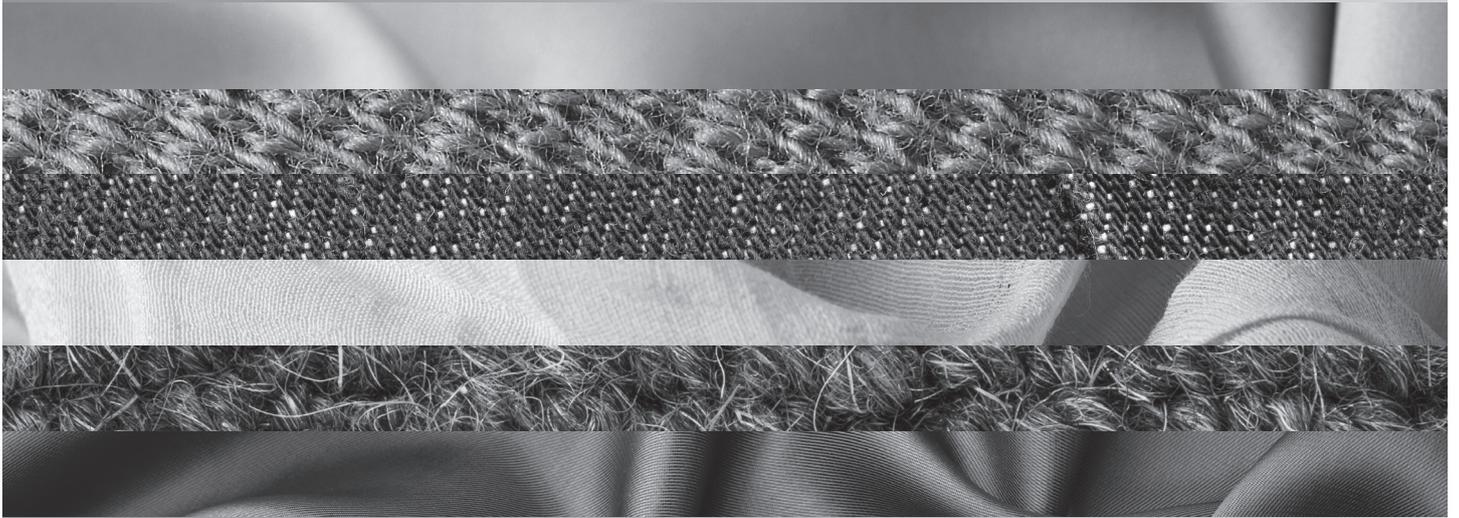




Bienvenidos a la  
lavandería industrial

Welcome to the  
industrial laundry



**Manual de uso y Mantenimiento**  
**User and Maintenance Manual**  
**Notice d'emploi et Maintenance**  
**Gebrauchs und Wartungsanleitung**  
**Manuale d'istruzioni e Mantenimento**  
**Manual de Operação e Manutenção**  
**ИСПОЛЬЗОВАНИЕ И УХОД**

**LAVADORAS**  
**BARRERAS LCA**

The technical documents include confidential information. Please note that disclosing or copying these documents is prohibited and that we will take proceedings against makers of such copies.

### **Management of electrical and electronic equipment at end of life**

This symbol on the product or its packaging indicates that this product must not be disposed of with domestic waste. It must be delivered to an appropriate collection point for the recycling of electrical and electronic equipment.



## **TECHNICAL MANUAL** **LCA WASHING MACHINE**

# SUMMARY

ENGLISH

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## 1. GENERAL PRINCIPLE

### 1.1. Introduction

Thank you for your confidence in our product. We trust that it will meet your needs.

The guarantee does not cover damage to glass components or consumables (seals, bulbs, etc.) damage to insulation materials, damage caused by faulty installation or inappropriate use, inadequate maintenance or poor general condition.

This appliance is subject to changes and modifications as a result of technical advances.

**WARNING:** In order to reduce the risk of electrical discharge or injury while using your appliance, follow the basic precautions, including:

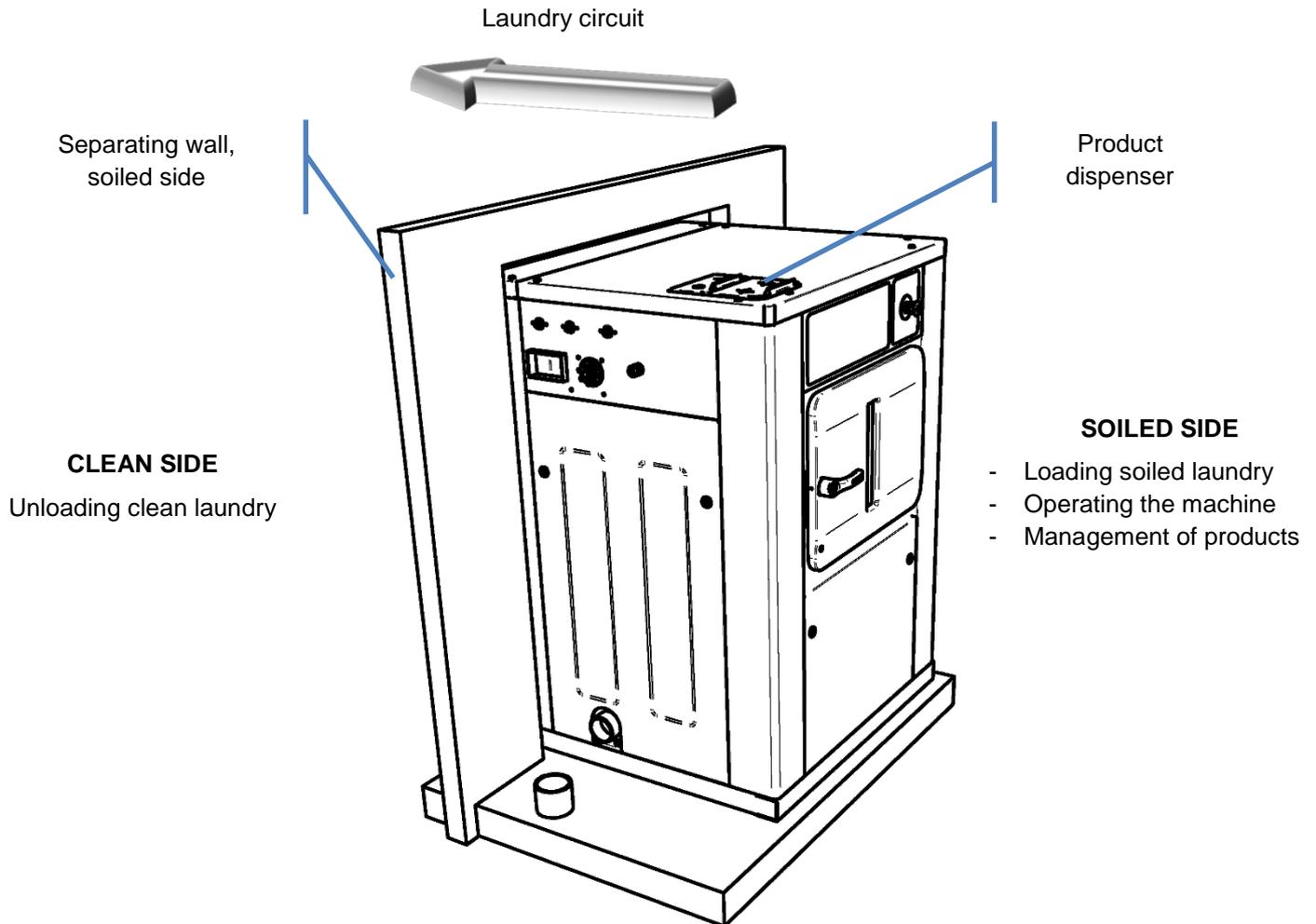
- 1- **READ** all the instructions before using the appliance and **KEEP THEM** in an easily accessible place to clarify any doubts.
- 2- This appliance must be installed by an official or approved Technical Support Service. Faulty installation, incorrect settings, inadequate servicing or maintenance or incorrect handling of the appliance may cause material damage as well as injury. Please read the instructions in this manual carefully before using the appliance. You will find important information about its installation.
- 3- Any incorrect installation, servicing, maintenance and/or cleaning or any modification of the appliance may damage it and cause injury to users.
- 4- Failure to respect the guidelines indicated will invalidate any guarantee.
- 5- Disconnect the appliance in the event of breakdown or malfunction.
- 6- **DO NOT WASH LAUNDRY** which has been previously treated, washed, soaked or blotted with petrol, dry cleaning solvents or other flammable or explosive substances.
- 7- **DO NOT ADD** petrol, dry cleaning solvents or other flammable substances to the washing water. These substances give off vapours that could catch fire or explode.
- 8- In some cases, hydrogen can form in a hot water system that has not been used for two weeks or more. **HYDROGEN IS EXPLOSIVE**. If the hot water system has not been used for some time, open all the hot water taps before using the washing machine and allow the water to run for several minutes. This will release any accumulated hydrogen. Because this gas is flammable, do not smoke or use a naked flame during this period of time.
- 9- **DO NOT ALLOW** children to play in or on the appliance. Keep a close watch on children when they are near a machine in operation.
- 10- **DO NOT TRY TO OPEN THE DOOR** if the drum is in motion.
- 11- **Do not install or store** the appliance where it is exposed to bad weather.
- 12- **DO NOT FORCE** the controls.
- 13- **Do not repair or replace any part** of the appliance, and do not attempt any maintenance process unless recommended in the instructions for use. In these circumstances, make sure you understand the instructions fully and that you have the necessary ability to carry out such an operation.

