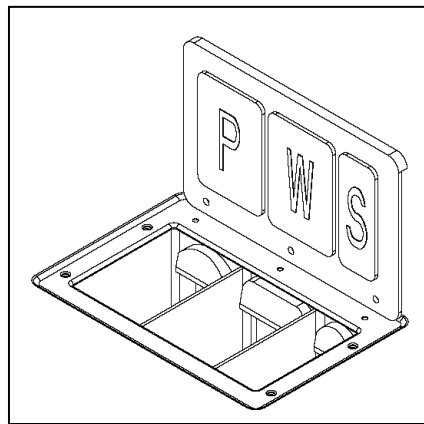
The washing machine is characterized by some elements that you need to know immediately, before starting to use and the machine. Below are some generic images that summarize the possible configurations.





With point 1, the access door for loading detergents is identified.

In smaller machines, the opening of the rubber lid highlights three compartments P, W, S for loading detergents of pre-washing, washing and fabric softener respectively.



In larger machines, the metal door opening highlights 4 jugs for loading powdered or liquid detergents.

Please note that the moments of loading of detergent and the durations of activation of the corresponding valves, are programmable.

With point 2 it is identified at the control area that corresponds to the computer display, and with point 3, the USB type A communication port.

Element 4 is the emergency fungus (where present).



ATTENTION!

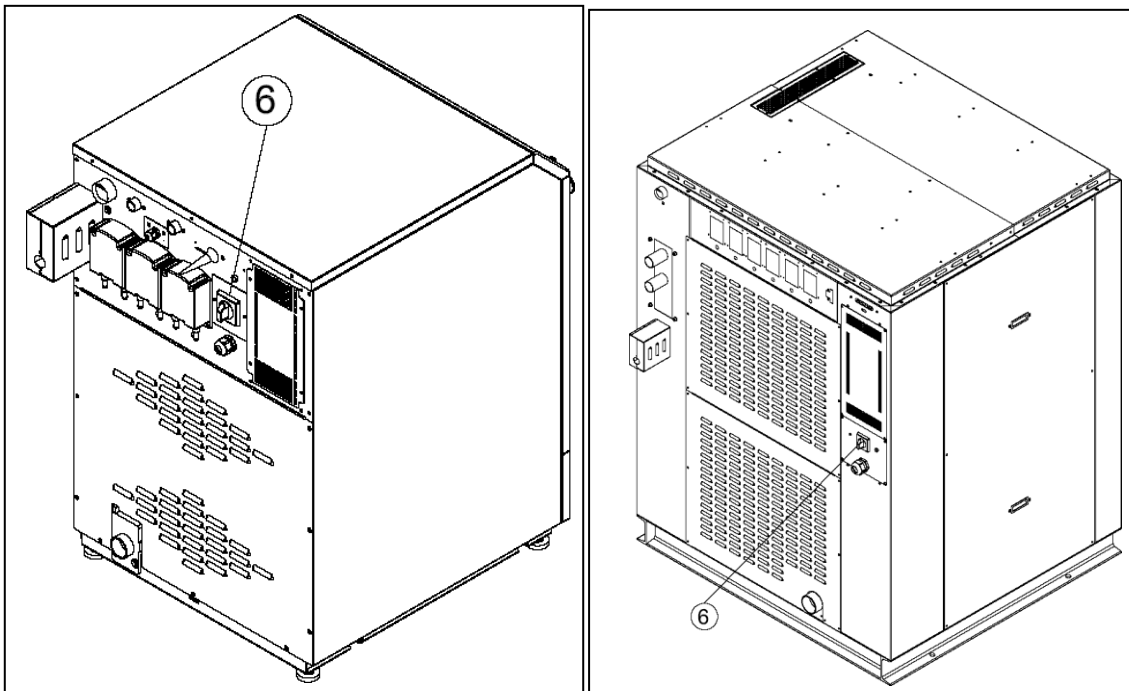
The emergency button (if present), when pressed, acts in stop mode category = 1: removing the power to the command. In this case, the display turns off and the cycle is automatically interrupted: the basket, in case it had been in rotation, stops inertially; the tank is emptied.

The emergency mushroom should be pressed only if you must face a dangerous situation.

When the danger situation is overcome, the emergency button can be reset, making it rotate clockwise: the display turns on and any previously interrupted cycle remains on standby and the following possibilities are provided:

- resume the previous program from the cycle that had been interrupted.
- abort the program permanently.

Point 5 identifies the loading porthole of the machine. See in the following paragraphs the characteristics of the different types of portholes that can equip the different models of washing machine. Finally, step 6 locates the main switch.

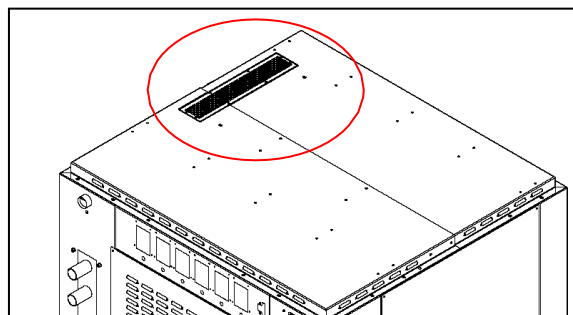


The main switch, when in position "1", electrically powers the machine. When the main switch is in the "0" position, the machine is electrically unit powered.



ATTENTION!

The openings for the passage of air in the backrest and possibly on the lid of the machine must always remain free. The passage of air through the slits must not be in any way limited!



ATTENTION!






In the case of use of an aseptic machine, the requirements for proving the effectiveness of disinfection must be defined by the laundry manager.

17. PREPARING THE GARMENTS

The machine must be loaded according to the characteristics on the serial label: it must not be loaded with a weight greater than the nominal load provided for by the technical sheet and the serial number plate. Before deciding on the most appropriate program, divide the linen according to the fabrics and fibers, to achieve a uniform washing of the entire load.

Before loading, make sure that the garments bear the age with the authorization to wash in the machine and always follow the instructions of the fabric manufacturer.

Here we recall the meaning of some example international symbols:

	Temperature. maximum 70°C; normal mechanical action
	Temperature. maximum 60°C; reduced mechanical action
	Temperature. maximum 40°C; very reduced mechanical action
	Hand wash only
	Do not wash in water

18. LOAD THE MACHINE AND CLOSING OF THE DOOR

The machine must be loaded according to the characteristics shown on the serial label. The label is glued to the back of the machine itself.



