

# *Veromatic*

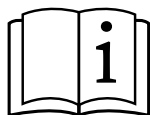
BEVERAGE MACHINES TECHNOLOGY

## *Service manual*

### *Attento instant*

SL11

Instant coffee vending machine



Technical info and service guidelines

EN

## Preface

Please read this manual carefully before executing service labour to the dispenser.

This service manual is intended exclusively for technical support to be executed by a qualified or licensed mechanic. The demands for a qualified mechanic are:

- The mechanic is well known in the workings of the dispenser/machine, by training at Veromatic International BV or an equal training elsewhere (dealer for instance).
- The mechanic is well known of all laws and regulations in the area of safety, electrical connections/symbols, etc.
- The mechanic uses the instructions and schemes valid for this machine type/model. These technical documents are supplied by the dealer.

For service labour is required:

- This Service manual
- The User manual supplied with all machines
- The Spare parts manual
- Tooling.

### Attention!

**This manual is NOT intended for the end user or the operator of the dispenser. They are referred to the user manual supplied with the machine.**

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## Liability

Although this manual has been produced with the utmost care, no legal claims can be derived here from. Veromatic International B.V. maintains the right to change the product without prior notice.

MANUFACTURER:

**Veromatic**  
BEVERAGE MACHINES TECHNOLOGY

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# 1. Safety regulations

This machine is exclusively intended for the preparation of hot drinks, such as espresso, coffee, cappuccino and hot chocolate. These products are based on ingredients such as fresh ground beans and freeze dried powder. Using the hot water key, other hot drinks can be prepared, such as hot tea.

It is forbidden to use the machine for other purposes than described above. Do not place the machine in areas where high pressure or steam is used to clean.

Read the directions and especially these safety guidelines, before you install or use this machine. Keep this manual with the machine to be able to consult them at a later time.

The following symbols indicate WARNINGS or safety risks:

## **WARNING!**

Indicates a risk situation that may cause severe personal injury, danger to life and/or damage to the machine.

## **WARNING!**

Electrical danger.

## **CAUTION!**

Indicates a hazardous situation which could result in minor personal injury and/or damage to the machine.

### 1.1. Users' qualifications

This machine is not intended for use by persons with reduced physical, sensory or mental capacities, or lack of experience and knowledge, unless they have been supervised or have been instructed about the use of the device by a person responsible for their safety.

Children may not operate the device and have to be supervised to ensure that they cannot play with the device.

### 1.2. Use environment

The machine may only be used indoors, not outdoors. Place in a frost free area (between 10 and 32° C.) where it is not exposed to humidity or excessive dust and cannot be sprayed with liquids.

### 1.3. Original spare parts

When replacing parts, only use original (spare) parts, available from Veromatic International B.V. This also applies for the options mentioned. Parts must meet strict quality demands through which the machine will continue to function optimally. When parts are used that are not original then the warranty is null and void and Veromatic International B.V. is not responsible for any possible damage that may occur as a result thereof.

### 1.4. Hygiene

For a good hygiene and safety it is important to maintain the machine according to the regulations. Clean the product canisters and the removable parts that come into contact with food according to the regulations in this manual and make sure they are thoroughly dry before replacing them in the machine.

### 1.5. Ingredients

Observe the storage and application regulations on the packaging of the ingredients. Make sure that the ingredients do not become moist. Remove the ingredients that have been in the canister too long or if you have doubts about their quality.

### 1.6. Ventilation openings

Prevent objects or liquids from entering the machine through the ventilation openings. Immediately pull out the plug if liquids enter the machine inadvertently. Never spray water with a hose or other implement in the direction of the machine.

### 1.7. Water filter

The water filter (dealer installed option) has to be replaced every 6 months, or after about 30,000 drinks. Your dealer can inform you about this. A water filter used for too long is detrimental for the operation of the machine and can be dangerous for the health. Do not use the water filter in areas where the water is not safe microbiologically or in areas where the quality of the water is unknown. Follow the installation

regulations as described in paragraph 3.1 or follow the installation directions for the water filter.

## 1.8. Water lock

Veromatic International BV prescribes the use of a water lock at the tap (Veromatic order code HL-00190) for safeguarding against continuously flowing water in case of leakage and does not accept any responsibility with regard to water damage, in case the machine gets installed without this water lock.

## 1.9. Water temperature

In the machine there is also a water boiler with a water temperature of 80-95°C. The water remains hot for a long time, even when the machine has been turned off.

Keep your hands away from the spout / cup when taking a drink or when rinsing, to prevent burns caused by the hot water. The drink will be dispensed almost immediately after making the selection.

## 1.10. Electrical safety

### **WARNING:**

Do not use objects to poke into the different openings of the machine and do not spray water into or on the machine. The machine may also not be placed in areas where cleaning takes place with steam or high pressure devices.

Some parts as the EMI filter or mains switch, may still carry voltage after switching off the machine. It is therefore important that during installation or service, where tools are required, the plug is always removed from the socket so that the machine is completely de-energized and no errors can be made.

Prior to removing the plug, the mains switch should always be set to the OFF position first to release any residual tension in components.

## 1.11. Liability and warranty

With reference to the (Metaalunie) terms of delivery of Veromatic International BV, it is not liable and liable for warranty as a result of:

- Normal wear and tear
- External damage
- Faulty and injudicious use
- Installation, assembly, modification or repair not carried out according to the manufacturer's guidelines
- Not or incorrectly performed maintenance
- Defects in or unsuitability of goods or used materials or tools by instructions or third parties.

## 1.12. Personal safety

Mind the following points before performing maintenance, to ensure a safe working environment:

Make sure the machine complies to the connection requirements.

1. When working on the machine, make sure the machine is without power.
  - a. First switch off the mains switch on the machine to release residual voltage.
  - b. Then remove the mains cable from the wall socket. If the maintenance requires to have the machine on power, be very careful.
2. The water in the boiler remains hot for a long time, even after removing the power. Be careful to avoid burns of hot water.
3. Do not stick sharp objects through openings, unless specific maintenance actions require this, and no damage may be done to wirings or components.
4. Do not put drinks or containers on top of the machine.
5. Do not clean the internals of the machine with wet cloths when safety covers are removed.
6. Never aim a water hose to the machine.
7. Check if removed earthing connections are re-applied the correct way and perform their function as intended.

## 2. Qualifications

In using, maintaining the coffee machine, distinction is made between different people who have different authorizations. The types are:

### 2.1. User types

User	Taking consumptions Emptying drip tray and waste bin (espresso only)
Operator	All of user Access to the maintenance area with the door key Refilling ingredients Cleaning the machine Start rinse/cleaning programs Detach and clean mixers and components where no tools are needed Use service menu for simple operations e.g. counters, machine mode, payment mode
Service technician	All of operator Installing the machine All service operations where tools are required to open/remove components Using the settings menu with the designated password Replacing components with original parts Decommissioning the machine
Service expert	All of operator Has access to more delicate settings of the settings menu, protected with a password

#### IMPORTANT NOTES:

**All areas that do NOT require tools, belong to the maintenance area.**

**All areas that require tools belong to the service area.**

**Regular maintenance in the maintenance area may be done by an operator. An operator is a trained person, trained in the cleaning and refilling of the machine. The training must have been done by a qualified service technician or similar designated person of the dealer who has installed the machine. A dealer appointed technician may be the operator, or an employee of the client thus trained as stated.**

**An operator may never perform service actions to the machine. Service actions are technical operations such as replacing of parts, or certain settings, which only a qualified technician may perform. Access to these areas are protected by the need of tools to open.**

**Access to the service area is restricted to persons who have knowledge and practical experience with the machine (a qualified and trained service technician), in particular with regard to safety and hygiene.**

## 2.2. Repairs

### **WARNING:**

**Repairs are understood to be anything for which tools are needed to work on the machine. Those repairs may only be done by authorized technicians. For any repairs only original parts may be used.**

**For your safety understand that the machine works with 230 VAC, 230 VDC and hot water. Earthing connections and several sensors are provided for a safe installation and use of the machine.**

The demands made from a technician are:

- The technician has to be informed of all laws and regulations regarding electrical connections, electrical symbols, etc.
- The technician is very familiar with the machine, by training with Veromatic International B.V. or similar training obtained elsewhere.
- The technician uses the instructions, diagrams etc., applicable for this type and model.
- The technician takes all security precautions for himself and others so as not to be exposed to any danger, electrical as well as mechanical.
- The technician is well aware of the applicable guidelines regarding hygiene.

The technician must take the following precautions while working on this machine:

1. Unplug the plug from the wall outlet.
2. Observe all general safety direction
3. Check to see if ground connections that have been removed are properly installed and functioning again. Failing to do so may cause a dangerous situation for both mechanic as users.
4. Micro-electronics are used in this machine. It is therefore necessary to wear a grounded bracelet with such service operations. For the same reason, the printed circuit boards that need to be repaired must be packaged in antistatic packaging material before they are transported.

To replace parts, use only original (spare) parts, issued by Veromatic International B.V. These satisfy strict quality demands which assure that the machine continues to function optimally. If original parts are not used, the warranty is null and void and Veromatic International B.V. is not responsible for possible damages resulting thereof.

### 3. Transport and unpacking

This machine may only be transported in the original packaging. The packaging contains the necessary instructions for storing and transporting this machine (see Figure 1).

#### Temperature

In operation	+10° tot +32°	Celsius
During transport and storage	+0° tot +50°	Celsius

#### Packaging dimensions and shipping weight

Height	67	cm
Width	39	cm
Depth	66	cm
Shipping weight	31	kg

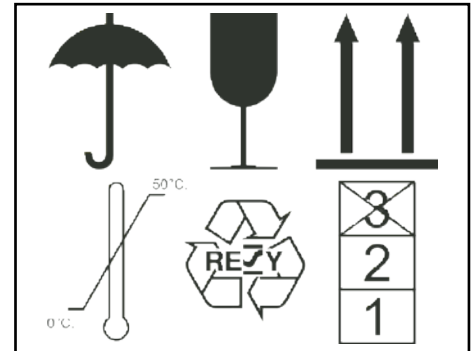


Figure 1.

Check the packaging for damage. A damaged machine may be unsafe and may not be put into operation. In this case, contact your dealer.

Keep the packaging if the machine is expected to be transported again in the future.

## 4. Machine overview

### 4.1. General

This is an automatic machine for preparing hot drinks. You place a cup, glass or jug under the correct spout. You then select a product and optionally the settings for your consumption on the screen. The consumption is dispensed in the placed cup, glass or jug.

### 4.2. User area

The user has only access to the outside of the machine, choosing and consuming drinks. Also the drip tray which is accessible without a door key, may be emptied if the machine mentions it to be full. The user area is shown in "Figure 2."

Additional in the Attento (espresso only), the waste bin may also be emptied and cleaned by the user, as it is accessible without the key by opening the lower door. In instant this is not possible by absence of a waste bin and no separate openable lower door.