- 14- Do not disable any security device, and do not modify any aspect of the washing machine. **DO NOT INSTALL** foreign elements in the machine.
- 15- Failure to respect the instructions in the user's manual can cause injury. It is impossible to mention all the possible situations in the hazard warnings. **Common sense**, caution and attention are factors which must be applied by any persons transporting, installing, using or maintaining the appliance.
- 16- **DO NOT** use the machine if all the covers or guards are not correctly located and fixed.
- 17- The distributor (seller) **HAS AN OBLIGATION** to instruct the user properly when the machine is set up for use.
- 18- Add the doses of detergent, softener and bleach recommended by the manufacturer in the corresponding dispensers. Follow the guidelines for washing fabrics provided by their manufacturers.
- 19- Clean the detergent dispensers and those for liquids other daily. Clean with soap and water. Never use abrasive detergents.

## 1.2. Operating principle

Loading the dirty laundry, adding the various laundry products, starting the machine and monitoring operations via the control panel all take place on SOILED side of the machine (a screen on the CLEAN side also allows operations to be monitored).

Once the programme is completed, the doors of the drum are automatically positioned on the CLEAN side (the laundry can then be unloaded on the other side of the separating wall, in another room, with no risk that soiled linen can contaminate clean laundry).



### 1.3. Safety

#### 1.3.1. Total door opening safety system

The purpose is to prevent accidents which could be caused by opening the porthole while the drum is rotating.

- Two door safety devices (one on each side of the machine) prevent the opening of the windows.
- Their opening is operated automatically by the microprocessor.
- In the event of a power cut, and once the drum is completely still, it is possible to unlock the doors manually (see Section 4.2).

#### 1.3.2. Balance safety device

These suspended machines have a mechanical or magnetic balance safety device and an electronic balance device managed by the frequency converter. This provides long-term protection to the mechanical elements of the appliance. This safety device stops spinning in order to prevent excessive vibrations caused by significant imbalance.

#### Operation of safety device in the event of severe imbalance:

During the final spin, a 'balance error' will appear on the screen if the balance safety device is triggered five times consecutively, and the cycle will be stopped.

#### 1.3.3. Heating safety device

A safety pressure switch prevents heating if there is insufficient water in the washing tub.

### 1.4. Heating

Two types of heating are available:

- Electrical heating: provided by armoured heating elements (the number of elements varies with the power of the appliance).

Machine type	LCA-16	LCA-22	LCA-35	LCA-50	LCA-66
Number of elements	3	3	3	6	3 + 3
Element power (KW)	4	6	9	6	9 and 6
Total power (KW)	12	18	27	36	45

- Steam heating: by release of steam pressure from an injector directly connected to the washing tub.

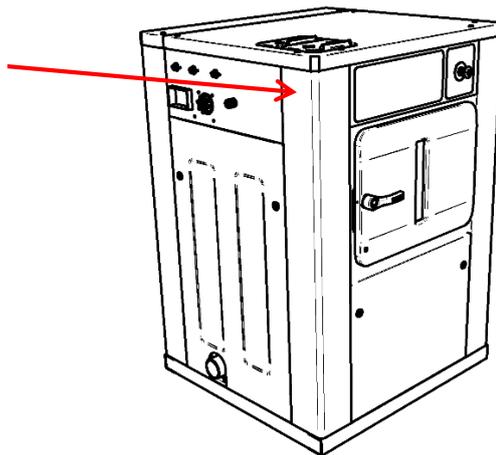
## 2. INSTALLATION MANUAL

### 2.1. Indicator plate

The indicator plate of this appliance is situated in the part upper of the left-hand frame. It states:

- The equipment type
- The series number
- Total power
- Electrical protection
- Steam pressure required (if a steam heated appliance)

Location of the  
indicator plate



Soiled side

### 2.2. Installation



**Attention:** the machine must be installed, configured and commissioned by a team of engineers from the manufacturing company, or by mechanics or sellers approved by the company.

The presence of the customer is also strongly recommended, inter alia for setting up and during the first trials.

The appliance must be installed in accordance with current regulations and standards, in an adequately ventilated room.

#### 2.2.1. Handling and packaging

On delivery, the appliance must be in a perfect condition. Packaging must not be incomplete or damaged. Comply with the instructions on the package (e.g. fragile, top and bottom, keep from rain, etc.). As the appliance is fairly heavy and of significant dimensions (see below), provide appropriate means for lifting and handling in order to ensure complete safety.

The appliance must be handled using a sufficiently large-capacity forklift. The forks must be at their maximum distance to avoid tipping.

It is essential to place the appliance in the centre (centre of gravity at the axis).

Do not tip or drop the appliance, for example when unloading.

**Note:** if a sling is used (not provided) the handler will be fully liable for handling (risk of distortion of the appliance).

**Equipment provided with the appliance:**

Installation equipment is in the drum. To access it, a porthole will have to be unlocked manually (see section 4.2).

- Technical documentation
- 3 flexible water intake hoses (length 1.5 metres)
- 1 drainage hose (bent, 50mm x 50 mm) diameter 80

	DIMENSIONS in mm (width x depth x height)		WEIGHT (KG)		Volume (m3) Pack.
	overall	with packaging	without packaging	with packaging	
LCA-16	1045 x 1071 x 1417	1072 x 1102 x 1394	438	459	1.65
LCA-22	1245 x 1071 x 1417	1262 x 1102 x 1394	471	494	1.94
LCA-35	1352 x 1191 x 1601	1452 x 1222 x 1694	748	780	3.01
LCA-50	1679 x 1190 x 1662	1752 x 1222 x 1694	1056	1090	3.63
LCA-66	2032 x 1201 x 1662	2102 x 1222 x 1694	1233	1275	4.35

**2.2.2. Characteristics of premises**



- The appliance must be installed in a very well ventilated room with correct lighting and an ambient temperature between + 5°C and + 40°C (upper temperature limit for the electronic frequency controller of the drive motor).
- The necessary space on either side must be left free in front of the windows to enable the operator to work properly and without danger.
- A **minimum 60 cm space** must be left on each side of the appliance for maintenance and servicing.
- A **minimum 1 m space** must be left above the appliance for maintenance and servicing.
- The appliance must be properly levelled on a solid and stable floor suitable to take the relatively substantial weight of the appliance (see table below).

Minimum ground strength is required for the installation of such an appliance (see table below)

	LCA-16	LCA-22	LCA-35	LCA-50	LCA-66
Weight (kg)	438	471	748	1056	1233
Ground surface (m <sup>2</sup> )	0.89	1.07	1.35	1.69	2.06
Static force (daN/m <sup>2</sup> )	492	504	658	749	740
Dynamic force (daN)	154	154	279	350	462
Dynamic force transmitted to the ground (daN/m <sup>2</sup> )	665	584	760	832	823
G factor	350	350	400	350	350

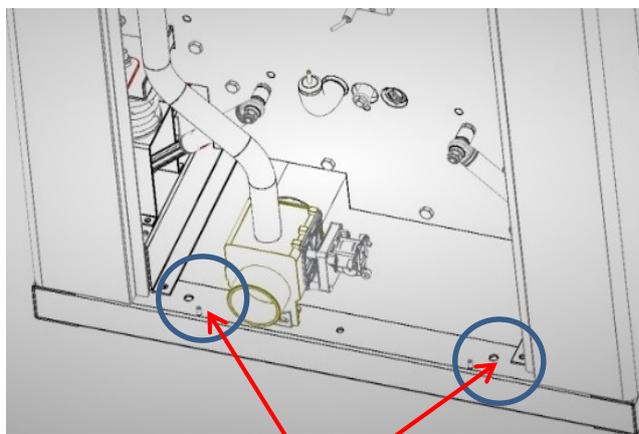
**2.2.3. Floor mounting**

The machine must be fixed to the floor by M12 anchoring bolts that are preferably fixed to the floor using chemical adhesive.

4 fixing points are required for appliances of types LCA-16, LCA-22 and LCA-35 and 6 for appliances of types LCA-50 and LCA-66.