ATTENTION!

The machine must be loaded with linen as homogeneous as possible and with a weight that does not exceed that required by the technical sheet and matriculation label.

Before carrying out the loading with dry linen, make sure that the basket is completely empty. After loading the machine, close the porthole.



ATTENTION!

Make sure that when closing the porthole, no flaps of fabric are pinched between the porthole and the front of the machine.

For machines with impulse closure, simply press the porthole until it locks.

For machines equipped with motorized closure, the porthole must only be placed on the front, so that the closing thy is welcomed by its seat on the front.

At the start of the cycle, the machine will give the control of the tight tightening of the motorized closure.



ATTENTION!

For barrier washing machines (double door): before closing the external porthole, make sure that the internal door has been closed correctly, according to the procedures indicated with a special notice on the machine itself.

In case of incorrect closing of the inner door, the cycle **MUST NOT** be started.

Make sure that the operators have well understood the instructions on closing the inner door on board the machine!

19. MANUAL OPENING OF THE DOOR

During the execution of the cycle, it may be necessary to open the porthole manually, without the aid of unlocking via keyboard.



ATTENTION!

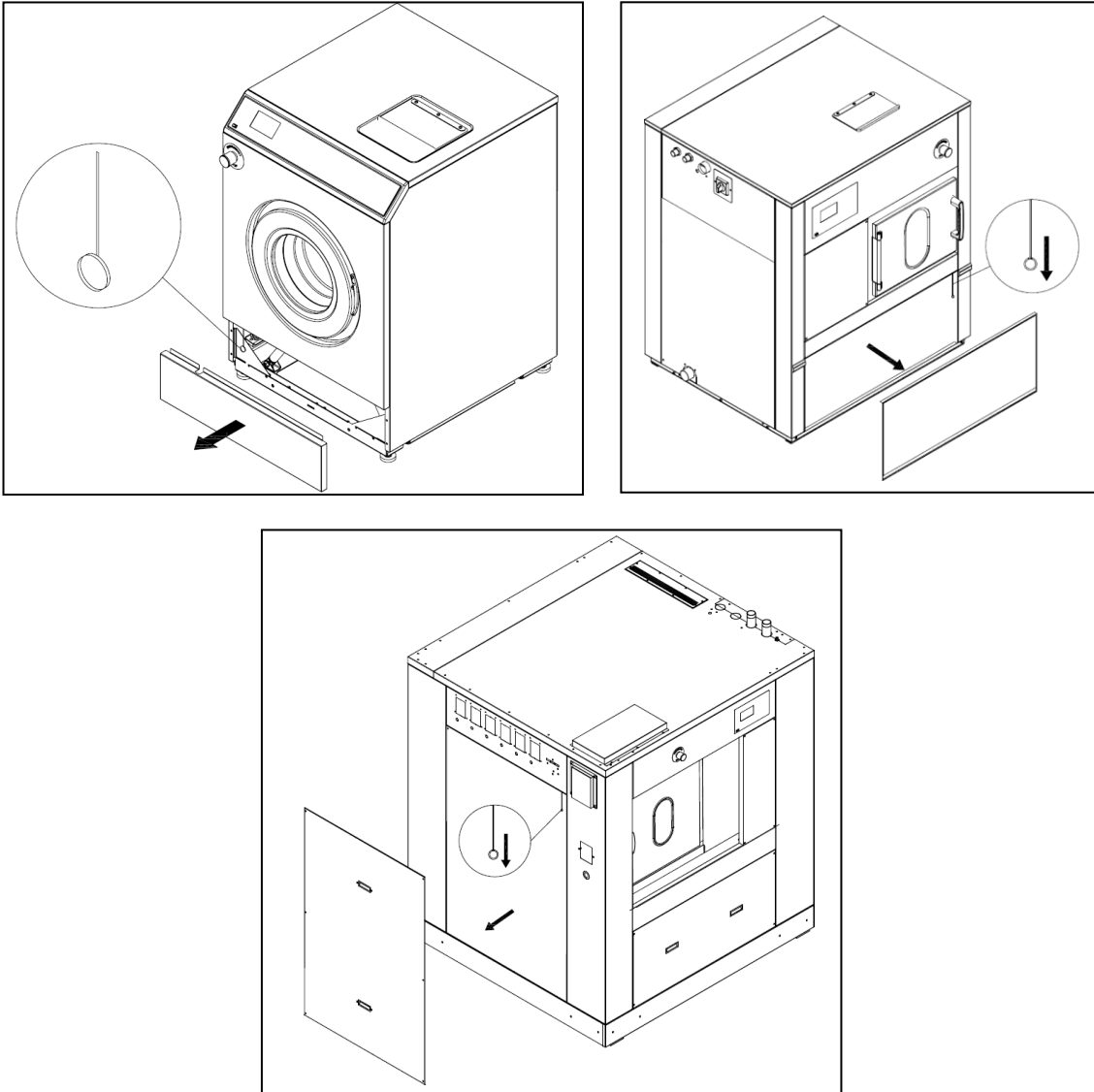
Before carrying out the manual procedure, disconnect the power supply from the main switch.



ATTENTION!