### 4.3. Maintenance area

The operator has access to the maintenance area, where basic cleaning and refilling is required. Access is possible by the operator only by means of opening the door with the door key. Opening the door will also activate the rinse programs on the display needed for cleaning.

Further access to internal parts is prohibited and protected by the need for tools.

See Figure 2 and Figure 3

1. Canister lock
2. Canister for instant product (4x)
3. Front door
4. touch screen
5. Door lock
6. Cabinet
7. Cup tray
8. Drip tray and grille
9. Visual coffee outlet
10. Hot water outlet
11. Cup sensor
12. On-off switch
13. Power cord connection
14. water inlet
15. Canister spout
16. Mixing system (3x)
17. Hot water hose
18. Coffee outlet
19. USB
20. Service mode switch

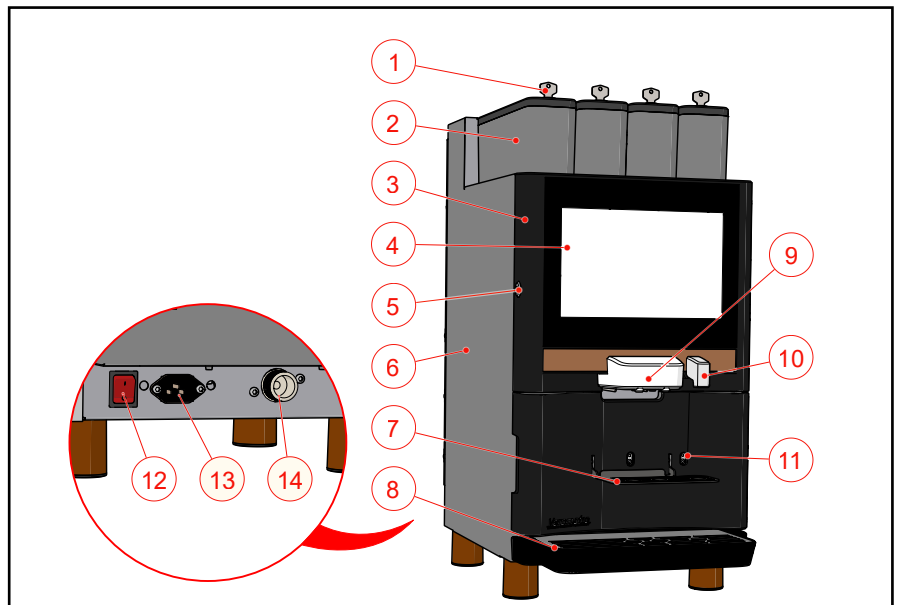


Figure 2. User area

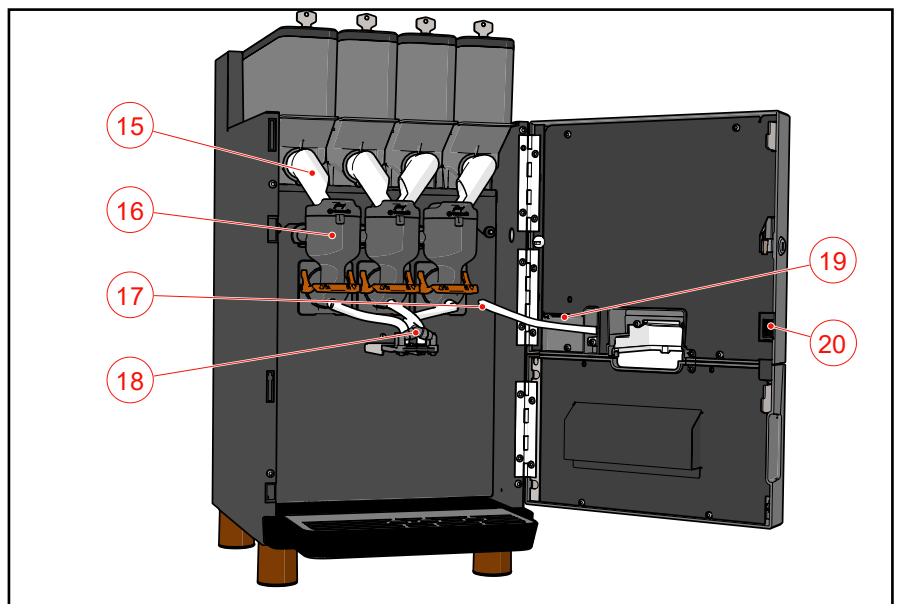


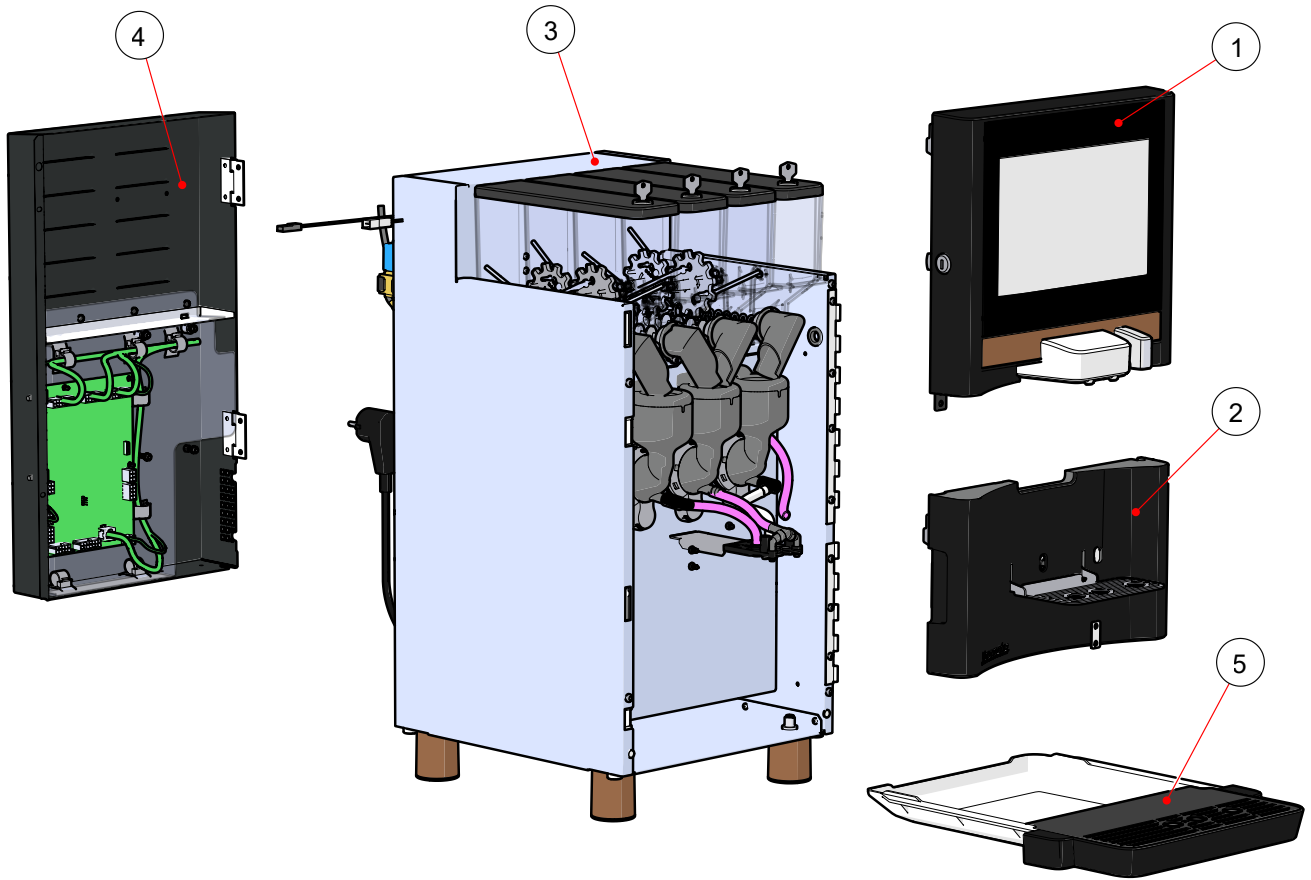
Figure 3. Maintenance area

## 5. Service area

The service area is every space where tools are needed to gain access, for instance to replace a motor. These areas are only meant for trained service technician

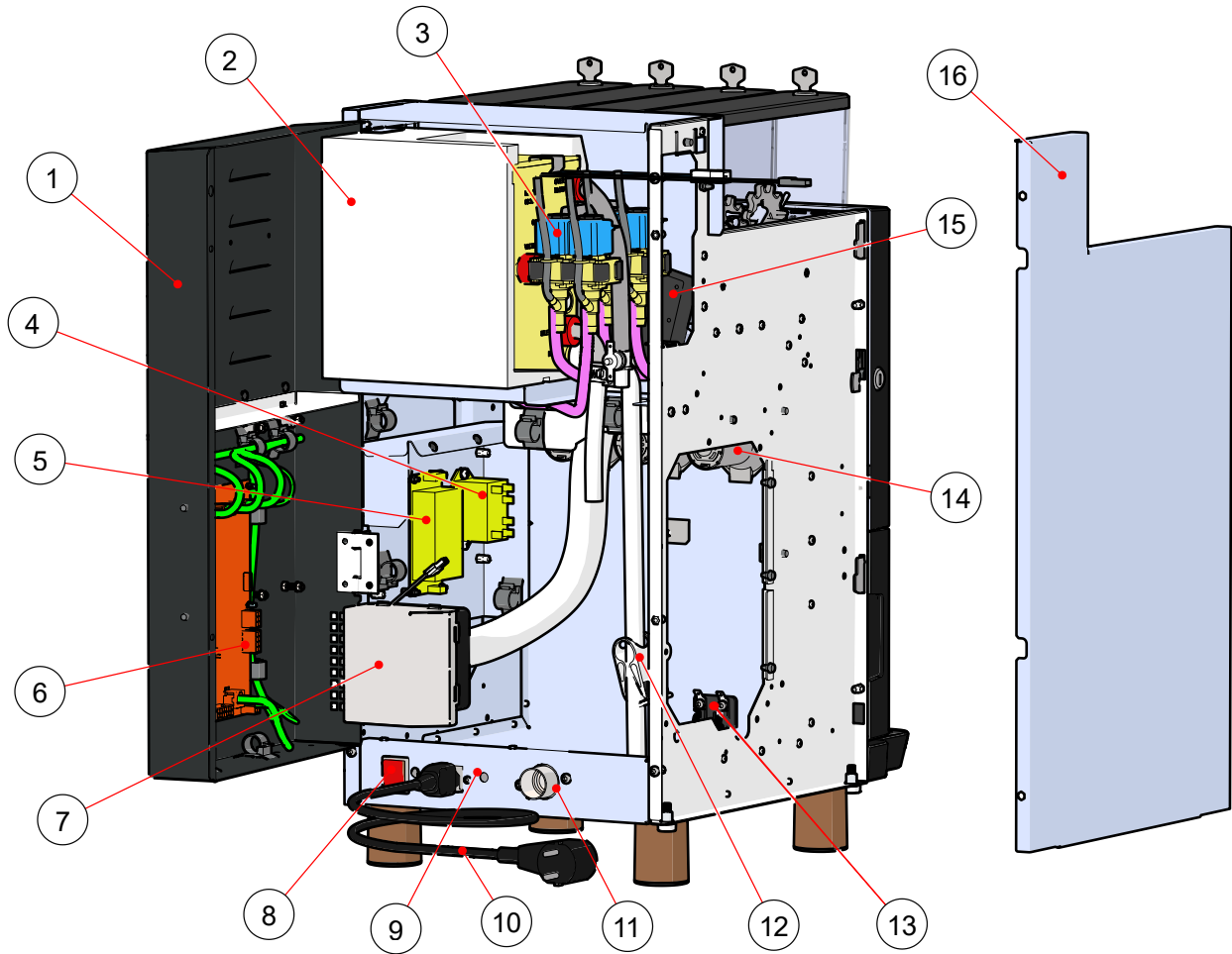
### 5.1. Main differentiation

The main machine is identified by the following base assemblies:



No	Description
1	Upper door part
2	Lower door part
3	Cabinet
4	Rear door
5	Additional components
5a	<i>Drip tray</i>
5b	<i>Ingredient canisters</i>

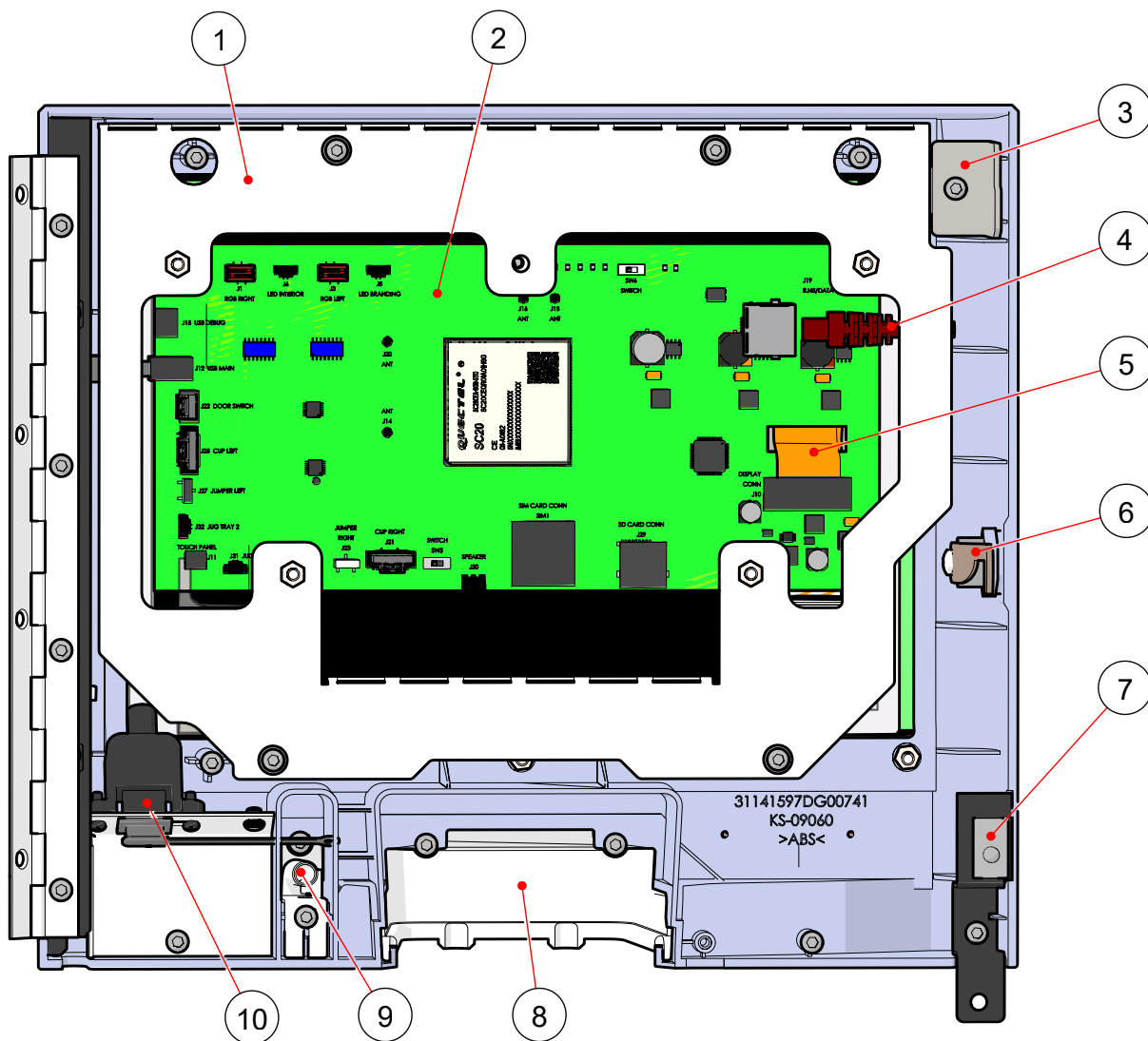
## 5.2. Internal components cabinet and rear door



No	Description
1	Rear door
2	Instant boiler 1.75L 2kW
3	Outlet valves 24VDC
4	Heater relay
5	24VDC SMPS power supply
6	PP-01020 I/O PCB
7	Exhaust fan
8	Mains on/off switch
9	Mains inlet with EMI filter
10	Mains cable
11	Water inlet valve
12	Boiler drain hose with clamp
13	Drip tray sensor
14	Mixer motor
15	Ingredient motor
16	Side cover(s)

### 5.3. Internal components upper door

The door houses the 10" touch display, the control PCB and other electronic components. The USB service port is accessible without removal of the cover for downloading settings, updating software, uploading screen savers etc.

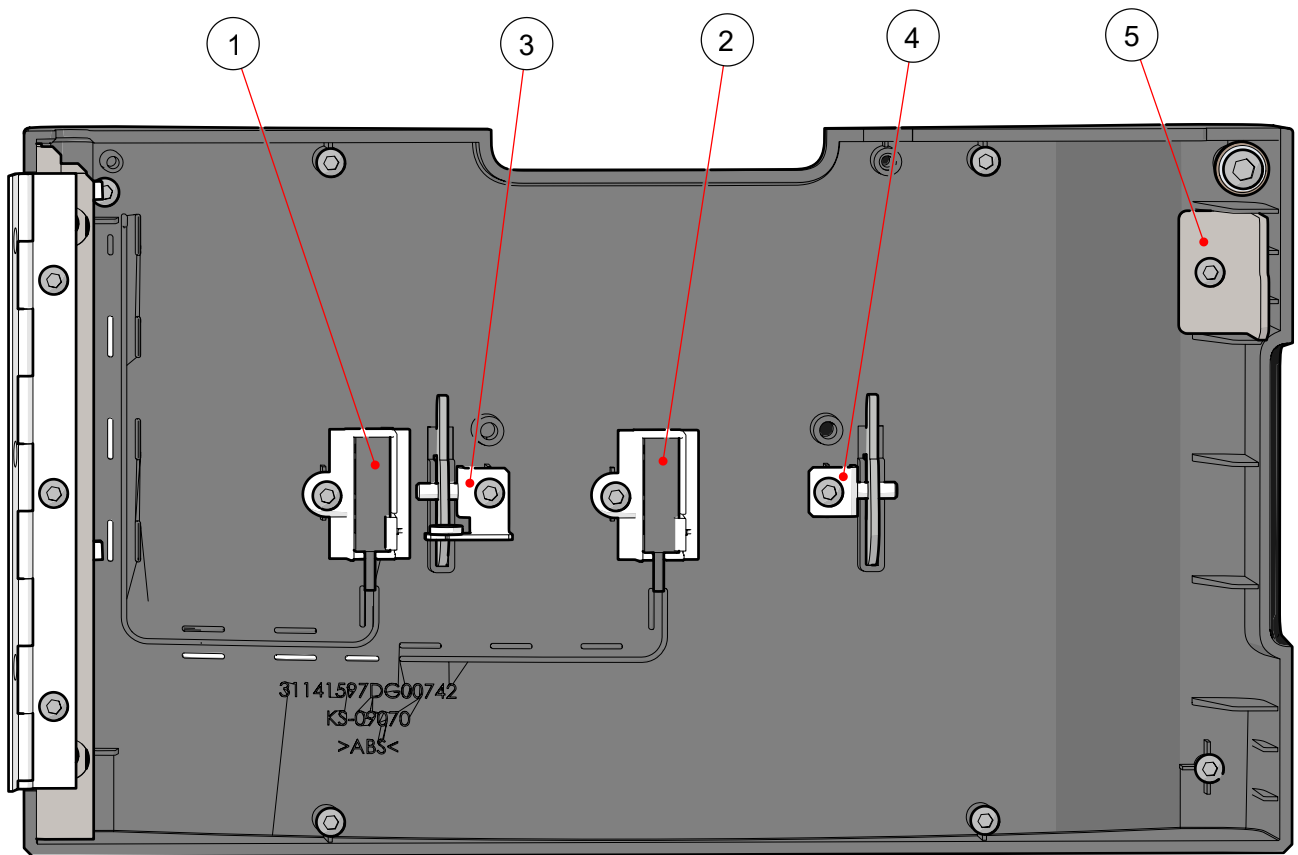


No	Description
1	Display bracket
2	Display with control PCB (SM-03800)
3	Door support bracket
4	Display to I/O comm cable
5	Flat cable touch screen
6	Door lock
7	Maintenance door switch/sensor
8	Outlet area
9	Hot water pipe
10	USB service port

## 5.4. Internal components lower door

The lower door houses mainly the cup presence sensors and the hinges for the cup tray. The latter is provided with a magnet to hold the cup tray in jug/large cup position.

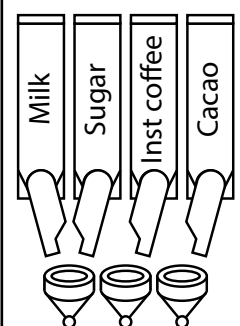
As there is no waste bin in the instant machine, the lower door is fixed with a bracket to the upper door and will move simultaneously when opening and closing.



No	Description
1	Right optical cup sensor
2	Left optical cup sensor
3	Right cup tray hinge with magnet
4	Left cup tray hinge
5	Door support bracket

## 5.5. Configurations

The Attento instant has one default configuration. A configuration consists of a specific combination of ingredients, linked to an espressobrewer or instant mixer. Below base configuration has been pre-programmed in software, however an authorized dealer can also modify this to make a custom setup.