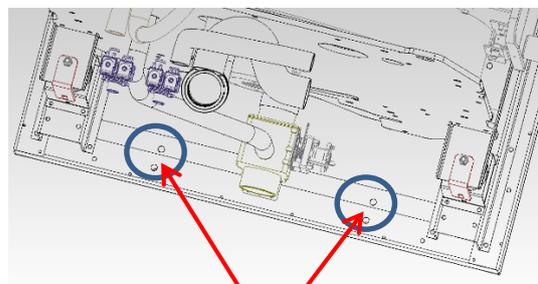
For the models LCA-35, LCA-50 and LCA-66, the lateral side mounting holes are situated on the interior of the appliance (see installation plan).

**LCA-16 – LCA-22**



Holes for floor fixation

**LCA-35 – LCA-50 – LCA-66**



Holes for floor fixation (internal holes)



**Attention:** the models fitted with the laundry weighing option must not be fixed to the floor.

### 2.2.4. Water connection

All models have one hot water inlet, one cold water inlet and one softened water inlet. All three water inlets must be connected even if hot and/or softened water are not available.

Bring the three water pipes vertically at the top of the machine, provide accessible shut-off valves.

Fit a filter on each water inlet below the shut-off valves.

	LCA-16	LCA-22	LCA-35	LCA-50	LCA-66
Diameter (inch/mm)	3 x 3/4" (20/27)	3 x 3/4" (20/27)	3 x 3/4" (20/27)	3 x 1" (26/34)	3 x 1" (26/34)
Maximum flow of incoming water (l/min)*	100	100	100	130	130
Pressure (bar)	3 to 5	3 to 5	3 to 5	3 to 5	3 to 5
Av. consumption hot water per cycle (litres) **	24	33	50	90	120
Av. consumption cold water per cycle (litres) **	120	198	210	360	600

\* The indicated flow is the maximum flow admitted by the electronic water inlet valve and not the flow required. If the flow is weak, this will impact the time it takes to fill the washing tub, but not the operation of the machine.

\*\* The consumption figures indicated are estimates and vary depending the type of laundry treated and the programme. Softened water is not used in the standard programmes.



For the models LCA-50 and LCA-66, an inlet of 1/2" (15/21 mm) is provided to feed water to the four product dispensers (prewash, wash, bleach and softener).

See installation plan for more details.

### 2.2.5. Drain hose connection

Whatever the machine type, there is one drain hose Ø 80 mm / 3" (drainage of the tub)

For waste water, provide a drain in the floor close by the machine (see installation plan) of at least Ø 80 mm (3").

The section of the waste water collection system under the machine must be respected: Ø 80 mm / 3"

See installation plan for more details.

### 2.2.6. Power connection

The power cable is not provided.

The machine must be connected electrically by a power cable with the characteristics set out in the table below and protected by a **differential circuit breaker 300 mA or 30 mA SI (super-immunised)**.

The electrical installation must comply with current standards.

<b><u>ELECTRIC Heating - E</u></b>						
		LCA-16	LCA-22	LCA-35	LCA-50	LCA-66
Motor power (KW)		2.2	2.2	4	5.5	7.5
Heating power (KW)		12	18	27	36	45
Total power (KW)		14.2	20.2	31	41.5	52.5
Supply voltage						
Protection (A)	400V 3P + N + E	25	32	50	63	80
	230V 3P + E	40	50	100	125	160
Cable core size (mm <sup>2</sup> )	400V 3P + N + E	5 x 6	5 x 6	5 x 10	5 x 16	5 x 16
	230V 3P + E	4 x 10	4 x 10	4 x 16	4 x 25	4 x 35

<b><u>STEAM Heating - S</u></b>						
		LCA-16	LCA-22	LCA-35	LCA-50	LCA-66
Motor power (KW)		2.2	2.2	4	5.5	7.5
Total power (KW)		2.2	2.2	4	5.5	7.5
Supply voltage						
Protection (A)	230V 1P + E + N	6	6	NA		
	400V 3P + N + E	NA		10	10	10
	230V 3P + E	NA		16	16	16
Cable core size (mm <sup>2</sup> )	230V 1P + E + N	3 x 1.5	3 x 1.5	NA		
	400V 3P + N + E	NA		5 x 2.5	5 x 2.5	5 x 2.5
	230V 3P + E	NA		4 x 2.5	4 x 2.5	4 x 2.5

**2.2.7. Steam connection**

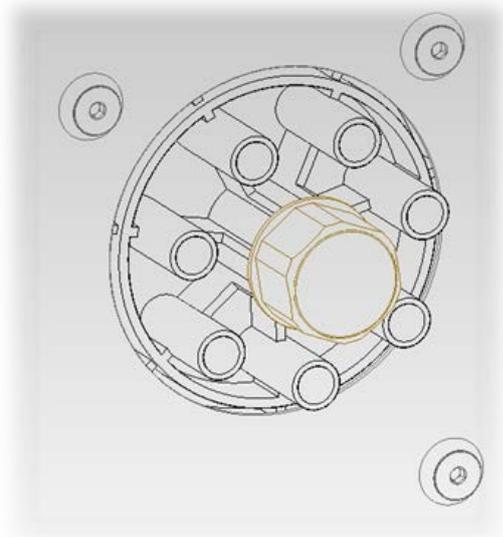
Steam is injected directing into the tub by an electronic steam valve installed in the appliance and controlled by microprocessor.

- The steam pressure must be the range 6 to10 bar.
- Steam connection by water inlet in 3/4" (20/27 mm).
- Fit a steam pressure reduction valve in case of higher pressure.

See installation plan for more details.

**2.2.8. Connection of liquid products**

- Connection of liquid product hoses:



The liquid product collector is fitted with eight connections for liquid soap (7 + 1 central)

**Liquid products must already be diluted when they reach the collector.**

- Power connection for liquid product pumps

**Standard:** Disconnect the product dispenser outlets and connect them to the pumps:

- Pump 1= PRE (prewash) = terminal number 12
- Pump 1= LAV (wash) = terminal number 16
- Pump 3= JAV (bleach) = terminal number 14
- Pump 4= ASS (softener) = terminal number 18

Possibility of controlling four additional pumps (terminals for wiring available in the appliance power supply board (see electrical diagram).

Option to add an extra electronic card to control six additional pumps.

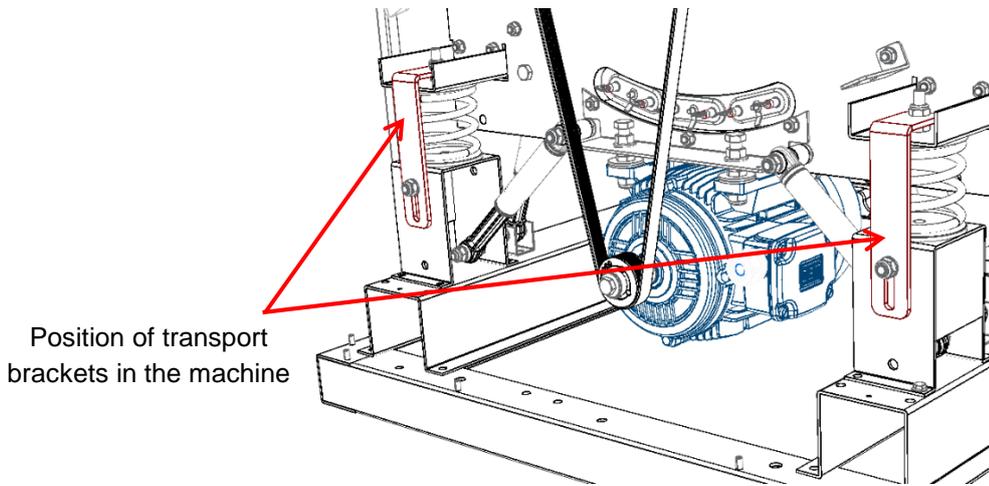
Pumps are controlled by the microprocessor (see Chapter 3).

**2.2.9. First operation**



- At the time of the first operation, make sure that the appliance is stable and level.
- Check that all the connections and outlets are correctly assembled.
- Check the machine is properly earthed.

- Move the four **red** transport brackets (remove the two side panels to access the transport brackets).



- Check the emergency stops, soiled side and clean side.
- Turn the lockable switch to position 1.
- The door safety devices on both soiled and clean sides must be in **locked position** (grey screw positioned towards the closed padlock). See section 4.2.



**Attention:** do not touch or approach any moving parts.  
Replace all the panels on the machine before use.

### 3. INSTRUCTIONS FOR USE

#### 3.1. Recommendations for use

This machine has been designed to wash or treat most materials. Its use for any purpose other than those stated is improper and dangerous.