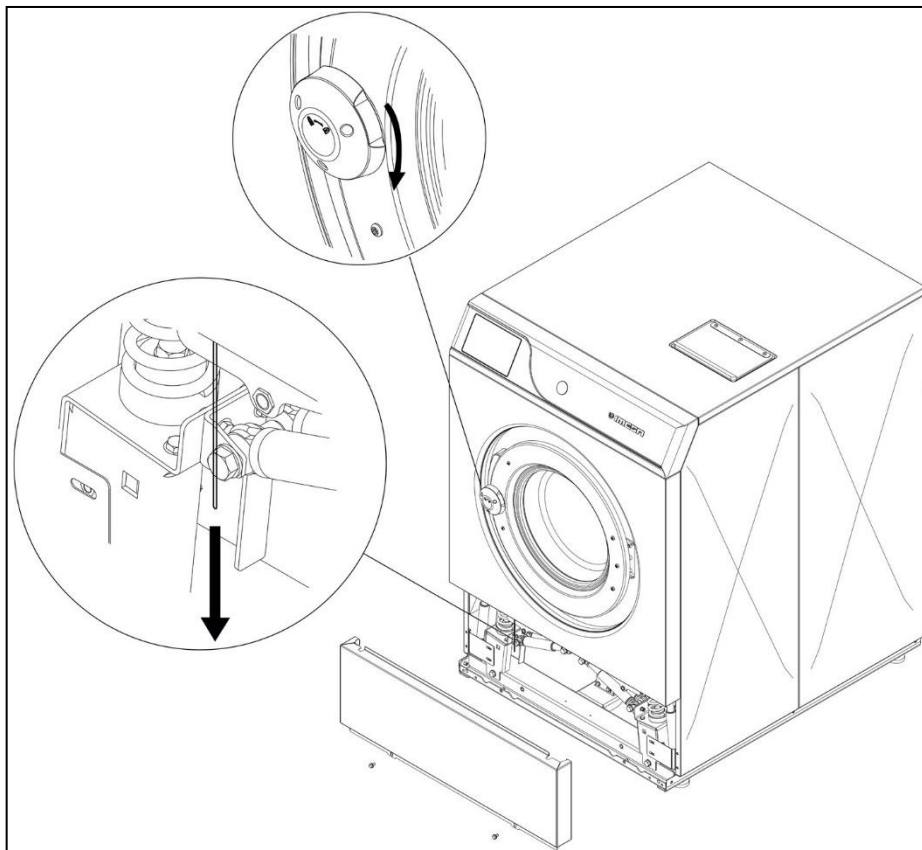
The manual unlocking of the porthole closure should NEVER be used during normal operation of the machine!

In the case of machines with impulse closure. To pressure only the panel identified in the figure. To unhook the porthole, pull the rope with a visible ring on the side.

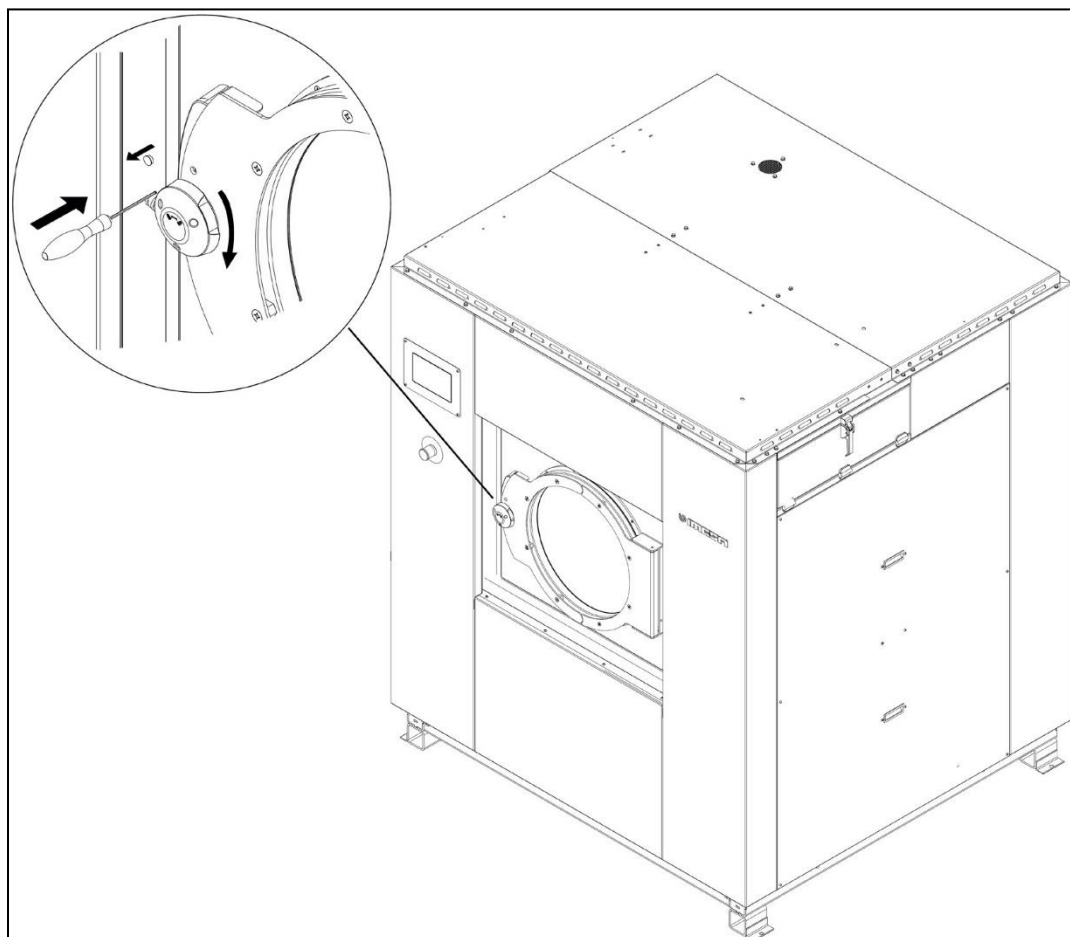


In the case of machines with impulse closure and rotary handle, proceed as follows:

For high spin washing machines with a load capacity between 14 kg and 32 kg and for non-high spin washing machines with a load capacity between 14 kg and 30 kg, open the bottom cover, locate the cord on the left side and pull it down. At the same time, turn the handle clockwise and open the door.



For high and low spin washing machines, with load capacity equal to or greater than 40 kg, insert a flat-blade screwdriver into the hole located above the handle and at the same time turn it clockwise. Then open the door.



20. TURNING ON THE MACHINE

Turn on the main switch that powers the machine.

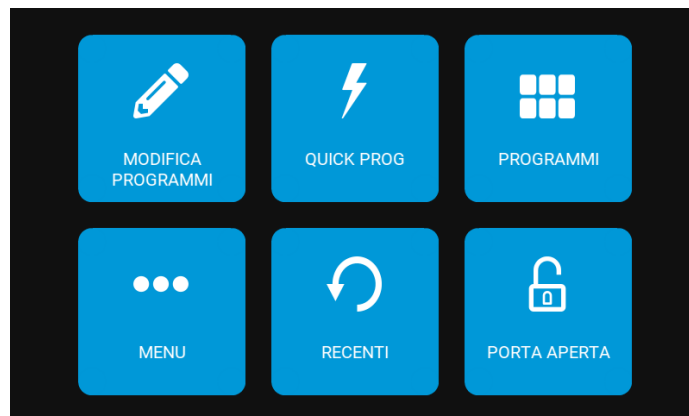
For machines equipped with steam heating: open the main valve to allow steam to enter. To limit water hammering, perform the opening operation slowly: from the close position to the open position, within 1 minute.