Configuration	301
Canisters	3
Mixers	1
Scheme	

## 5.6. Type plate

The type plate is located inside the machine on the top right side wall (See Figure 4). You will find the following machine data on the type plate:

- Model
- Serial Number
- Construction year
- Electrical data
- Water connection

The settings of product and water quantities may differ per machine. Each machine has a unique serial number with corresponding software version. If you wish to have the setting of your machine changed, the serial number is of interest to the dealer.

## 5.7. Safety symbols on the machine

The following safety symbols are affixed to the machine:




<b>Veromatic</b>	Model : AT11
Donker Duyvisweg 56 3316 BM Dordrecht NL	230 V~ 50 Hz - 2000 W p= 0.2-1.0 MPa
Ref : AT11-401A1ALG	
Serial No.:	
	
2024	

Figure 4.

Symbol	Location	Meaning
	<ul style="list-style-type: none"> <li>• Rear side of the machine</li> <li>• At PP-00851</li> </ul>	Caution! Electrical voltage
	Rear of the machine	Collect separately for recycling.

The safety symbols on the machine must be kept complete and legible. Damaged and illegible safety symbols must be renewed.

## 6. Installation

### WARNING:

Installation may only be carried out by a qualified service technician!

### 6.1. Operating diagram

See Figure 5

1. Water connection
2. Pressure reducer (optional)
3. Water filter (optional)
4. Inlet valve
5. Check valve
6. Boiler
7. Exhaust valve
8. Boiler drain
9. Instant product canisters
10. Mixer units

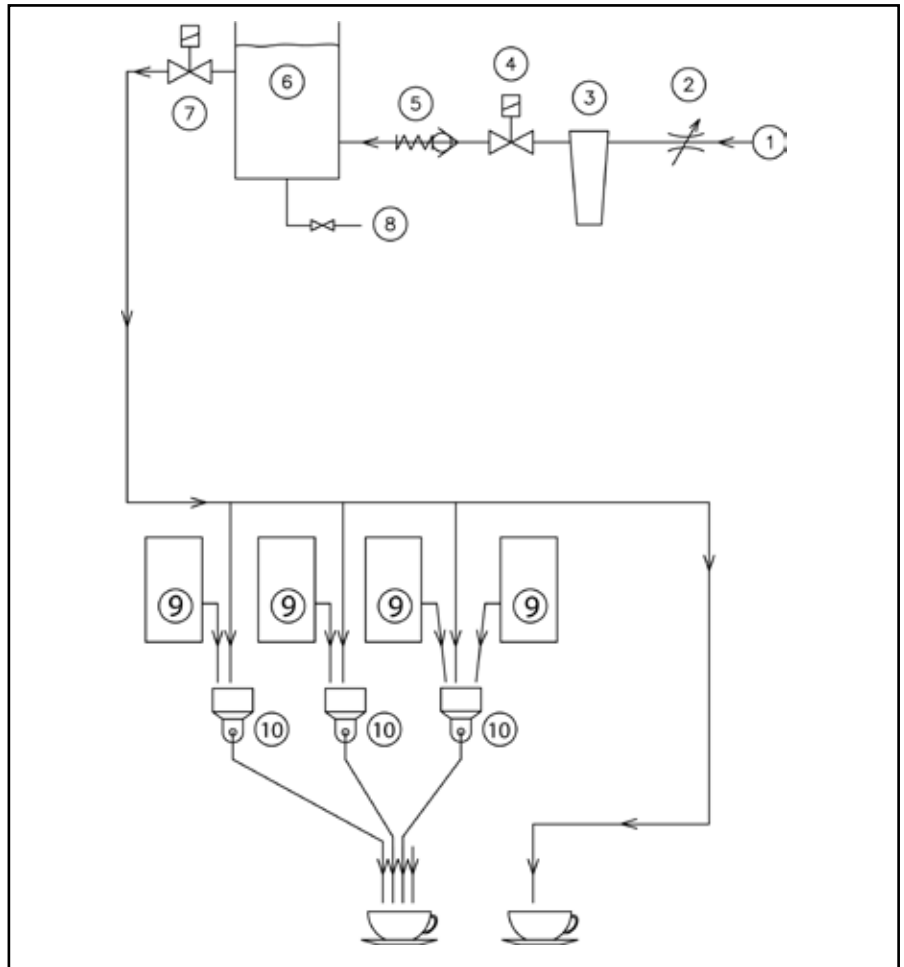


Figure 5.

In this machine, drinks are prepared according to the instant principle.

The hot water required comes from a boiler. In this boiler, the water is constantly kept at a certain temperature. If the water falls below a certain level, the inlet valve is opened and tap water can flow into the boiler again. The already present amount of water and the heating element together ensure that the "new" water quickly reaches the right temperature.

Instant principle

A certain amount of hot water and powder(s) is dosed in a mixer unit. There, both are mixed with each other by means of a rapidly rotating mixer. This mixture, whether or not combined with another solvent, flows out of the spout into your cup or jug.

## 6.2. General installation guidelines

The machine may only be installed by an authorised service technician. This person observes the guidelines established by the machine manufacturer and in accordance with national and local regulations. The mechanic instructs the operator on the operation, maintenance and handling of any malfunctions.

Besides the legal guidelines a service technician has to meet, Veromatic International BV has the following requirements for a service technician:

1. The mechanic is well informed about the machine, by training at Veromatic International B.V. or by equivalent, obtained elsewhere.
2. The mechanic uses the instructions, diagrams etc. that apply to this type and version.
3. The mechanic is well informed about the valid guidelines for hygiene.

## 6.3. Operating environment

The machine is for indoor use only, not for outdoor use. Place it in a frost-free place where it is not exposed to moisture or excessive dust and cannot be sprayed with water. The machine may not be used above a height of 2000 m.

The machine is only suitable for use in domestic, office and light industrial environments. The machine is not suitable for professional kitchens where frequent cleaning with water is required. The machine is also not suitable for use in dusty environments. Veromatic International cannot guarantee the correct operation and safety of the machine when placed in any other environment.

It is not allowed to install the machine in areas which are cleaned with water jets or steam.

To ensure a correct operation of the machine, it should not be installed in an angle, but on a horizontal and stable surface.

The ambient temperature must fall within +10° to +32° Celsius for the machine to work properly.

Make sure that the wall socket and water shut-off valve remain freely accessible and easy to reach after the machine has been installed.

The on/off switch is at the back of the machine. Make sure that this also remains easily accessible.

Check that the power cable is undamaged. A damaged power cable must be replaced immediately! Make sure that there is enough free space around the machine.

Minimum required installation space (in mm),  
See Figure 6.

Place the machine in such a way that the highest surface of the machine is at least 120 cm above the floor. If the machine is installed directly under a cupboard, there must be a clearance of at least 150 mm all around the machine. For a good operation of the machine, it is necessary that a lot of cooling air can be supplied and removed. Various openings have been provided in the machine for this purpose. These openings must never be covered.

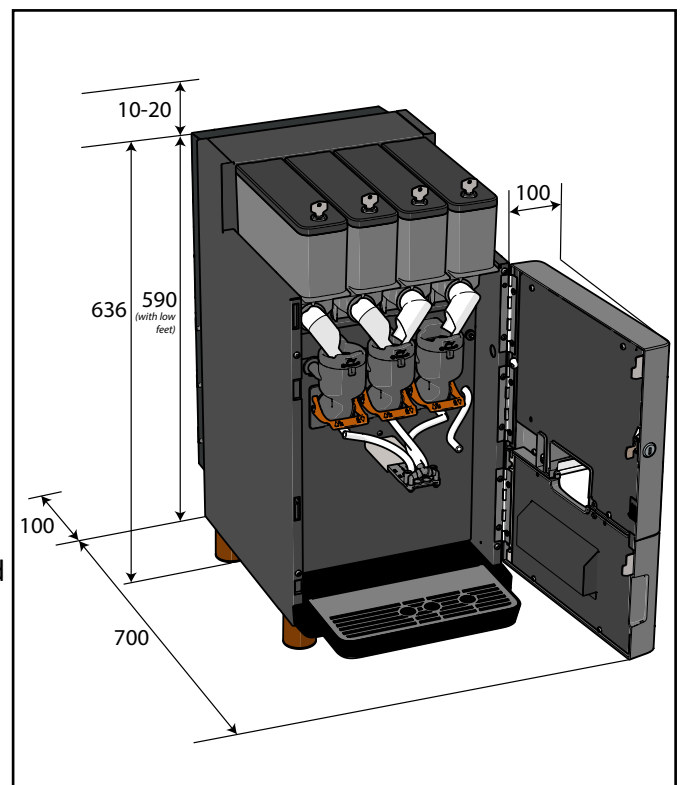


Figure 6.

## 6.4. Water connection

### Water connection details

Water connection	¾"	BSP
Water pressure	2.0 – 10.0	bar
	0.2 – 1.0	MPa
Water lock	Veromatic International BV prescribes the use of a water lock (order code HL-00190) and accepts no responsibility or liability for water damage if the machine is installed without this protection.	
Water filter	Install a water filter to ensure the best taste quality and to reduce limescale formation and thus maintenance. Do change the water filter regularly. See the water filter specification for more information. Your dealer can inform you about a water filter and install it.	

The machine must be placed within 1½ metres of an aerated washing machine tap on a riser pipe which complies with the locally applicable regulations of the water supply company and the above-mentioned working pressure.

The machine must be connected with a flexible hose set (not supplied) that complies with the applicable water and food regulations of the country. The hose must have a swivel on the machine side with a seal in accordance with the size stated above. Whether new or replacement, always use a new hose set for the water inlet. Do not reuse the old set for safety reasons. Make sure the hoses are suitable for the pressure on site or use a reducing valve (order code VT-02741).

### Connection procedure

1. Connect the water hose to the tap.
2. Flush the water pipe for a considerable time so that any dirt cannot enter the machine.
3. In case of a water filter, follow the connection procedure of the filter.
4. Connect the water hose to the inlet valve on the machine. Tighten the swivel properly.
5. Check that the hose is not kinked or damaged.
6. Turn on the tap.
7. Check for leakage.

## 6.5. Electrical connection

- The machine must be connected with the power cord supplied.
- A sufficiently fused wall outlet with proven grounding must be available within 1½ meters of the machine.
- Use a separate group for only this machine with a 16A fuse.

### Electrical connection details

Power supply	230		V~
Frequency	50		Hz
Maximum power consumption	2000		W
Safety class	Class I		
IP rating	IP20		
Pollution grade	2		
Overvoltage category	II		

### CAUTION!

Give the machine a chance to acclimatise. To do this, leave it at the workplace for at least half an hour before connecting it to the mains.

## 6.6. Preparing for operation

1. Open the front door of the machine
2. Remove the instant canisters from the machine with the spouts facing upwards (see Figure 7).
3. Fill the canisters to a **maximum of three-quarters** of their capacity (see Figure 8).

### CAUTION!

Fully filling the canisters will encourage spillage and cause poor hygiene. Overfilling may prevent the machine from working properly. Do not press on the ingredients.

4. Reinsert the canisters into the machine (see Figure 9)

### CAUTION!

Make sure that the spouts point downwards.