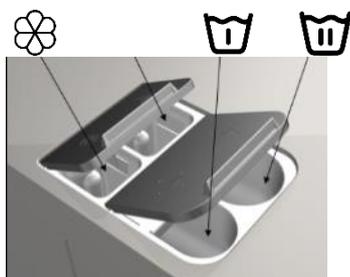
The machine must be filled with its nominal load. Larger or smaller loads must not be permitted.

Clothing must not be washed in bags or textile bags. If this is absolutely necessary, ensure that the appliance is filled to its nominal load to avoid possible unbalanced loads.

Canvas, waterproofed items, mops, fitted carpet or rugs must not be spun.

When a programme ends and before the door is opened, clothes are untangled for 30 seconds. An acoustic signal is heard when the door can be opened after this process.

#### 3.2. Using the product dispenser



-  Powder detergent for the prewash
-  Powder detergent for the main wash
-  Liquid softener
-  Disinfectant (bleach)

 **Attention:** all the products used are harmful and must be handled with care. Read the product suppliers' instructions carefully.

Before any handling: you must put on any safety equipment required, for example gloves, boots, goggles, breathing mask etc.

Laundry products:

- Put the products in the appropriate dispensers before the cycle begins and close the lid.
- Wash and prewash products must be in powder form (or in liquid form if fed by an automatic dosing pump).

There are several types of laundry product, some of which are more easily carried by the water. Consult your supplier who will give you advice.

Bleach:

- 5 -10 g of 12° bleach per litre of water.
- Never fill beyond the lower bend on the bleach dispenser siphon.

Softener:

- Ask your supplier for advice. Dosing varies, depending on the product used.

### 3.3. Interface

#### 3.3.1. Screen OFF

On the soiled side, the appliance is fitted with a touchscreen displaying all the information, from which you can select all the commands displayed on the screen (selection of programme, menu, starting the programme).

The appliance also has a **display on the clean side which is not a touchscreen**, enabling users to see information on the current programme when they are on the clean side.

When the machine is powered, the “OFF” screen appears:

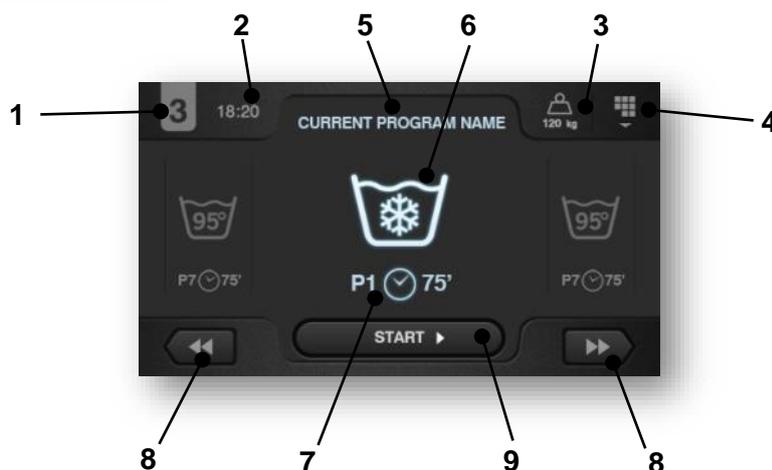


1. **Date:** Date in the selected format (if enabled).
2. **Time:** hours and minutes in the selected format.
3. **Laundrette message:** Message configured by the user (if enabled).
4. **Logo:** The logo displays (if enabled).
5. **Appliance identification:** Appliance identification label (if enabled).

If the “energy saving” option is enabled and there is no activity ten minutes after the washing machine has been switched off, the screen backlight turns off. If any part of the screen is touched, the backlight will light up again.

If you press on the OFF screen, the “main” screen appears.

#### 3.3.2. Main screen



1. **Appliance identification**
2. **Time**
3. **Laundry weight (option)**

4. **Main menu:** Access to the washing machine main menu where the various machine parameters can be configured.
5. **Name of the programme selected**
6. **Temperature of programme selected:** The temperature indicated is the maximum temperature for the programme selected.
7. **Number and duration of the programme selected**
8. **Choice of programme**
9. **Start:** Button to start the programme selected.

### 3.4. Starting a cycle

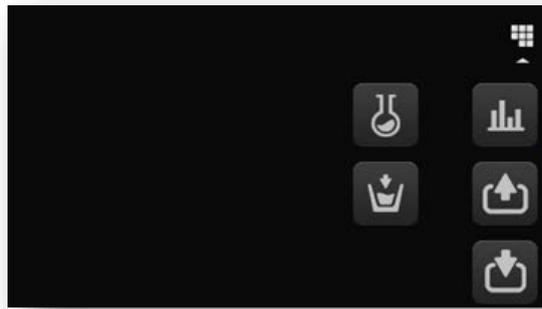
- Open the porthole on the soiled side
- Open the door of the drum
- Load the machine to at least 75% of the maximum appliance load
  - LCA-16 13-17 kg of dry laundry
  - LCA-22 18-24 kg of dry laundry
  - LCA-35 26-35 kg of dry laundry
  - LCA-50 37-52 kg of dry laundry
  - LCA-66 52-70 kg of dry laundry
- Close the door of the drum and the porthole on the soiled side
- Select the programme and press START (ensure that the porthole on the clean side is closed)

When you press START, the programme starts and all the information corresponding to the current programme displays on the screen. Some of these options can be deactivated in the menu.

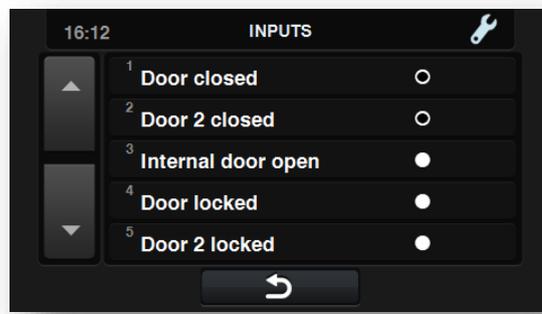


1. **Appliance identification**
2. **Time**
3. **Programme running**
4. **Time remaining:**
5. **Status (graphic):** Graphic showing the washing machine cycle currently running (filling, emptying, washing, rinsing, spinning or untangling).
6. **Status (text)**
7. **Number and name of currently running cycle**
8. **Rapid advance function**
9. **Pause function**
10. **Stop:** Button to stop and cancel the programme. A confirmation message will be requested.

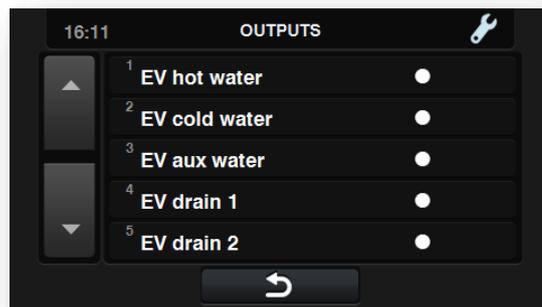
11. Access to the parameter menu.



- 
**Inputs:** The status of each of the inputs is displayed.



- 
**Outputs:** The status of each of the outputs is displayed.



- 
**Settings/values:** Displays parameters and actual values for the currently running cycle (temperature, level, time remaining).



Can be used to edit setting values but is only effective for the current programme.



- 
**Manual dosage:** This section is accessible, the status (on/off) of each dispenser is displayed and the appropriate dose can be enabled /disabled. The options available depend on the configuration of the existing kits. When you leave the dosage window, all dispensers are deactivated.

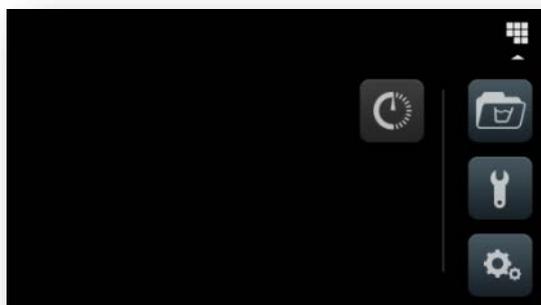


- 
**Manual water inlet:** This section is accessible, the status of each water inlet (ON/OFF) is displayed and the required inlet can be enabled/disabled. The water inlet enabled by the fill logarithm cannot be deactivated. When you leave the water entry window, all manually enabled water intakes are deactivated.



The main washing machine configuration menu is illustrated below. Here, you can configure various washing machine settings and display or download stored data.