Make sure that the emergency button (for models that provide it) is in the rest position and that it has not been activated.

Before starting the machine, always carry out the safety check procedure (check the concerning paragraph). When the machine is turned on, the display briefly shows the software version installed.

Please note that the software may take approximately one minute to load.

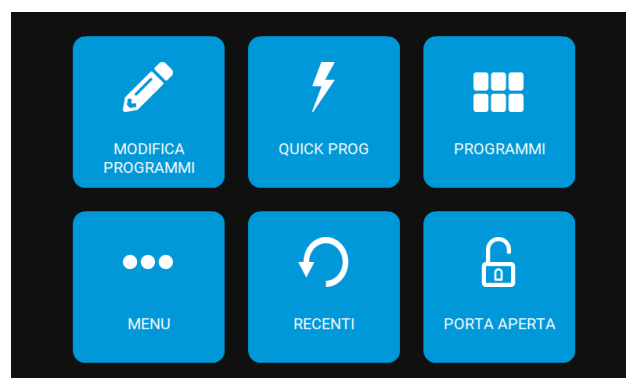
The following screen appears on the display, followed by a series of slides that make up the screensaver.



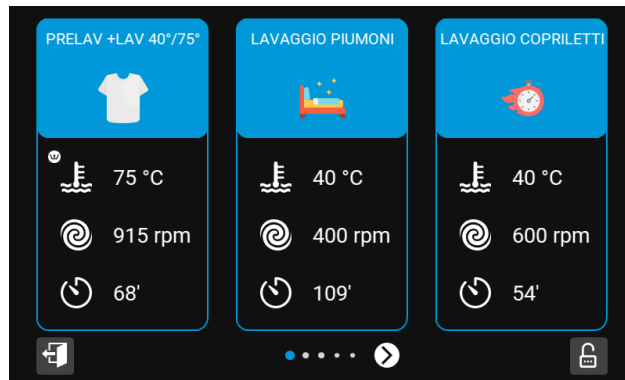
Load the washing machine as described in the relevant paragraph and close the door according to the procedure provided.

21. SELECTING A PROGRAM

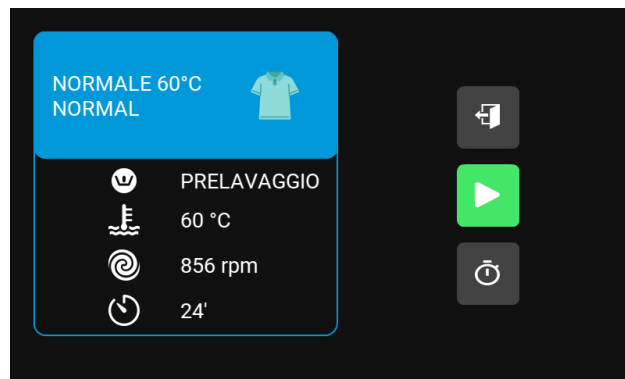
After loading the machine and closing the door, the main screen appears on the display.




By tapping the "PROGRAMS" icon you can view the list of programs residing in the computer's memory. The following screen appears on the display:



It is possible to scroll the list of programs using the arrows located at the bottom of the screen. When the desired program is displayed, simply touch it to highlight it.





By touching the icon  the selection is confirmed and if the door is closed correctly the program will start.

22. RECENT PROGRAMS

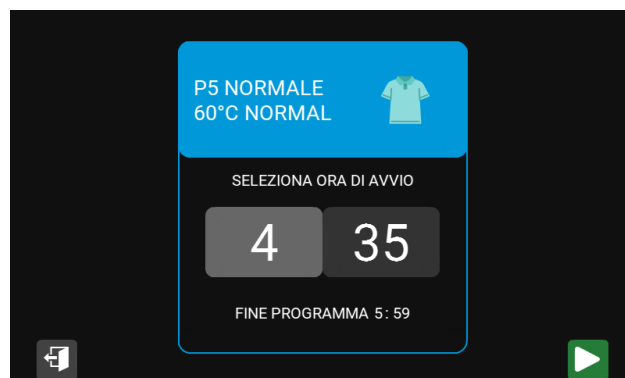
From the main menu, by touching the "RECENT" icon you can access the list of the last programs performed. The selection and start of the program take place as described above.

23. DELAYED START


If you want to start a program with a delay, proceed with the selection as described above. Instead of touching


the  icon for immediate start, touch the icon .

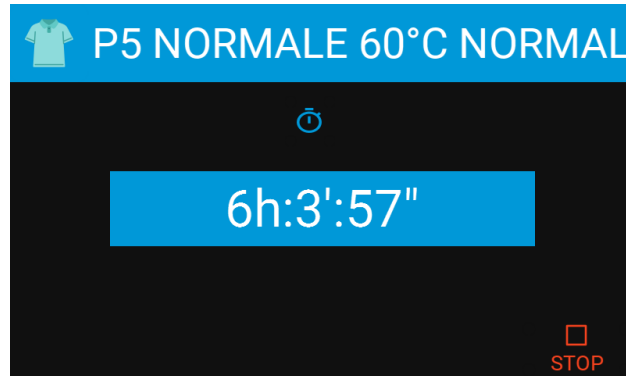
The following screen appears on the display:




The startup delay is set via the machine's internal clock and can be increased and decreased by clicking on the hours and minutes

The function can possibly be abandoned by touching the icon .

After configuring the desired delay, confirm the data set by touching the icon . The following screen appears on the display:



Below the delayed start indication appears the countdown that indicates how many hours and minutes are left to the automatic and delayed start of the program.

The countdown can be interrupted at any time by pressing the  icon.

At the end of the countdown, the cycle will start automatically if the door is closed correctly.