5. Close the door
6. Switch on the machine using the switch at the rear of the machine (see Figure 10).
7. Wait until the water in the boiler has reached the correct temperature (message disappears).
8. Open the machine door to activate the Rinse Menu.
9. Place a drip tray under the spouts.
10. Rinse the machine via the menu option.
11. Close the door.
12. Press the Back button to exit the Rinse menu and return to the dispensing mode. If necessary, adjust the machine to the desired taste and quantity.
13. Take each product at least 2x to check the adjustment.

## 6.7. Instructions for the operator

After the machine has been installed and made ready for use, the service technician must instruct the appointed operator in how to maintain the machine responsibly in accordance with local guidelines, using this manual. Safety and hygiene are the key issues here.

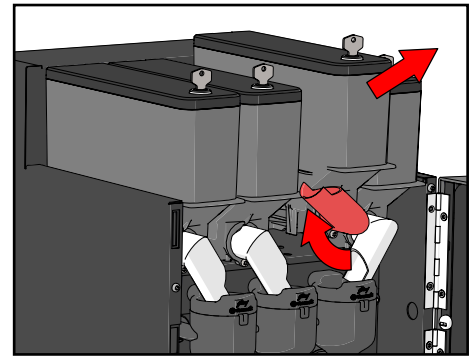


Figure 7.

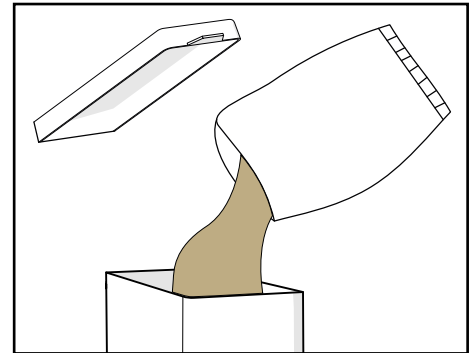


Figure 8.

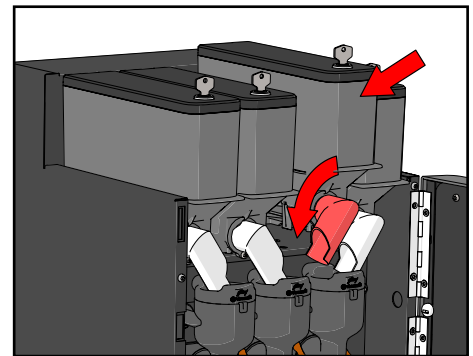


Figure 9.

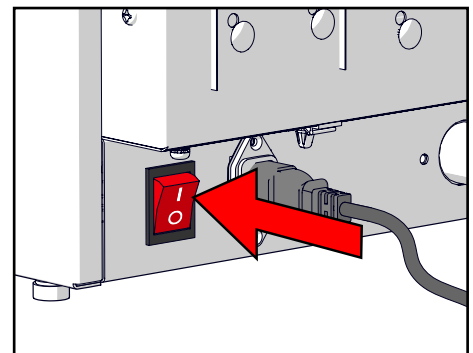


Figure 10.

## 7. Maintenance and service menu

### 7.1. Access to the maintenance area

Good maintenance is of great importance. Hygiene and a good cup of coffee are closely linked. By following the instructions properly, the machine can be kept clean in a safe and efficient manner in accordance with HACCP regulations.

 **WARNING:**

**Never spray with liquid into or against the machine.**

To refill and service the machine, you must first open the door. For this, you need the corresponding door key. There are two exceptions:

- The drip tray can also be emptied without opening the door.
- The canisters have their own key and can be refilled from above without opening the door.

You will need the following items to carry out the maintenance:

- Machine door key
- Canister key
- Drip tray for rinse water
- Bucket with hot water
- Detergent
- Brush

 **CAUTION!**

**Never use a dishwasher to clean parts from the machine.**

 **WARNING:**

**All areas that require tools belong to the service area.**

Regular maintenance may be done by an operator. An operator is a trained person, trained in the cleaning and refilling of the machine. The training must have been done by a qualified service technician or similar designated person of the dealer who has installed the machine. A dealer appointed technician may be the operator, or an employee of the client thus trained as stated.

 **WARNING:**

**An operator may never perform service actions to the machine. Service actions are technical operations such as replacing of parts, or certain settings, which only a qualified technician may perform. Access to these areas are protected by the need of tools to open.**

**Access to the service area is restricted to persons who have knowledge and practical experience with the machine (a qualified and trained service technician), in particular with regard to safety and hygiene.**

## 7.2. Entering the maintenance and service menus

In operation the machine displays the products screen and is ready for dispensing. This is the screen the regular user sees.



The maintenance and service modes of the software control, exist in the following distinct partitions.

### The Rinse menu

For daily rinsing actions for operators.



### The Service menu

Regular maintenance actions (view counters, payment mode, etc) for operators.



### The Settings menu

Detailed settings adjustments, recipes, configuration changes, etc for service technicians.



### 7.3. Accessing the Rinse menu

The Rinse Menu is used for refilling, rinsing and cleaning the machine.

When the door opened, the Rinse menu is automatically activated (see “Figure 11.”). Here you can see at a glance what level the ingredients in the canisters and drip tray have. You can adjust the levels of the canisters here after refilling by clicking on the approximate level which has been filled.

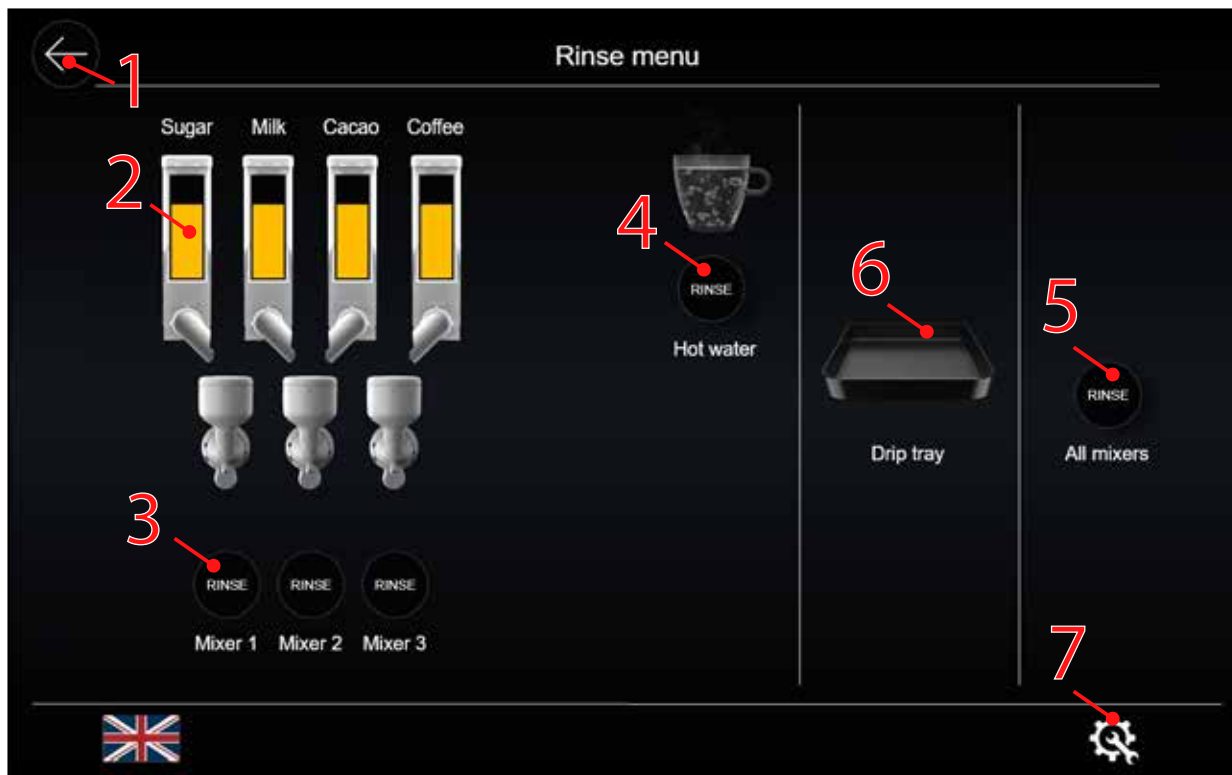


Figure 11.

The options:

1. Return to main dispense menu
2. Stock level ingredient canister
3. Mixer rinsing start/stop
4. Hot water rinsing start/stop
5. Rinsing of all mixers simultaneously
6. Drip tray empty/full indication
7. To service and settings menu

#### Rinse programmes and cleaning cycles

From the Rinse menu, the various rinse programmes and cleaning cycles can be started. The rinsing is done intermittent and is also useful in minimizing lime scale buildup in the outlet valves.

- Mixer rinsing
- Rinsing the hot water system
- Rinsing all mixers simultaneously

The “Back” button brings you back to the main dispense menu. If the door is still open, the system will indicate this. This may only be done when performing maintenance for some actions (see later) with a service key. When returning to idle state for (end) users, always close the door.

The gear button opens the choice menu for access to the Service and Settings menu.

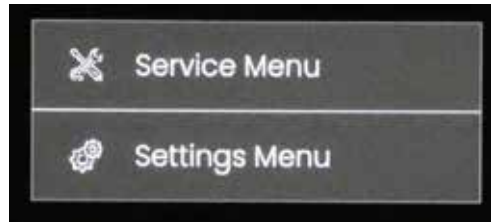
## 8. The Service menu

The Service menu is aimed at an operator who has to perform some simple maintenance actions besides the daily cleaning. To gain access to this menu a password is not needed, however the door has to be opened with the key as instructed earlier.