This menu is reached from the icon  on the main screen (see section 3.3.2)



-  **Delayed programming:** This enables a wash to be delayed until the date/time required. When you press on the “delayed programming” button, you are asked to enter the date/time required on a screen displaying the programme date/time and the programme name and number. You can opt to run the programme only before the date set or to cancel the programming .
-  **Programme management:** Management of all stored and active programmes. (see section 3.5.1).
-  **System configuration:** Configuration of the different parts of the washing machine.
-  **Maintenance:** (reserved for the technical service – password 1-3-5-7)

### 3.5. Programme details

The appliance has eight standard programmes:

P1 – White heavily soiled	80°C
P2 – White soiled	80°C
P3 – Colour	60°C
P4 – Polyester/cotton	60°C
P5– Energetic	40°C
P6 – Wash	40°C
P7 – Wool	30°C
P8 – Cold	--°C

(For the option to create personalised programmes, see section 3.5.1)

P1 - White HEAVILY SOILED							
Cycle	Time (min)	Water inlet	Level (mm)	Temperature (°C)	Product DISP./Time (s)	Mechanical action (s)	preset speed
Prewash	4	REG	180 - 4	38	PRE - 45	M15-A5	3
Wash	5	REG	120 - 2	80	LAV - 45	M15-A5	3
Rinse 1	2	Cold	180 - 4			M15-A5	3
Rinse 2	4	Cold	150 - 3		JAV - 45	M15-A5	3
Rinse 3	2	Cold	180 - 4			M15-A5	3
Rinse 4	4	Cold	180 - 4		ASS - 45	M15-A5	3
Spin	7						4
Estimated time = 83 minutes							

P2 - WHITE SOILED							
Cycle	Time (min)	Water inlet	Level (mm)	Temperature (°C)	Product DISP./Time (s)	Mechanical action (s)	preset speed
Wash	8	REG	120 - 2	80	LAV - 45	M15-A5	3
Rinse 1	4	Cold	150 - 3		JAV -45	M15-A5	3
Rinse 2	2	Cold	180 - 4			M15-A5	3
Rinse 3	4	Cold	180 - 4		ASS - 45	M15-A5	3
Spin	7						4
Estimated time = 64 minutes							

P3 - COLOUR							
Cycle	Time (min)	Water inlet	Level (mm)	Temperature (°C)	Product DISP./Time (s)	Mechanical action (s)	preset speed
Prewash	3	REG	180 - 4	30	PRE - 45	M15-A5	3
Wash	5	REG	120 - 2	60	LAV - 45	M15-A5	3
Rinse 1	2	Cold	180 - 4			M15-A5	3
Rinse 2	2	Cold	180 - 4			M15-A5	3
Rinse 3	4	Cold	180 - 4		ASS - 45	M15-A5	3
Spin	6						4
Estimated time = 63 minutes							

P4 - Polyester-cotton							
Cycle	Time (min)	Water inlet	Level (mm)	Temperature (°C)	Product DISP./Time (s)	Mechanical action (s)	speed (rpm)
Wash	8	REG	120 - 2	60	LAV - 45	M15-A5	3
Rinse 1	4	Cold	150 - 3		JAV -45	M15-A5	3
Rinse 2	2	Cold	180 - 4			M15-A5	3
Rinse 3	4	Cold	180 - 4		ASS - 45	M15-A5	3
Spin	6						3
Estimated time = 53 minutes							

P5 - Energetic 40°C							
Cycle	Time (min)	Water inlet	Level (mm)	Temperature (°C)	Product DISP./Time (s)	Mechanical action (s)	preset speed
Prewash	3	REG	180 - 4	30	PRE - 45	M15-A5	3
Wash	4	REG	120 - 2	40	LAV - 45	M15-A5	3
Rinse 1	2	Cold	180 - 4			M15-A5	3
Rinse 2	2	Cold	180 - 4			M15-A5	3
Rinse 3	4	Cold	180 - 4		ASS - 45	M15-A5	3
Spin	6						4
Estimated time = 55 minutes							

P6 - Wash 40°C							
Cycle	Time (min)	Water inlet	Level (mm)	Temperature (°C)	Product DISP./Time (s)	Mechanical action (s)	preset speed
Wash	6	REG	120 - 2	40	LAV - 45	M15-A5	3
Rinse 1	2	Cold	180 - 4			M15-A5	3
Rinse 2	2	Cold	180 - 4			M15-A5	3
Rinse 3	4	Cold	180 - 4		ASS - 45	M15-A5	3
Spin	6						4
Estimated time = 43 minutes							

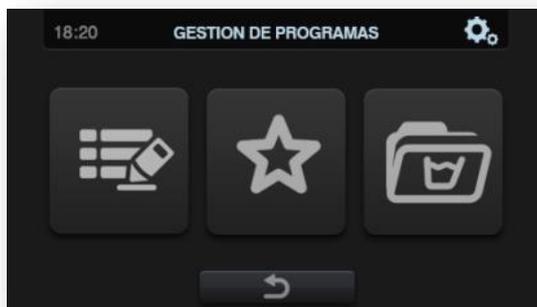
P7 - Wool							
Cycle	Time (min)	Water inlet	Level (mm)	Temperature (°C)	Product DISP./Time (s)	Mechanical action (s)	preset speed
Wash	8	REG	120 - 2	40	LAV - 45	M5-A5	3
Rinse 1	3	Cold	180 - 4			M5-A5	3
Rinse 2	4	Cold	180 - 4		ASS - 45	M5-A5	3
Spin	3						2
Estimated time = 34 minutes							

P8 - Cold							
Cycle	Time (min)	Water inlet	Level (mm)	Temperature (°C)	Product DISP./Time (s)	Mechanical action (s)	preset speed
Wash	8	REG	120 - 2		LAV - 45	M5-A5	3
Rinse 1	3	Cold	180 - 4			M5-A5	3
Rinse 2	4	Cold	180 - 4		ASS - 45	M5-A5	3
Spin	3						2
Estimated time = 27 minutes							

**3.5.1. Programme management**

In this sub-menu, you can manage all the programmes, both those selected by the user and those found in the library. To do this, choose between “Cycle library”, “My programmes” and “Programme library”.

Access: [main screen]  → [main menu] 



There is a library in which all the programmes and cycles are stored, including programmes stored by default and programmes created or imported by the user.

**3.5.2. My programmes**

Programmes in the “My programmes” folder are those which are displayed on the main screen.



Press the button to add or delete programmes. The screen displays the programme library. The programmes in “My programmes” are displayed here and you can select/deselect each programme to add it to or remove it from the favourites list.



Use the “up arrow” and “down arrow” keys to change the position of any programme in the list of favourites, which can be arranged in any order required.

Press on the modify button to modify the selected programme or to edit it in the programme library.



Press OK or cancel to return to “My programmes”.

### 3.5.3. Programme library

Programmes can be added, copied, modified or deleted. New programmes can be imported or exported to a USB port.



- 
**Creation of programmes:** creation of new washing programmes using the cycles existing in the library. When this button is used, the user is asked to enter the name of the new programme. The following screen is displayed (without any cycles) so that cycles from the cycles library can be added.



Cycles can be added in the cycles library. The cycles you wish to view can be filtered by cycle type. After you have selected the cycle, the cycle library parameters can be consulted before including them in the programme you are creating.



Each programme is a collection of parameters grouped in cycles which are not linked to any of the cycles in the library.

-  **Copy programme:** Copy of a programme found in the library, with a new name.
-  **Modify programme:** Changes to the name and cycles of the programme. You can add, modify, delete or re-order the existing cycles. When a programme is modified you can add or delete cycles from the cycle library in the same way as on the creation of a new programme.  
The parameters of a cycle are read-only when programmes are created; they can be changed during the modify programme procedure.
-  **Delete programme:** Delete the programmes stored in the library.
-  **Import programme:** Used to import new programmes from a USB port. When the USB key is enabled, only files with a .prg extension are displayed, along with the folders. There is a button to select all the programmes in the folder currently open. If a programme with the same name as an existing programme is imported, you will be asked if you want to replace the programme or cancel the operation. As there may be many such programmes, there is a box in which to select “do the same in all cases”.

-  **Export programme:** is used to export existing programmes in the library to a USB port.



You can select the programmes that you want to export.

You can select all programmes or programmes saved as favourites. The number of programmes selected is displayed at all times.

All the programmes selected are saved in a folder (model + series no) and each programme will represent one file.

#### **3.5.4. Cycle library**

The name of each cycle can be edited in the cycle library. Once included in a programme, the name displayed for the cycle will be different when information about the cycle is displayed. This will be a dynamic name including the type of cycle and a parameter (temperature, rpm).

The cycle library is editable. Existing cycles can be created, edited, copied or deleted.