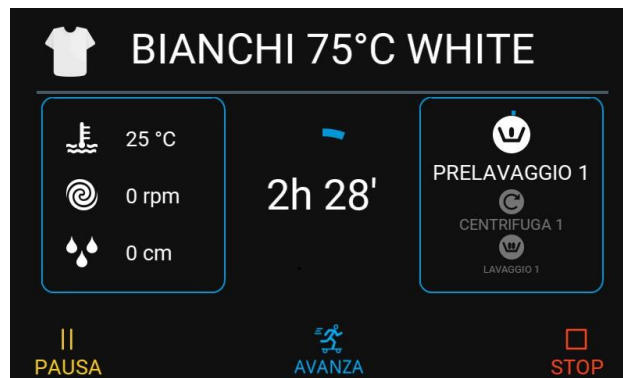
24. RUNNING A PROGRAM

After selecting the program, as described in the previous paragraphs, the cycle is started by pressing the icon



. The selected program starts if the door is properly closed.

During execution, the following screen appears on the display:



The information on the left of the display allows you to understand the operating conditions of the machine, while the program is running.

All parameters can be changed during the washing process simply by touching the corresponding icon. These changes remain valid only for the current cycle: for updates on the function and for further information, please refer to the online documentation.



ATTENTION!

In the case of early conclusion of the cycle remember that the temperature of the tissues may be high! In this case the automatic opening of the door won't be allowed.




ATTENTION!

In case of breakdowns or malfunctions, immediately turn off the equipment and call the authorized technical service center!

25. PAUSE OF A PROGRAM


While the program is running, it can be paused for a controlled pause.

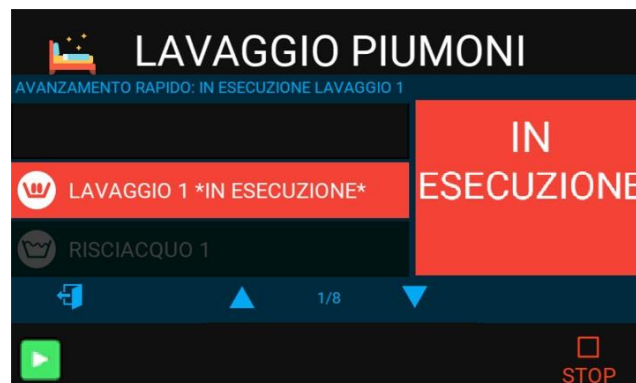
To suspend it, and then perform a pause, simply press the icon  for a few seconds. The following screen appears on the display, indicating that a soak has been performed, the duration of which is highlighted in the center of the display.





The soaking can be interrupted, and the cycle restarted by pressing the icon . During soaking, the program can be completely interrupted by pressing the icon .

26. FAST FORWARD

It is possible to move within the program by entering the rapid navigation function with the icon . The following screen appears on the display while the machine is momentarily in stand-by.



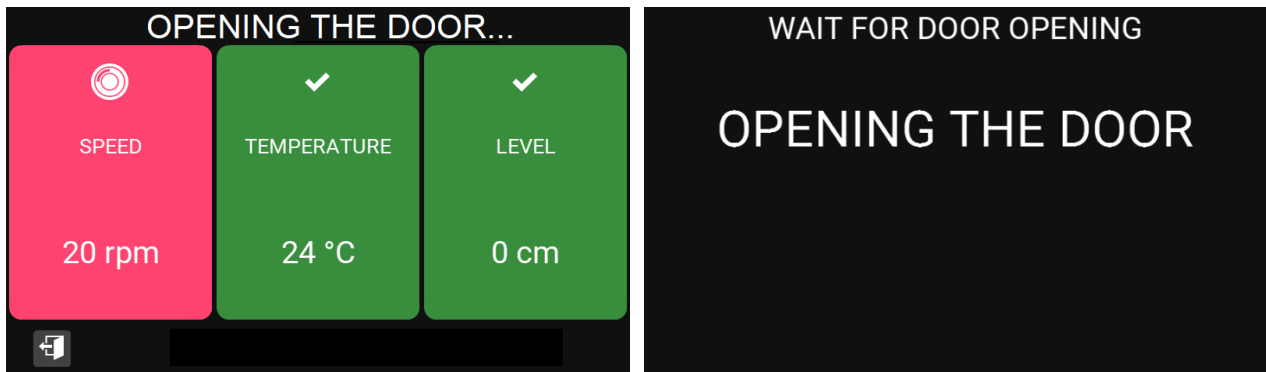
By pressing the "⏮" and "⏭" keys it is possible to browse the cycles that make up the program. By pressing the key  it is possible to start the selected cycle.

Pressing the key representing the door exits the screen without carrying out any advancement action. The  key allows the complete interruption of the program.

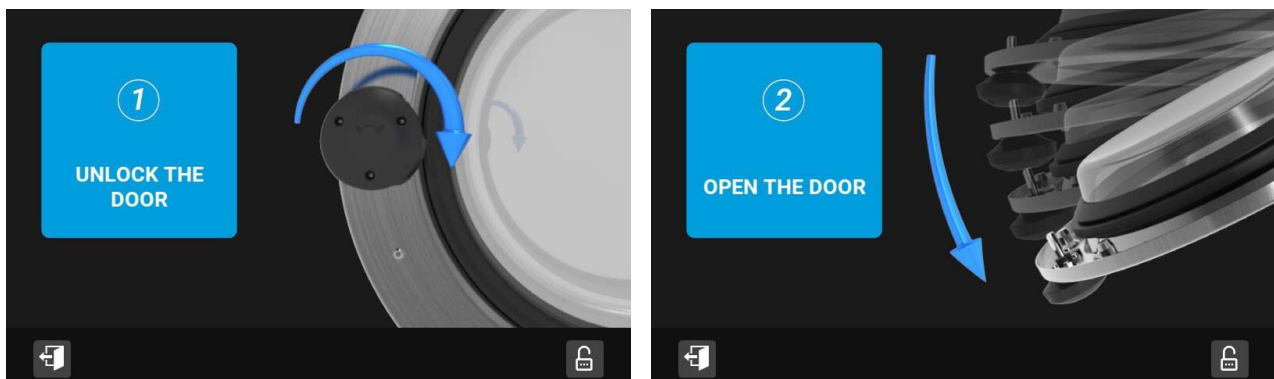
27. END OF A PROGRAM EXECUTION

At the end of the program, open the door and unload the machine.

The machine will carry out a check to verify the possibility of opening the door safely. When the three banners turn green, the door can be opened.