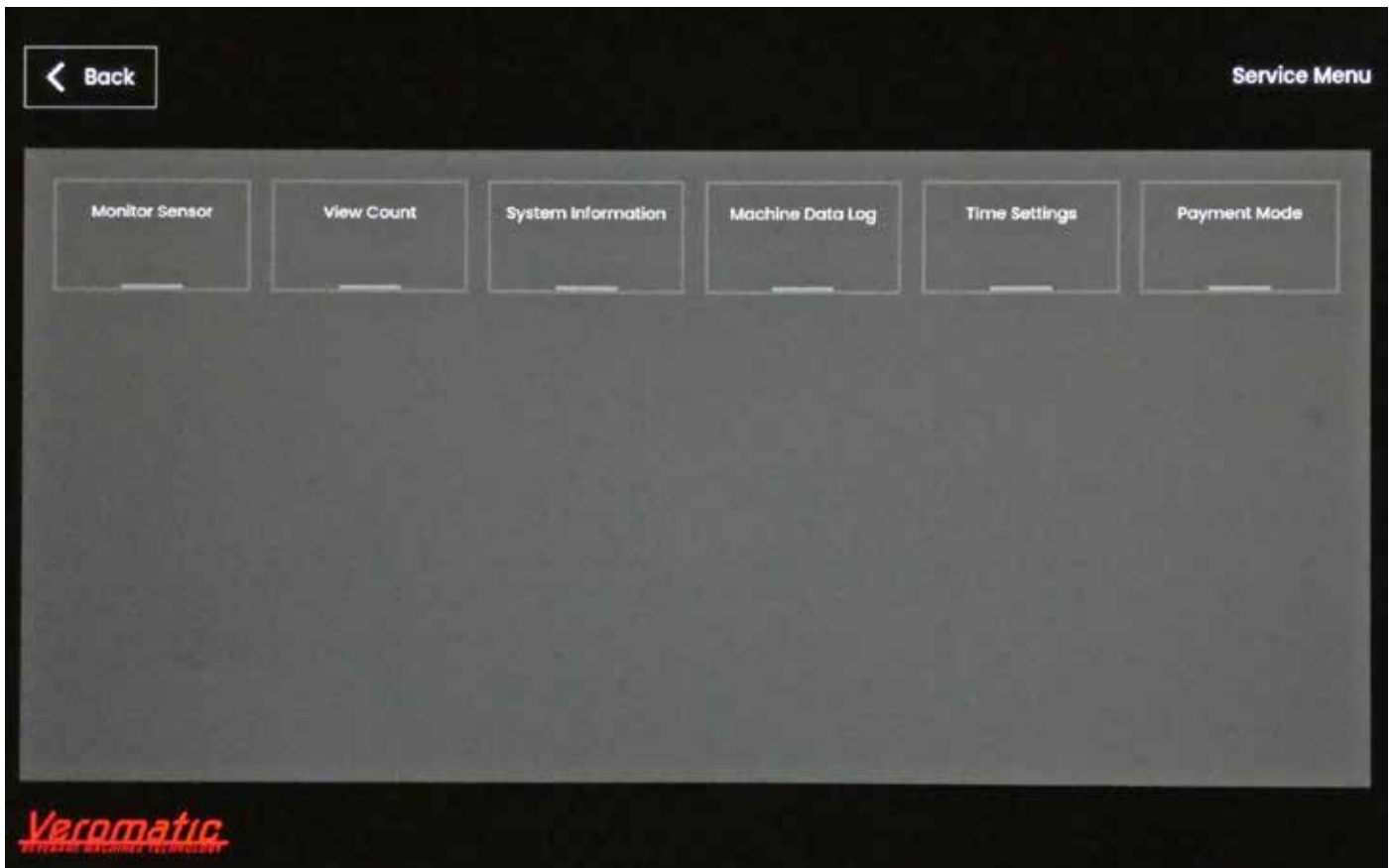
From the Rinse menu, click on the 'cog' icon.



Figure 12.



Press "Service menu" to enter.



The Service menu allows you to:

- Check the status of the machine's sensors
- View the product counters
- View the system information
- Check the contents of the machine data log
- Configure the time setting
- Configure the sales type (Free, Discount, Paid)


## Monitor Sensors

← Back

**Monitor Sensors**  
Service Menu > Monitor Sensors

### Monitor Sensors

Items	Description	Items	Description
Cup Sensor Left	OFF	Boiler Water Level Min	Achieved
Cup Sensor Right	OFF	Boiler Water Level Max	Achieved
Door	Close	Drip Tray	Empty
Fan	OFF		
Boiler Temperature	91 °C	Heater OFF	



## View Counters

← Back

**View Count**  
Service Menu > View Count

### View Count

EXPORT

Drink Name	Count	Drink Name	Count
Coffee	0	Americano	0
Espresso	0	Long Black	0
Cappuccino	0	Drink	0
Caffè Latte	0	Drink	0
Latte Macchiato	0	Drink	0
Caffè Mocha	0	Drink	0
Wenau Melange	0	Drink	0
Chocolate milk	0	Drink	0
Mil chinolate	0	Drink	0



## System Information

System Information

Service Menu > System Information

Machine Details      Factory test      External Components

Display Hardware Version	V.11
Display Software Version	10.85-dev
IO Board Hardware Version	V.10
IO Board Software Version	V.1.3.17
Machine Type	INSTANT
Machine Model	Attento
Machine Article Number	
Machine Serial Number	

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## Machine Data Log

Machine Data Log

Service Menu > Machine Data Log

SALES LOG      SERVICE LOG

Machine Data Log

22-01-2025 - 28-01-2025      EXPORT LOG

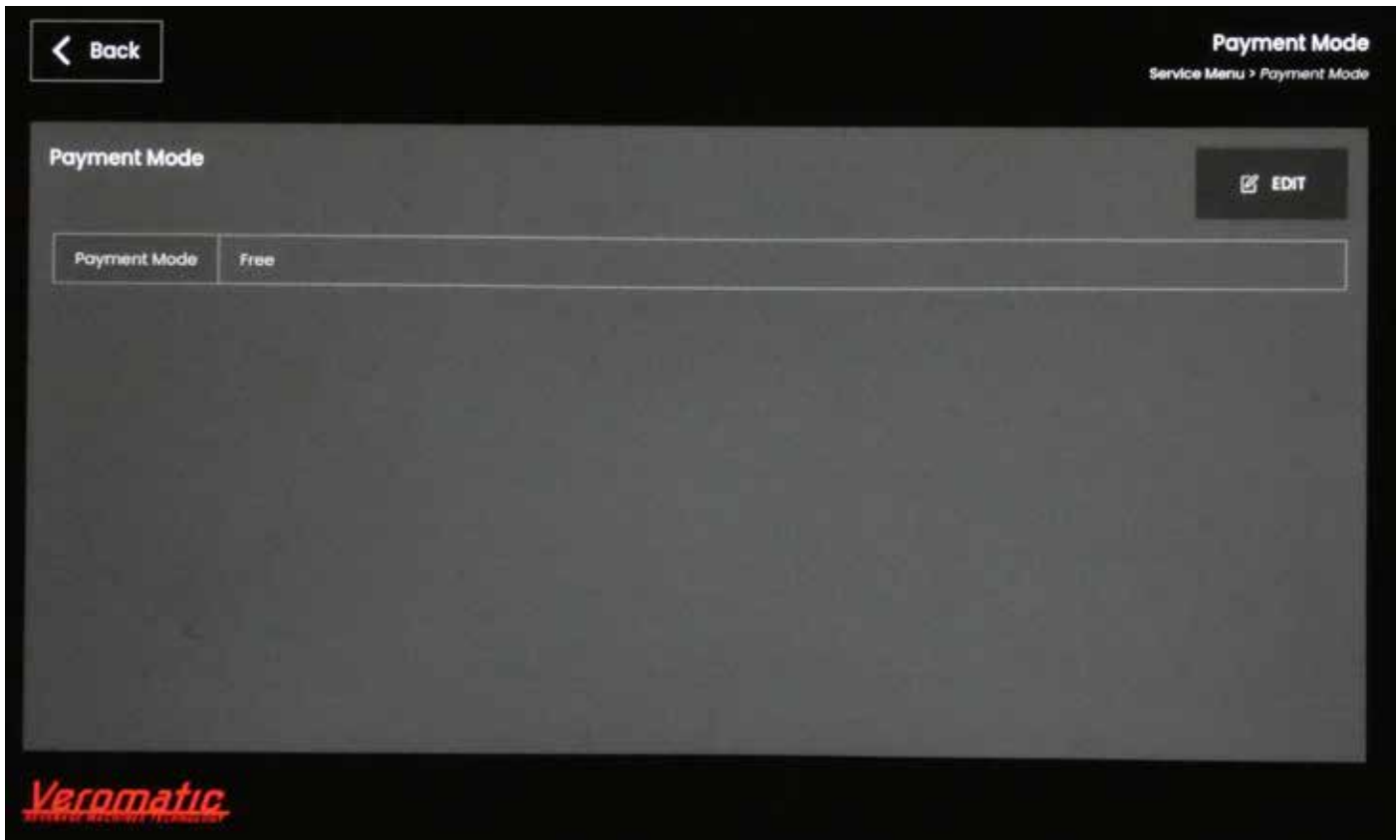
No Logs Found...

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## Time Settings



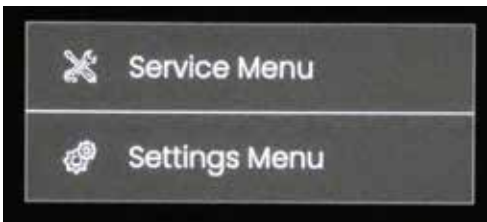
## Payment Mode



## 9. The Settings menu

Many other detailed options and settings of products and the machine are provided in the “Settings menu”. These are only accessible for a dealer or mechanic with the appropriate password. These settings are not meant for regular maintenance in order to guarantee the correct and safe working of the machine.

The Settings menu is the second menu to choose after clicking the “cog” icon in the Rinse menu.



A password will be asked for Authentication. Press the numbers button in the lower left corner, and then the required password. Press confirm to move on to the Settings Menu.



### 9.1. Authorization levels

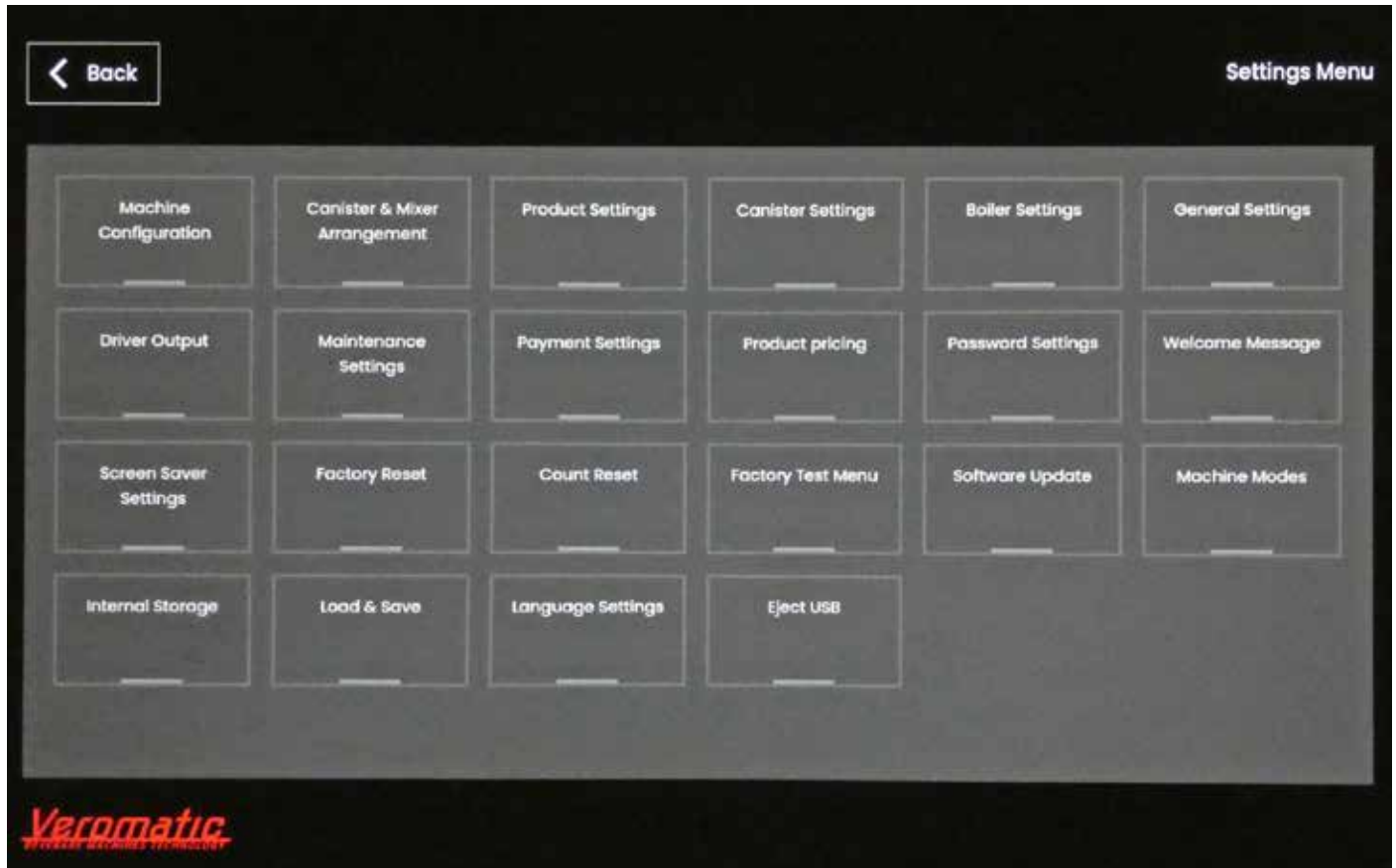
By entering the password, the extended menu levels are accessed or certain modes activated. Passwords can be changed after installation; defaults are:

Access Level	Default Password
Basic	-
Advanced	1111
Supervisor	(given separately)
Jug	-
Machine	-
Free	-

## 9.2. Settings Menu overview

The Settings menu allows dealers to adjust e.g.:

- product recipes
- boiler temperatures
- canister configuration
- product layout and naming
- etc.



A detailed explanation of settings will be given in the next chapters.

## 10. Machine system logic

With the 10" platform a new logic is introduced for the base workings of the control software.

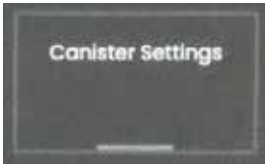
The base of the machine control system is determined by the ingredients in the canisters, which can be coupled to a specific mixing system: the **Canister & Mixer arrangement**. A default arrangement is provided but can easily be customized to the customers need.

The default canister arrangements are milk/topping in mixer 1, sugar in mixer 1, instant coffee in mixer 2 and cacao in mixer 3.

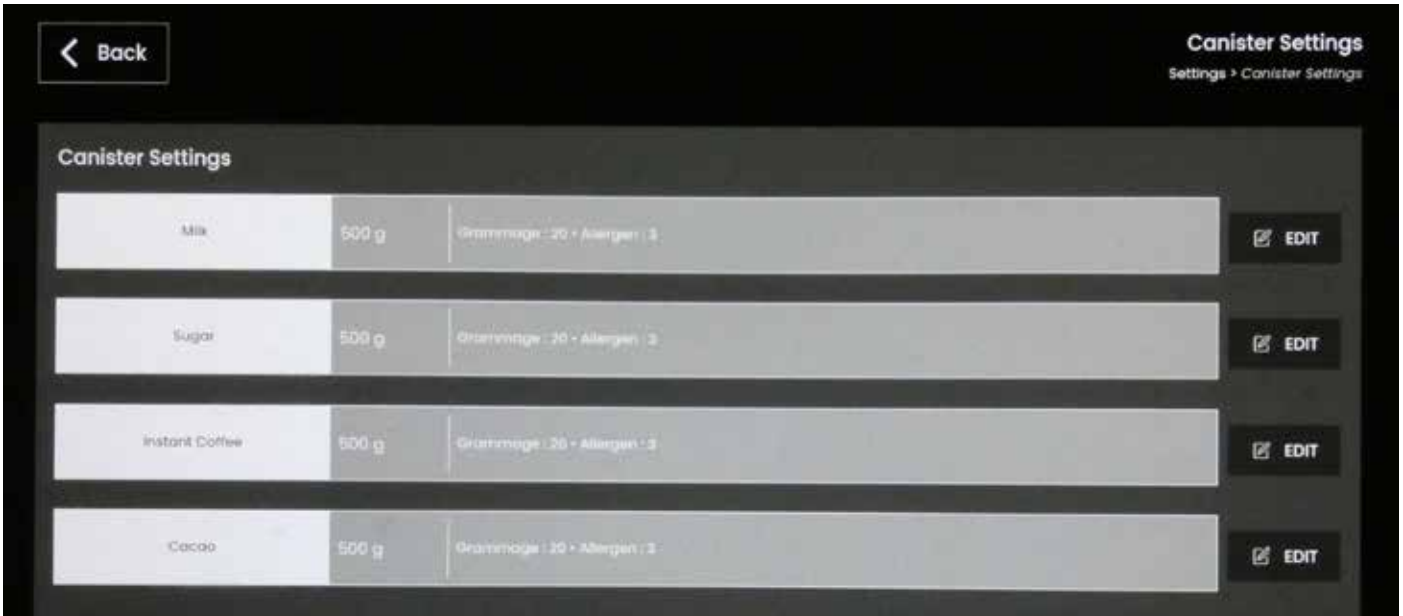


## 10.1. Canister Settings

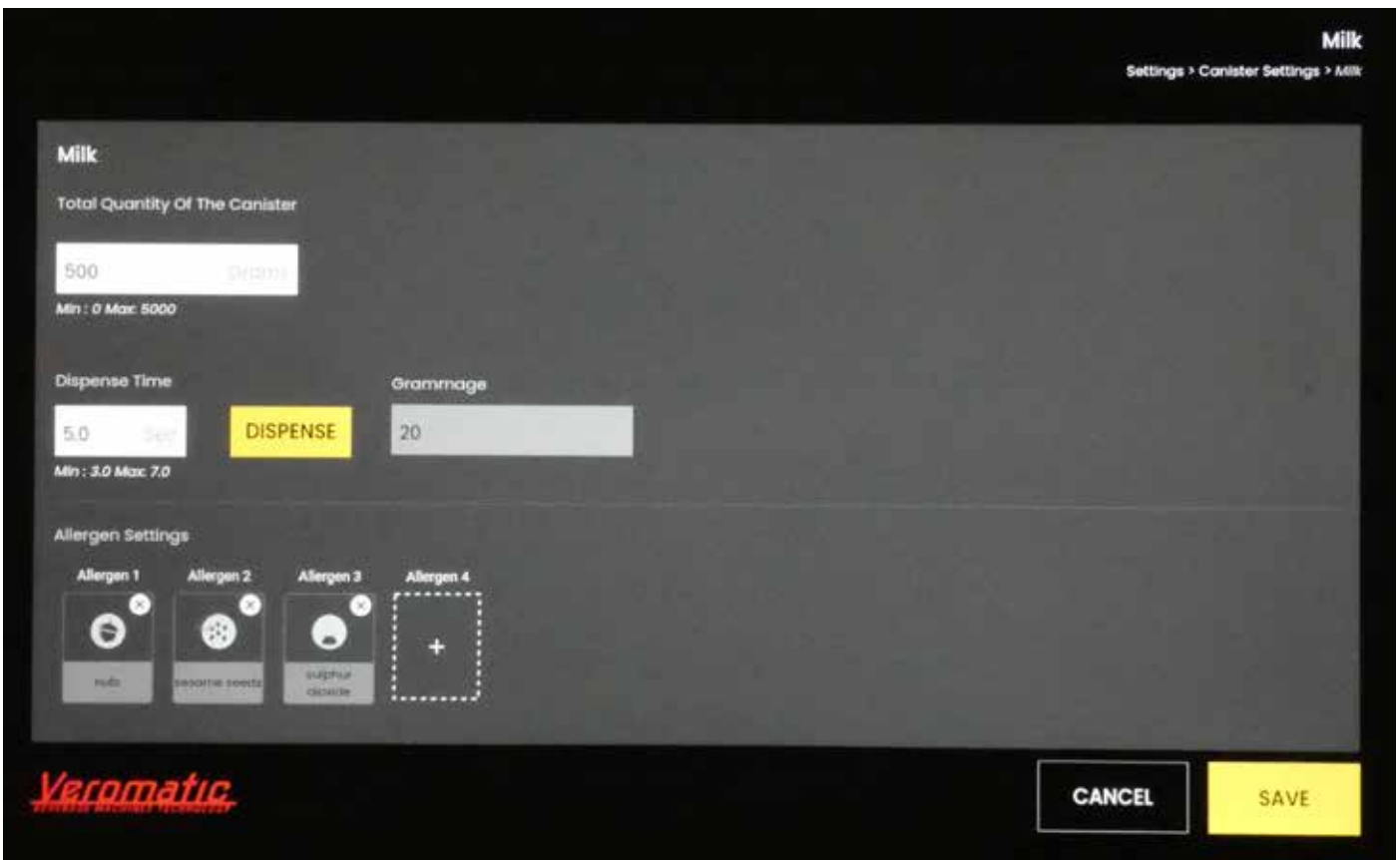
The canister settings are found in the Main Settings Menu under the corresponding name.



The four base ingredients are shown with the default settings for the canisters.



Click on the Edit button to change the settings and to calibrate the canister.



Fill in the weight of the dealer specific ingredient that fits in the canister. At the bottom specific allergens can be determined.

The canister can also be calibrated. This is important to have proper dosings in the products, but also to calculate the correct fill level of the canisters and the empty warning.

To calibrate the canister, first remove the physically the mixers before proceeding. Make sure to have a sufficient big cup or container and a weighing scale at hand.

Put the cup/container empty on the scale and tare the scale. Then hold the container underneath the corresponding canister outlet to catch the dispensed ingredient powder.