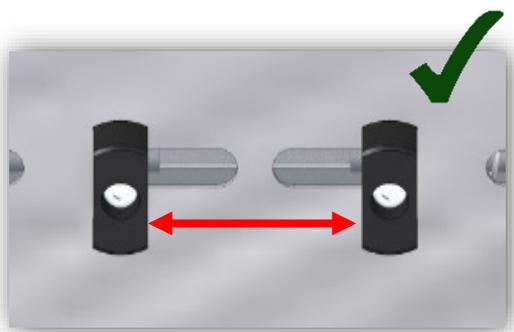
## 4. TECHNICAL INSTRUCTIONS

### 4.1. Closing the drum door

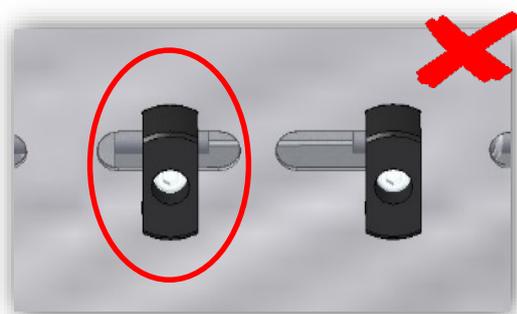
**Important:** the system for closing the drum door consists of a lock with two latches and two buttons for operating the two latches.

Ensure that the latches are properly positioned: buttons at least 5 cm apart (faulty closure will cause the lock parts to break and risk damaging the doors).

Failure to comply with this instruction will void the warranty; repairs to damage thus caused will be therefore automatically be at the customer's expense.



**Correctly locked** drum door



**Incorrectly locked** drum door

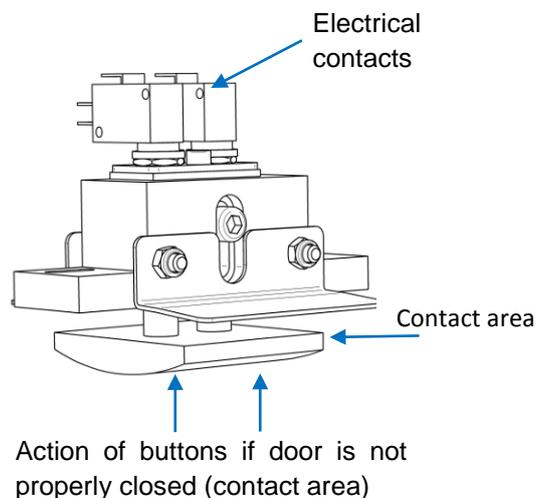
The machine is fitted with a safety system above the tub which detects the distance between the closure buttons on the drum door.

If the cycle starts while the drum door is incorrectly locked, the cycle is stopped and the error message ERROR 03, "Internal door unlocked" is displayed on the screen (see list of error codes).

The porthole on the soiled side automatically unlocks to allow the closure of the drum door to be checked.

#### Detailed view of the drum door safety system

The contact area measures the distance between the closing latches on the drum door. If the drum door is not properly closed, the latches raise the contact area which activates two electric contacts which stop the cycle that is currently running and display the error on screen.



 **It is essential that this system is regularly checked and cleaned, because hard and scale-forming water can obstruct the mechanism and its proper operation (every 6 months – see maintenance schedule)**

## 4.2. Opening the portholes

It may be necessary to unlock the porthole. This can be done in two different ways.

### 4.2.1. Opening the porthole, soiled side

The porthole can be opened manually by pressing the button provided for the purpose as indicated below. The cycle must be stopped, and only the door on the soiled side can be opened like this.

Button for unlocking the porthole on the soiled side (machine stopped)

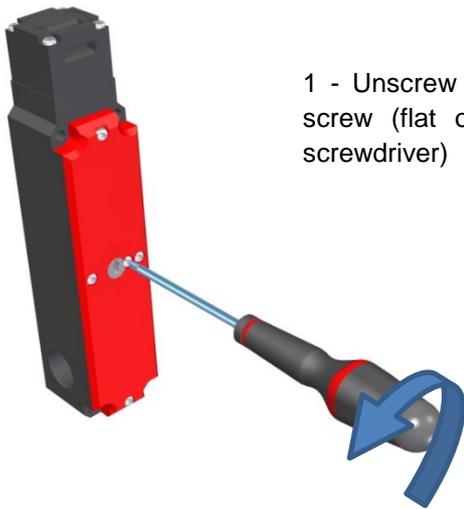


### 4.2.2. Manual opening of portholes in the event of loss of power

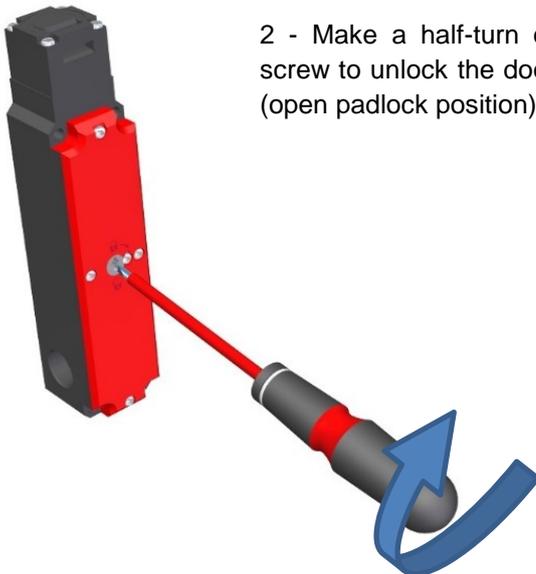
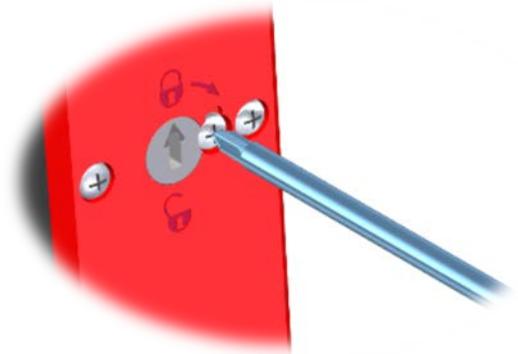


Access the door safety device through the hole provided at the bottom left of the porthole, **then unlock.**





1 - Unscrew the mounting screw (flat or cross-head screwdriver)

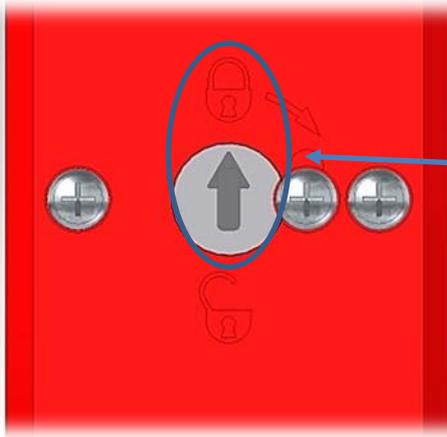


2 - Make a half-turn of the grey screw to unlock the door manually (open padlock position)



**IMPORTANT:** Return the grey screw to locked position (padlock closed, see below) before starting the machine normally.

In normal operation, the door safety devices must be locked as indicated below:



**IMPORTANT:** In normal operation, the door safety devices must be in locked position (padlock closed) as shown by the arrow on the grey screw.

In this case, when the porthole is closed and locked, it can no longer be opened.

The portholes unlock automatically in the course of the cycle for loading and unloading the appliance.

## 5. TROUBLESHOOTING AND ERROR CODES

### Miscellaneous faults

FAULTS	CHECKS
Screen does not light up	Check that the main circuit breaker is switched on
	Check that the section switch is in the ON position
	Check that the emergency stops are not activated
	Check the control fuse
Cycle does not start	Check that the soiled side and clean side doors are closed
	Check that the door safety devices are properly locked on both soiled and clean side
The cycle starts but no water enters the machine	Check that the inlet valves are open
	Check that the electronic inlet valve filters are not blocked
	Check / clean the electronic inlet valves
The cycle starts but the water inflow does not stop	Check that no foreign body is preventing the closure of the drainage valve
	Check/clean the decompression tank and the tube of the pressure switch
	Check / clean the electronic inlet valves
The cycle starts but there is no heating	Check the correct operation of heating elements (electric heating)
	Check that the steam is entering the appliance (steam heating)
	Check the electronic steam valve (steam heating)
	Check that there is no leakage at the drainage valve (not enough water, no heat)
The machine does not drain	Exhaust hose blocked
	Drainage valve out of service or stuck in closed position
The machine does not spin	Incorrect loading of the laundry (insufficient or excess load)
	Exhaust hose blocked
	Drainage valve out of service or stuck in closed position