In the case of a door with a rotary handle, the following images will appear in sequence:



In the case of a barrier machine (double door), to unhook the porthole press the button on near the display of the clean side.

After unloading the machine and closing the inner door and the porthole, the message "CALL BACK BASKET" appears on the dirty side.

Touch the touch at the inscription: the basket rotates until the inner door is brought back to the porthole of the dirty side, ready for the next program.



ATTENTION!

For barrier machines (double door): before closing the external porthole, make sure that the internal door has been closed correctly, according to the procedures indicated with a special notice on the machine itself.

In case of incorrect closing of the inner door, the cycle MUST NOT be started.

Make sure that the operators have well understood the instructions for closing the internal door on board the machine!

28. END OF WORKING DAY

At the end of the working day, the machine must be brought to the end of the cycle and turned off: the basket must be emptied and cleaned.

Turn off all power supplies by operating the relevant line switches/disconnectors: electric, steam and compressed air.

Finally, leave the porthole open.

29. PROGRAMMING

The programming procedure allows you to modify existing programs or to implement new programs.

A program consists of a sequence of steps or steps, configurable in detail, in the various parameters that compete with them.

Use the instructions published online.

30. DISPLAY REPORTS

The computer provides complete diagnostics both in case of malfunctions and in the case of simple reports. Below is the list of reports that may appear on the display. However, the user is invited to contact, in these cases, an authorized service center for the solution of the problem occurred.

COD	DESCRIPTION	WHAT HAPPENED: WHAT TO DO
1	THERMAL MOTOR	On display appears: "ALARM !!! 01 Thermal Engine". The machine stops and the buzzer rings for 15 seconds. When you touch the touch, the alarm is reset and the door opens. An overheating of the engine has occurred: wait for the engine to cool down and restart the cycle. If the problem occurs often, call the Authorized Service Center.
2	DOOR OPEN	On display appears: "ALARM !!! 02 Open Door". The machine stops and the buzzer rings for 15 seconds. When you touch the touch, the alarm is reset and the door opens completely. The porthole opened while a cycle was in progress. Call the Authorized Service Center.
3	TEMPERATURE PROBE FAILURE	On display appears: "ALARM !!! 03 Temperature Probe" (the display temperature changes to 237°C or 0°C) depending on the type of probe breakage). The cycle does not stop, but all the heating phases are skipped. When you tap the touch, the signal is reset. The breakdown of the temperature probe occurred. Call the Authorized Service Center.
4	WDT LOAD	On display appears: "ALARM !!! 04 Load Timeout". The machine stops and the buzzer rings for 15 seconds. When you touch the touch, the alarm is reset and the door opens. The maximum time to perform a water load has been exceeded. Check that the loading taps are open, that the load filters are clean and that there are no water leaks. If the problem occurs often, call the Authorized Service Center.
5	WDT EXHAUST	On display appears: "ALARM !!! 05 Download Timeout". The machine stops and the buzzer rings for 15 seconds. When you touch the touch, the alarm is reset and the door opens. The maximum time to perform a water discharge has been exceeded. Check the correct cleaning of the drain line. If the problem occurs often, call the Authorized Service Center.
6	STUCK TOKEN	If a payment signal exceeds 6 seconds on display appears: "ALARM !!! 06 Token blocked" The alarm remains until the payment system is unlocked. When the system unlocks, the standard screen returns.
7	SINGLE IMBALANCE	There was an imbalance of the basket during centrifugation. A rebalancing cycle is started to retry the centrifuge.

COD	DESCRIPTION	WHAT HAPPENED: WHAT TO DO
8	TRIPLE IMBALANCE	<p>Three consecutive imbalances occurred during the same centrifuge: the centrifuge cycle is abandoned, and the program automatically switches to the next cycle.</p> <p>If the problem occurs frequently, make sure of the correct load mode (nominal capacity, homogeneous load).</p>
9	INVERTER BLOCK	<p>On display appears: "ALARM !!! 09 Inverter Block".</p> <p>There is a problem with the inverter being blocked.</p> <p>The cycle continues but the basket does not turn when you touch the touch, the signal is reset.</p> <p>NOTE: It is possible that the message will be detailed with the type of inverter block.</p> <p>Call the Authorized Service Center.</p>
11	WDT HEATING	<p>On display appears: "ALARM !!! 11 Warm-up Timeout".</p> <p>The maximum time to perform a water heating has been exceeded.</p> <p>The cycle does not stop, but all the heating phases are skipped.</p> <p>When you tap the touch, the signal is reset. Call the Authorized Service Center.</p>
12	WATER DURING SPIN	<p>Although the machine must increase the number of revolutions, the speed always remains fixed at 100rpm: this is not an alarm but the intervention of a safety that occurs when the water level, during the start of the centrifuge, does not fall below the expected level.</p> <p>Call the Authorized Service Center.</p>
13	OVERHEATING	<p>On display appears: "ALARM !!! 13 Overheating".</p> <p>The water temperature exceeded 110°C.</p> <p>The heating system is turned off and the subsequent heating steps are skipped.</p> <p>Call the Authorized Service Center.</p>
14	MAINTENANCE REQUEST	<p>"Maintenance request" appears on the display.</p> <p>The machine has reached the number of cycles that require the verification of ordinary maintenance by the Authorized Service Center.</p>
15	WDT ZERO ENGINE	<p>On display appears "WDT Zero Engine".</p> <p>The maximum time for the opening of the motorized porthole has been exhausted: call the Authorized Service Center.</p>
16	WDT DOOR CLOSURE	<p>The display displays "WDT Door Closure".</p> <p>The maximum time for the closure of the motorized porthole has been exhausted: call the Authorized Service Center.</p>
17	WDT DOOR OPENING	<p>"WDT Door Opening" appears on the display.</p> <p>The maximum time for the start of the opening of the motorized porthole has been exhausted: call the Authorized Service Center.</p>

COD	DESCRIPTION	WHAT HAPPENED: WHAT TO DO
18	WDT INFLATION	On display appears "ALARM !!! 18 Expired WDT gasket inflation". The maximum time for the completion of the inflation of the porthole gasket has been exhausted: call the Authorized Service Center.
19	WDT DEFLATION	On display appears "ALARM !!! 19 Expired WDT deflating gasket". The maximum time for the completion of the deflation of the porthole gasket has been exhausted: call the Authorized Service Center.
21 ... 28	TANK 1 ... 8 OUT OF STOCK	On display appears "TANICA 1 ... 8 SOLD OUT". One of the detergent tanks (from 1 to 8 depending on those actually present) has run out. Fill or replace.
-	POWER FAILURE	"POWER FAILURE" appears on the display. During the execution of a program, the power supply was lost. When the power supply is restored, the machine waits for 40" while the display flashes the words "POWER FAILURE". It is possible to restart the cycle from the point where it was interrupted, by pressing the "START" icon.