**For all other problems, contact your technical service or your vendor**

## List of error codes

ERROR	DESCRIPTION	CAUSE/SOLUTION
E1	No current detected	If the power fails during a cycle, you can continue the programme in progress (YES) or halt the programme in progress (CANCEL)
E2	Fault in porthole closing	The safety device on the door on either the soiled side or the clean side is not locked when the programme starts or unlocks during the cycle
E3	Drainage fault	Check the drainage valve/Clean the drainage valve
E5	Water inlet fault	Check the general water inlets/ check the electronic drainage valves / Check the drainage valve (always open) / check or clean the pressure switch tube
E6	Heating defect	The water temperature does not rise when the heating is enabled. Check the heating elements or electronic steam valve and the water level
E7	Maximum temperature reached	The water temperature reaches 95°C. Check the heating controls, the heating switch(es) or the electronic steam valve
E8	Movement error	The door position detector is faulty or incorrectly set, the controller has crashed (cut electrical power for at least a minute to reset it) and/or is faulty.
E9	Balance error	The balance safety device(s) are engaged six times consecutively during the spin cycle
E10	Maximum balance error	The balance safety device contact(s) are open at the start of the spin cycle
E11	Hot laundry	The temperature of the water is above 50°C when the programme finishes or is stopped during the cycle. This prevents the portholes from unlocking
E12	Unlocking error	The machine fails to unlock the portholes electrically after three attempts. DO NOT FORCE THE DOOR, CONTACT TECHNICAL SERVICE
E13	Model error	No inputs relative to the machine models are active (CN5 connector of the main CPET card)
E17	T1 FULL	WATER RECOVERY option active , too high a level detected in DISP 1
E18	T1 EMPTY	WATER RECOVERY option active , minimum level detected when a request to fill DISP 1 is in place
E19	T2 FULL	WATER RECOVERY option active, too high a level detected in DISP 2.
E20	T2 EMPTY	WATER RECOVERY option active , minimum level detected when a request to fill DISP 2 is in place

## List of error codes

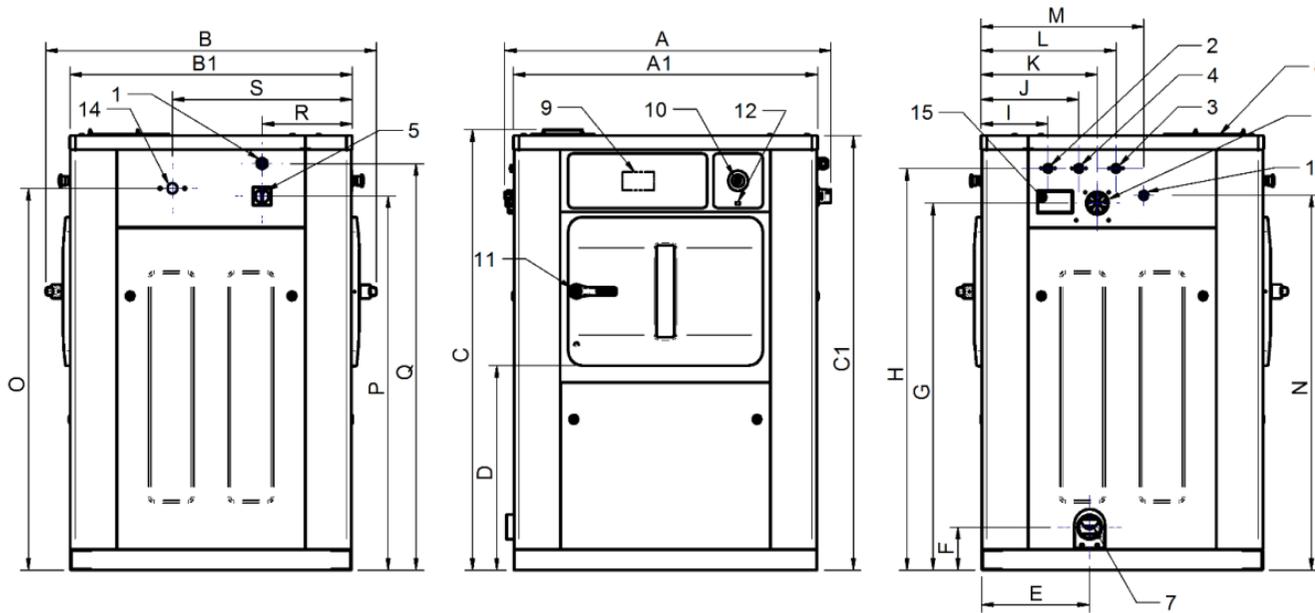
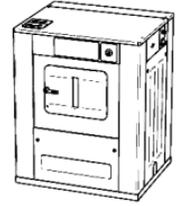
ERROR	DESCRIPTION	CAUSE/SOLUTION
E21	T3 FULL	WATER RECOVERY option active, too high a level detected in DISP 3.
E22	T3 EMPTY	WATER RECOVERY option active , minimum level detected when a request to fill DISP 3 is in place
E23	Weight error	WEIGHING option active. This message displays when the machine detects that there is no signal from the weight sensor, the weight is below 0 or above 20% of the nominal load of the model configured
E24	Transfer error	If the transfer between the PC and the USB port was not carried out correctly, this warning is displayed. OK to accept.
E25	CONTROL/AUXILIARY CONTROL COMMUNICATION ERROR	Communication problem between main and auxiliary card
E26	Motor/controller error	The main card is sending commands to the controller but detects no rotation
E27	NTC out of range error	The temperature sensor is disconnected from the card or faulty.
E28	Pressure sensor error	The analogue pressure switch (PRA) detects pressure (water level) outside its operating range or is faulty
E29	Position error	At the start of the cycle <b><u>the door safety devices are not locked (soiled side and/or clean side)</u></b> , the position detector is incorrectly set or faulty (see section 4.2.2)
E30	Incorrectly locked drum door	See TECHNICAL INSTRUCTIONS section 4 - Closing the drum door

## 6. PREVENTATIVE MAINTENANCE

ITEMS TO BE CHECKED	FREQUENCY
Check the correct operation of the safety devices ( <b>drum door safety device</b> - Balance - porthole safety - emergency stop)	Every month
General cleaning of the appliance	
Cleaning of the product dispenser	
Cleaning water inlet filters	Every 3 months
Cleaning of the hydraulic drainage circuit and electronic drainage valve	
Check porthole door closure systems (adjustment, clamping)	
Check the proper operation of the drum door closure system	
Check on heating elements (connectors, clamping, current)	
Check on electrical connections of the section switch	Every 6 months
Clean the decompression tank and the tube of the pressure switch (disconnect it from the analogue pressure switch)	
Disassembly and cleaning of the drum door closure system	
Greasing the bearings/rollers (use high-temperature non graphite lubricant)	
Visual inspection/cleaning of drive belts and pulley	
Check the floor fixing	Every year
General check on tightness of all mounting hardware on the machine	
General check on connections of electrical components	
Check on springs and dampers	

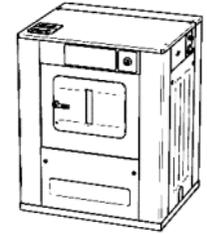
ENGLISH

# LCA-16 – LCA-22 principal dimensions

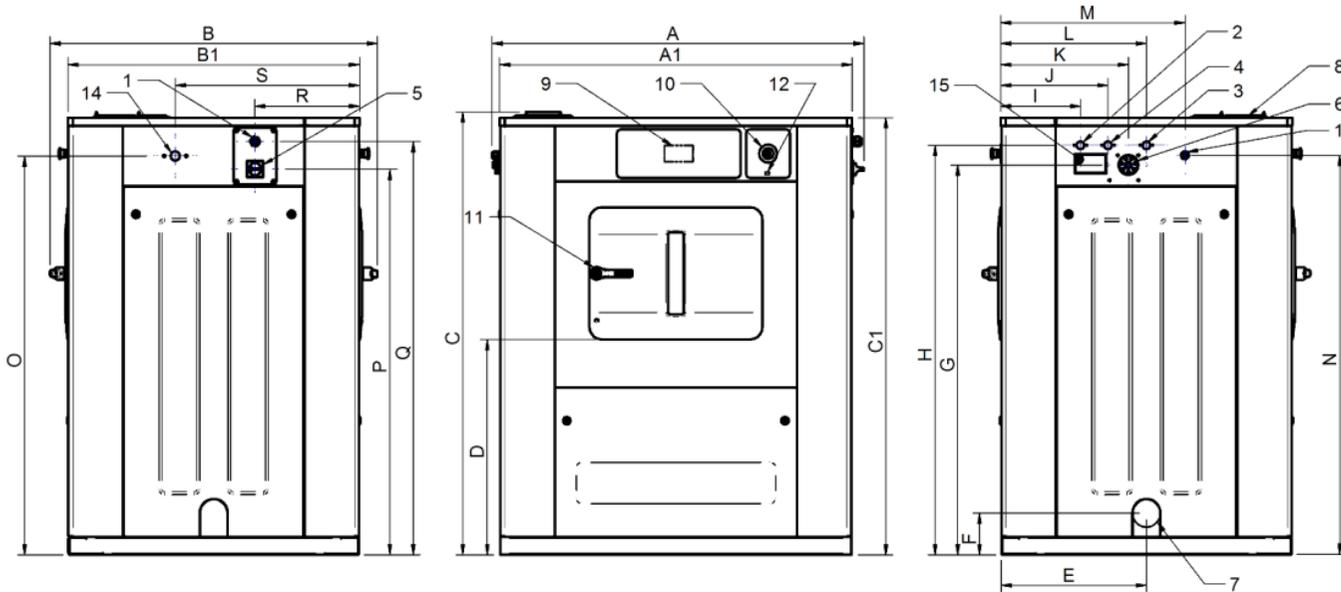


1	Electrical connection
2	Hot water
3	Cold water
4	Softened water
5	Main switch
6	Liquid product inlet
7	Drainage
8	Product dispenser
9	Control panel
10	Emergency stop button
11	Door opening
12	Port USB
13	Connection of dosing pumps
14	Steam inlet
15	Event

	A	B	C	A1	B1	C1	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
LCA-16	1045	1071	1417	984	914	1398	658	350	138	1180	1292	216	316	377	436	527	1205	1228	1203	1308	292	582
LCA-22	1245	1071	1417	1184	914	1398	658	350	138	1180	1292	216	316	377	436	527	1205	1228	1203	1308	292	582

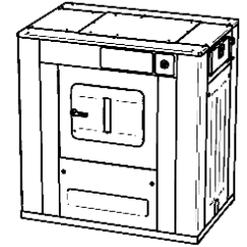


# LCA-35 principal dimensions

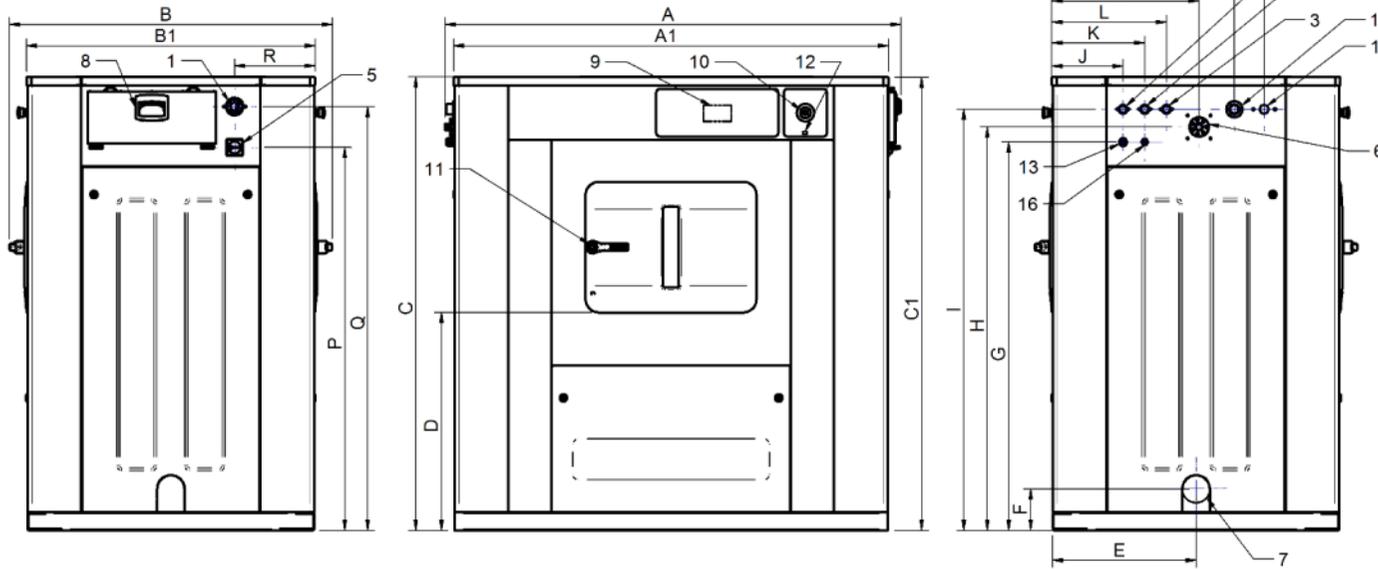


1	Electrical connection
2	Hot water
3	Cold water
4	Softened water
5	Main switch
6	Liquid product inlet
7	Drainage
8	Product dispenser
9	Control panel
10	Emergency stop button
11	Door opening
12	USB port
13	Connection of dosing pumps
14	Steam inlet
15	Event

	A	B	C	A1	B1	C1	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
LCA-35	1352	1191	1601	1280	1060	1580	778	528	152	1409	1480	290	390	465	530	670	1441	1441	1394	1494	380	670

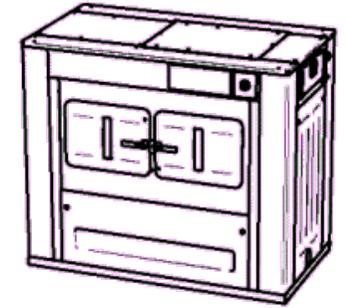


# LCA-50 principal dimensions

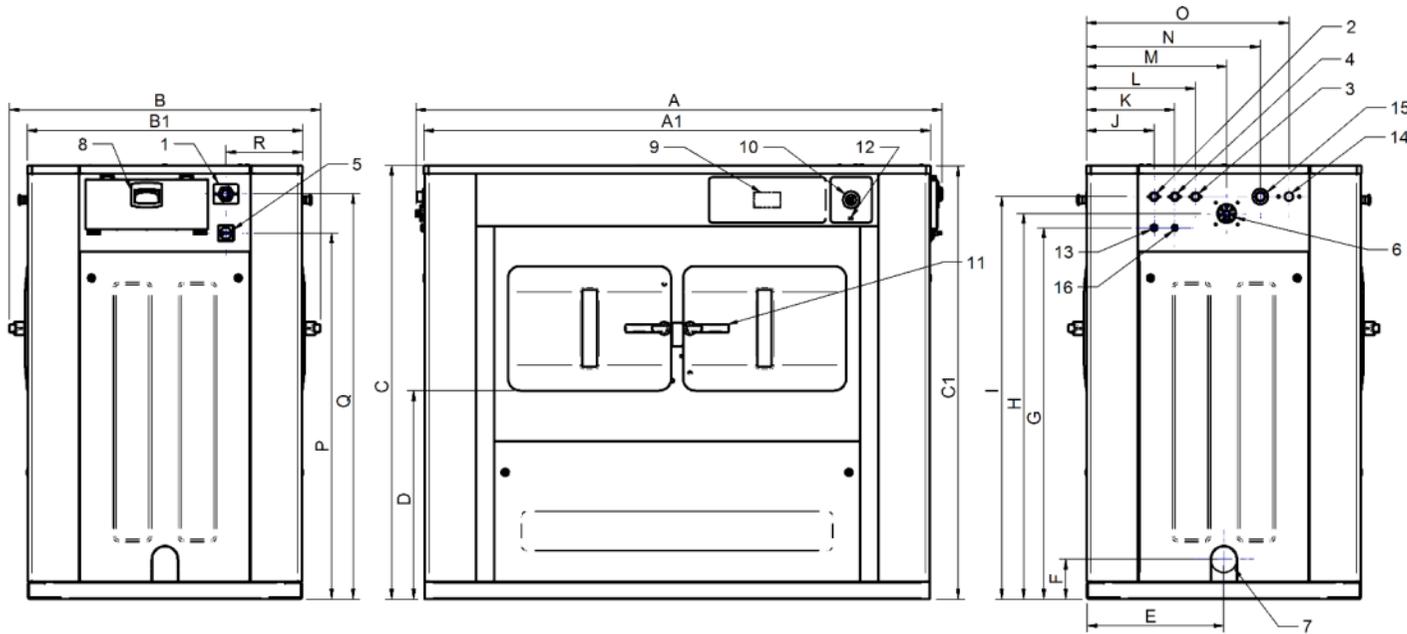


1	Electrical connection
2	Hot water
3	Cold water
4	Softened water
5	Main switch
6	Liquid product inlet
7	Drainage
8	Product dispenser
9	Control panel
10	Emergency stop button
11	Door opening
12	USB port
13	Connection of dosing pumps
14	Steam inlet
15	Event
16	Water for product dispenser

	A	B	C	A1	B1	C1	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
LCA-50	1679	1190	1662	1602	1062	1660	798	528	152	1423	1478	1543	262	342	422	542	672	782	1403	1553	296



# LCA-66 principal dimensions



1	Electrical connection
2	Hot water
3	Cold water
4	Softened water
5	Main switch
6	Liquid product connection
7	Drainage
8	Product dispenser
9	Control panel
10	Emergency stop button
11	Door opening
12	USB port
13	Connection of dosing pumps
14	Steam connection
15	Event
16	Water for product dispenser

	A	B	C	A1	B1	C1	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
LCA-66	2032	1201	1662	1955	1062	1660	798	528	152	1423	1478	1543	262	342	422	542	672	782	1403	1553	296