For any other type of message not in the table, refer to the manufacturer's website.

31. PROGRAMS IN MEMORY

The machine has in memory a series of programs already configured, which can still be modified.

NOTE: In rigid washing machines, the maximum speed is in any case 450 RPM. In addition, the spin speed is purely indicative and varies in function and capacity of the machine (check the actual value of the G-factor in the technical data sheets of the machines).

Below is a brief description of the programs.

Different configurations of the machinery may include the integration of a dedicated set of programs.

	NAME	PREWASHING	WASHING	RINSE	CENTRIFUGAL
1	WHITE 85°C WHITE	3', 40°C	5', 85°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)
2	BIANCHI 75°C WHITE	3', 40°C	5', 75°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)
3	NORMALE 60°C NORMAL	3', 30°C	3', 60°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)
4	NORMALE 40°C NORMAL	3', 30°C	3', 40°C, 24"/6"/24", 40rpm	3	2+1 (5', max rpm)
5	COLOURED 60°C COLOR	-	3', 60°C, 10"/20"/10", 40rpm	3	2+1 (5', max rpm)
6	COLOURED 40°C COLOR	-	3', 40°C, 10"/20"/10", 40rpm	3	2+1 (5', max rpm)
7	SINTETICO 40°C SYNTHETIC	-	3', 40°C, 15"/15"/15", 40rpm	3	2+1 (2', max rpm)
8	LANA 30°C WOOL	3'	3', 30°C, 2"/10"/2", 30rpm	3	1 (1', 1/2 max rpm)
9	LAVAGGIO RAPIDO 60°C QUICK WASH	-	3', 60°C, 24"/6"/24", 40rpm	3	1; (5', max rpm)

	NAME	PREWASHING	WASHING	RINSE	CENTRIFUGAL
10	LAVAGGIO RAPIDO 40°C QUICK WASH	-	3', 40°C, 24"/6"/24", 40rpm	3	1 (5', max rpm)
11	FORTE 90°C STRONG	5', 40°C	10', 90°C, 30"/3"/30", 40rpm	3	3+1 (5', max rpm)
12	FORTE 60°C STRONG	5', 40°C	10', 60°C, 30"/3"/30", 40rpm	3	3+1 (5', max rpm)
13	DISINFEZIONE 90°C DISINFECTION	5', 40°C	3', 90°C, 24"/6"/24", 40rpm	2+3	5+1 (5', max rpm)
14	DISINFEZIONE 60°C DISINFECTION	5', 40°C	3', 60°C, 24"/6"/24", 40rpm	2+3	5+1 (5', max rpm)
15	WOOL DISINFECTION 30°C WOOL DISINFECTION	3'	3', 35°C, 2"/20"/2", 30rpm	1+3	1 (1', 1/2 max rpm)
16	MICROFIBRA 60°C MICROFIBER	5'	5', 60°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)
17	MICROFIBRA 40°C MICROFIBER	5'	5', 40°C, 24"/6"/24", 40rpm	3	3+1 (5', max rpm)

32. OTHER FUNCTIONS

There are many other functions available that are constantly updated in the machine software.

Enter the manufacturer's site to download the software update files and check the new features of the machine.

33. MAINTENANCE OF THE WASHING MACHINE

Any ordinary or extraordinary maintenance must be carried out by professionally qualified personnel. Make sure all power supplies are disconnected before performing any type of maintenance.

Ordinary and extraordinary maintenance are reported to follow with the expected cadences.

EVERY DAY

- The machine must be kept clean using neutral detergents. Clean the bodywork in order to eliminate any trace of soap, and so also the detergent tray.
- Clean the gaskets of the porthole.
- Clean vents and vents
- Check the cleaning condition of the basket: make sure that there are no deposits.
- Check that the drain valve does not lose
- At the end of the day, leave the porthole open to ventilate the interior
- At the end of the day disconnect all energy and water supplies
- Clean the air panel filters
-

EVERY THREE MONTHS

- Check that valves, pipes and gaskets do not lose
- Check the goodness of the drive belts and cleaning conditions of the basket: make sure that there are no deposits.
- Check the cleanliness of the drain valve
- Check the cleanliness of the loading valves and their filters

EVERY YEAR

An authorized technical assistance center shall be consulted for:

- Perform the cleaning of the inside of the machine
- Check the goodness of the electrical contacts of the wiring
- Check the tightness and integrity of rubber parts
- Perform greasing of mechanical parts that require it
- Clean the engine vents

**ATTENTION!**

In the case of tilting machines, before starting any maintenance, make sure that the air circuit is completely exhausted and no movements of the pneumatic drives can occur, even in the absence of power supply.

In the case of maintenance in non-resting positions of some drives, be sure to lock all pneumatic drives mechanically and safely.

34. WASHING PROBLEMS

If there are poor results in the washed tissues, check the following table.

PROBLEM detected	Further SOLUTION
The fabrics still come out dripping with water.	Verify that the program ends with a final centrifuge. It is possible that a series of imbalances have occurred: check the load and relaunch a centrifuge.
Fabrics come out with obvious marks of the basket	Check the spin speed, it is probably excessive.
The fabrics come out felted.	Check the labels of the garments and compliance for use in the washing machine. Check centrifuge speed and temperatures of the cycle used.

35. USE OF THE TILTING MACHINE

To the description of the previous paragraphs must be added the following clarifications, in the event that the machine is equipped with a system for tilting the basket forward and / or backward.

The removal of the transport and locking stops of the tank must be done following the instructions given in the appropriate paragraph.

The pneumatic controls are managed via a remote push-button panel to perform the forward lifting (unloading phase) or the rear lifting (unloading phase).

It should be noted that the machine, depending on the option applied, can have the availability of only tilting forward, only tilting back or both.

The description, from here on, will be related to the machine equipped with both drives.

**ATTENTION!**

For tilting machines, or pneumatic opening of the door (where present), the operator must keep out of reach of the machine and the porthole, using the appropriate remote-control panel.

The user must pay attention to the dangers of crushing and shearing between the overhead elements and the other machines or structures of the building!

When the tilting phase is not active, the "CRADLE UNLOCKED / CRADLE UNLOCKED" LED is lit on the machine front.

**ATTENTION!**

During tilting operations, the porthole must be locked with the appropriate latch, so as to prevent the porthole from tilting freely while the machine rises or falls.

The tilting phase can only be activated if the porthole is open.

To activate the tilting function, you need to hold the remote control with both hands and activate it via the selector which must be brought from position "0" to position "1".

When the remote control is activated, the green LED on the keyboard lights up. From here on, the use of remote-control buttons will be described.



ATTENTION!

Reach button of the remote control will work, if and only if it is pressed at the same time as the green button present in the remote control itself.

Before allowing the tilting movement, it is necessary to carry out the locking of the cradle. It is therefore essential to hold down the "CRADLE LOCK / CRADLE LOCK" button, until the green LED on the front of the machine lights up.

At the same time, both LEDs must also be lit:

- "FORWARD ENABLED TILTING"
- "BACKWARD ENABLED TILTING"

Only after that, you can activate the lifting of the machine:

- forward (NEXT – UP / FORWARD-UP)
- backwards (BACK – UP / BACKWARD-UP)

By pressing the corresponding keys on the remote control.



ATTENTION!

Durante the movement in FORWARD / FORWARD, only the LED "TILTING FORWARD ENABLED / FORWARD ENABLED" will remain lit.

When only this LED is on, the only working tilting controls are that act on the tilting forward

Durante the movement BACK / BACKWARD, will remain on only the LED "TILTING BACK ENABLED / BACKWARD ENABLED".

When only this LED is on, the only working tilting controls are those that act on the tilting back

To return the machine to the washing position, use the opposite commands (FORWARD-DOWN or BACKWARD DOWN).

When the machine is in the washing position, both LEDs:

- "FORWARD ENABLED TILTING"
- "BACKWARD ENABLED TILTING"

they must be switched on.

In this situation, activate the UNLOCK CRADLE / CRADLE UNLOCK command until the relative LED is switched on the front of the machine.

At the end, deactivate the remote control position its main switch to the "0" position: the green led of the remote control turns off.

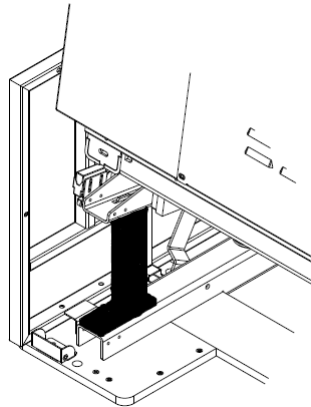
Only in this last condition you can use the washing machine in a standard way.



ATTENTION!

Use the appropriate maintenance stop, supplied with the machine, to perform checks, cleaning and service operations located at the bottom of the tank or under the machine. The maintenance stop ensures the support of the tank and prevents its movement. The maintenance stop can be installed both front and rear, depending on whether the machine is 1-way tilting (lifting only front or only rear) or 2-way (alternating lifting of the front and rear). For the installation of the maintenance stop lift the machine from one of the desired directions, place the maintenance stop as in the next figure, make sure that the maintenance stop is correctly interposed between the base and the upper part of the machine that must remain locked. Disconnect the machine from the main

switch and make sure that the water and air lines have been closed upstream of the machine.



36. EASY DOWNLOAD

For machines that are equipped with it, the EASY DOWNLOAD function facilitates the unloading of linen, making the basket slowly rotate during the unloading phase of the linen.

To activate the function, simply hold down the "EASY DOWNLOAD" button on the front of the machine, and at the same time, press one of the icons on the display: CLOCKWORK ROTATION or COUNTERCLOCKLESS ROTATION.

NOTE: The rotation of the basket occurs only if the button and one of the icons are held down at the same time.

37. PROCEDURE FOR CHECKING SAFETY DEVICES

After turning on the machine, before starting the cycle, it is necessary to always check the perfect functioning of the safety devices, The user must always scrupulously carry out the following steps:

Sequence of ACTIONS	Consequent REACTION
Start a loop and press STOP the machine must be stopped and waiting for a new start.
Start the cycle and check that the porthole is blocked. Use the fast forward to go to the end of the program and check that the porthole cannot be opened until after the end of the program: with the basket completely stationary.
Operate the emergency fungus (where present) the basket must be stopped, and the machine must be turned off.



ATTENTION!

After turning on the machine and before starting work, it is always necessary to check the perfect functioning of all safety devices.

38. SCRAPPING

When the life cycle of the machine is concluded, proceed with the scrapping according to current regulations, separating the metal parts from the plastic parts, from the glass parts, from the electrical / electronic parts.



The crossed-out bin symbol on the equipment or its packaging indicates that the product at the end of its useful life must be collected separately from other waste.

The separate collection of this equipment, which has reached the end of its life, is organized and managed by the manufacturer. The user who wants to get rid of this equipment must then contact the manufacturer and follow the system that this has adopted to allow the separate collection of the equipment that has reached the end of its life.

Appropriate separate collection for the subsequent start-up of disused equipment for recycling, treatment and environmentally compatible disposal helps to avoid possible negative effects on the environment and health and promotes the reuse and/or recycling of the materials of which the equipment is composed.

The abusive disposal of the product by the holder entails the application of the penalties provided for by current legislation.



ATTENTION!

If the machine is put into disuse, before disposal, disassemble the porthole, so that no one can close themselves inside at the risk of their lives.

39. WARRANTY CONDITIONS

For warranty conditions, please refer to the manufacturer's price list.



ATTENTION!

To take advantage of the manufacturer's warranty, the requirements contained in the manual itself must be scrupulously observed and in particular

- always operate within the limits of use of the machine.
- always carry out constant and diligent maintenance.
- use for the use of the machine adequately trained personnel.
- use only genuine spare parts indicated by the manufacturer
- comply with the contractual obligations or the rules dictated by the offer to which the buyer has adhered.