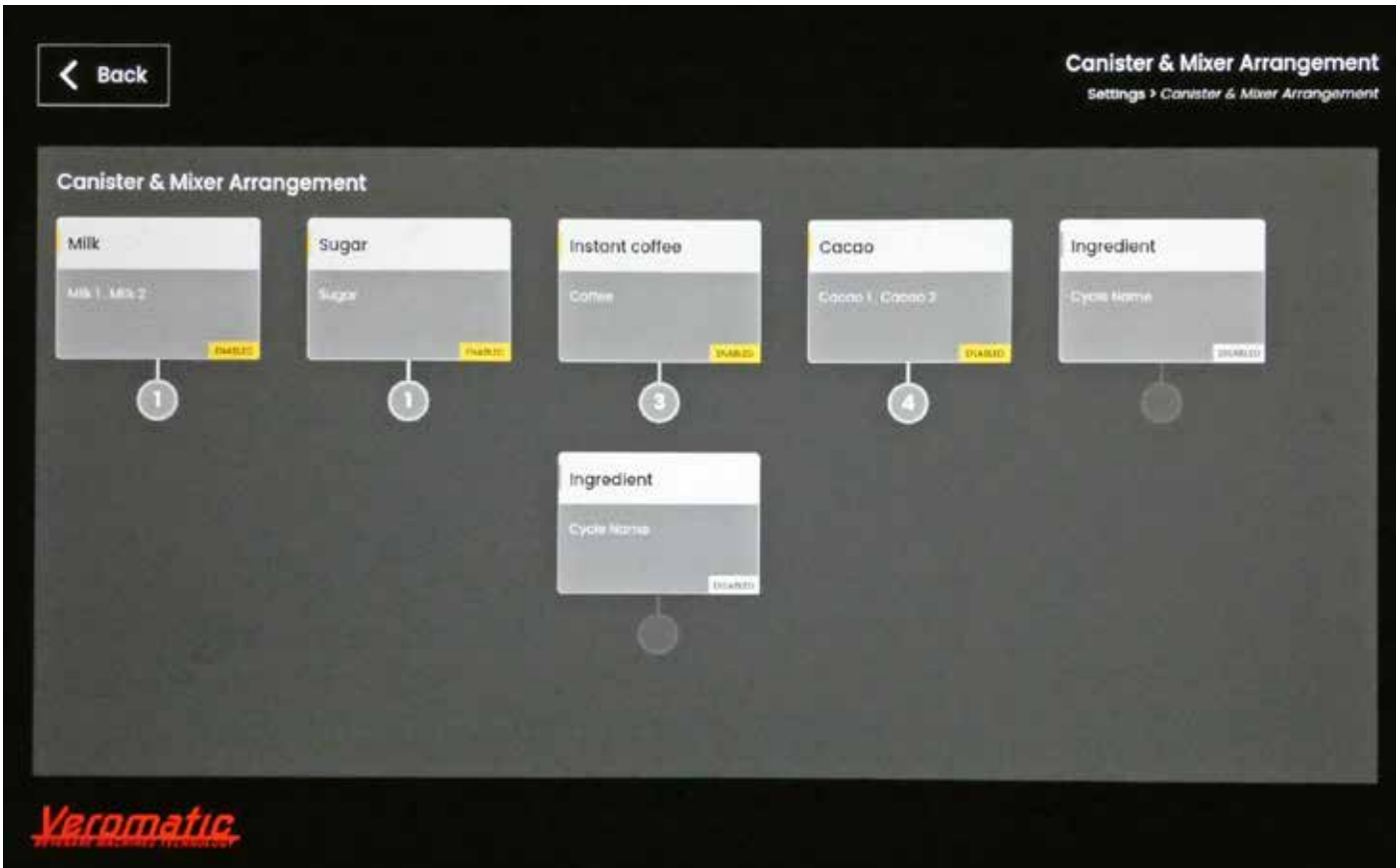
Set a Dispense Time on the display and press the Dispense button. The machine will give a powder dose of the set time. Now weigh the container on the scale and read the value. Now, put this weight value in the Grammage field on the display. Confirm the settings by pressing the Save button. Now the canister output is calibrated correctly. Repeat the process for the remaining canisters.

## 10.2. Canister Mixer Arrangement

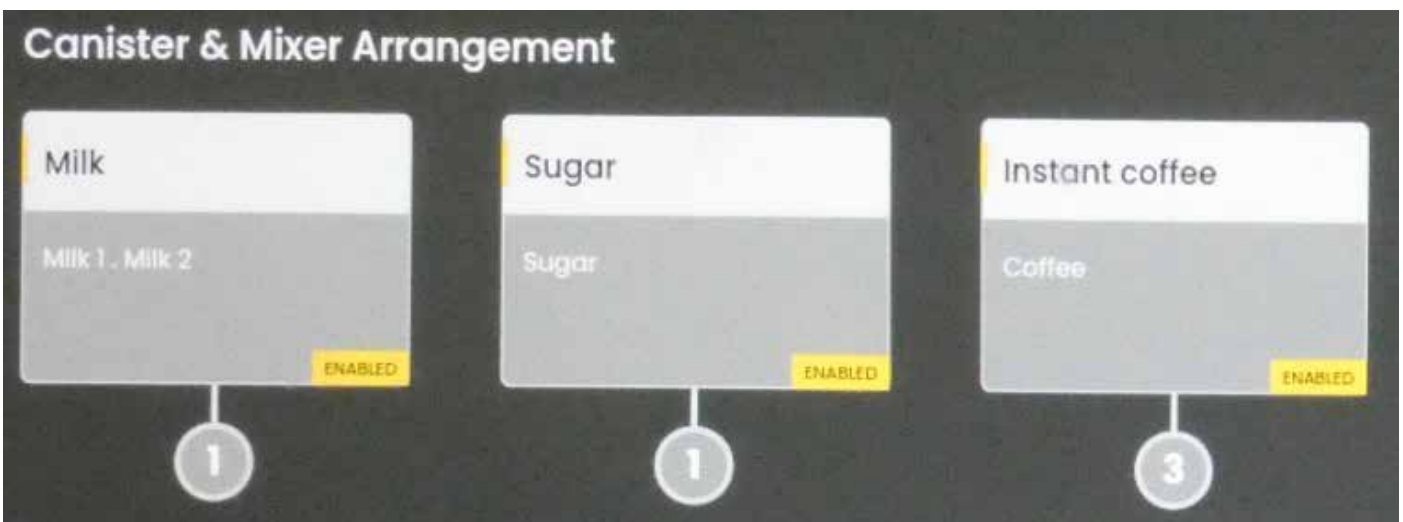
Each canister can be coupled to a specific mixer. This setting can be found under Canister Mixer Arrangement.



This screen shows the set combination of the canister with the designated mixer.

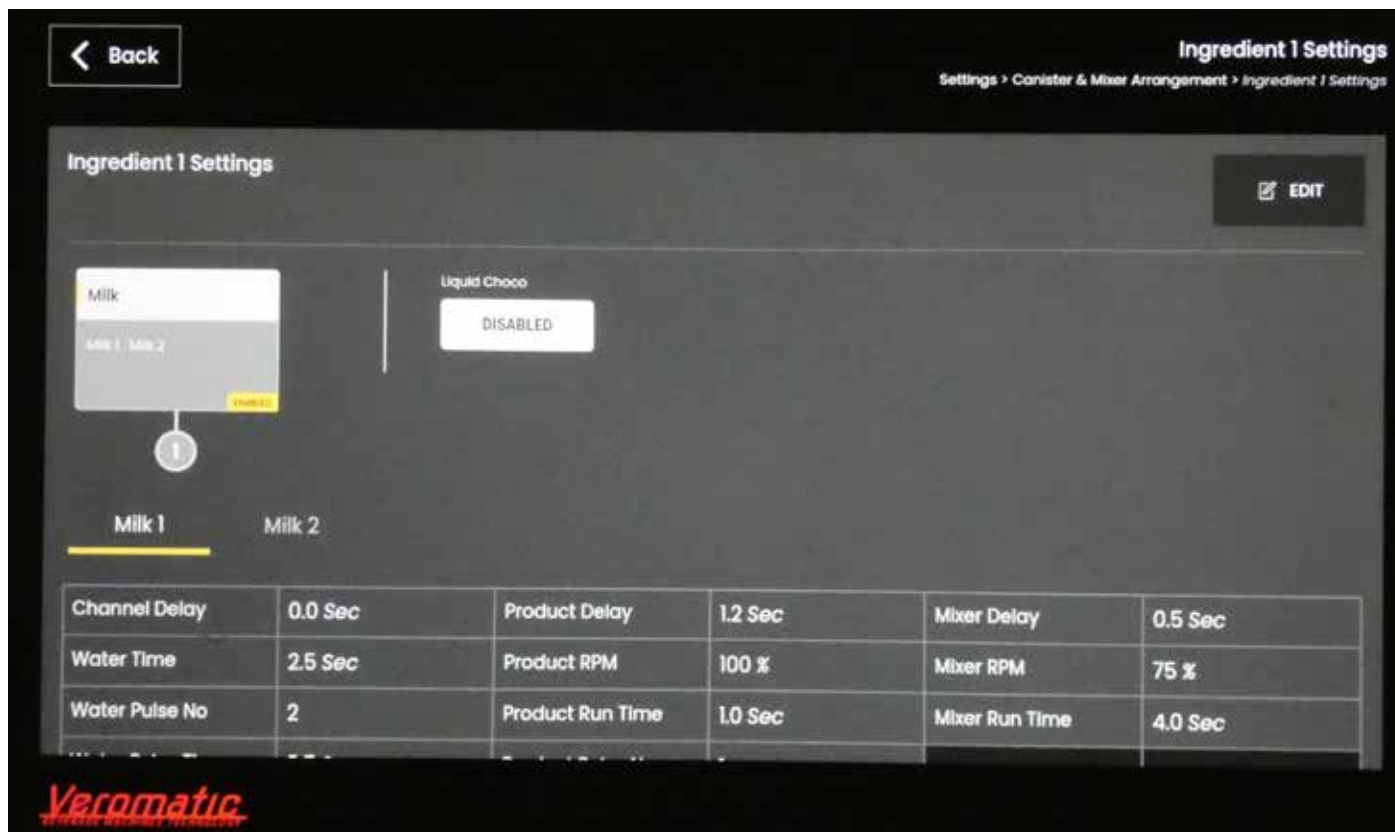


Below detail shows some arrangement combinations. The rectangle with the base ingredient text represents the physical canister and the circle with the number represents the mixer spot where the canister is designated to.



In each combination, different ingredient settings can be present, called **Cycles**. In the picture is shown that the base ingredient Milk, has two Milk Cycles (Milk 1 and Milk 2), whereas Sugar and Instant Coffee have one Cycle.

The yellow label Enabled shows that the canister is active for use, for a canister can also be de-activated. Clicking on the canister rectangle will show the underlying settings for dispensing for this particular ingredient.



### 10.2.1. Changing ingredient settings - Cycles

The detailed Ingredient Settings show again the Canister-Mixer combination top left. The Liquid Choco button is currently disabled. Below are the settings for two Cycles, in this case: Milk 1 and Milk 2.

Milk 1		Milk 2			
Channel Delay	0.0 Sec	Product Delay	1.2 Sec	Mixer Delay	0.5 Sec
Water Time	2.5 Sec	Product RPM	100 %	Mixer RPM	75 %
Water Pulse No	2	Product Run Time	1.0 Sec	Mixer Run Time	4.0 Sec
Water Pulse Time	0.5 Sec	Product Pulse No	1		
		Product Pulse Time	0.0 Sec		
		Product Strength	ON		
		Product Strength %	20 %		

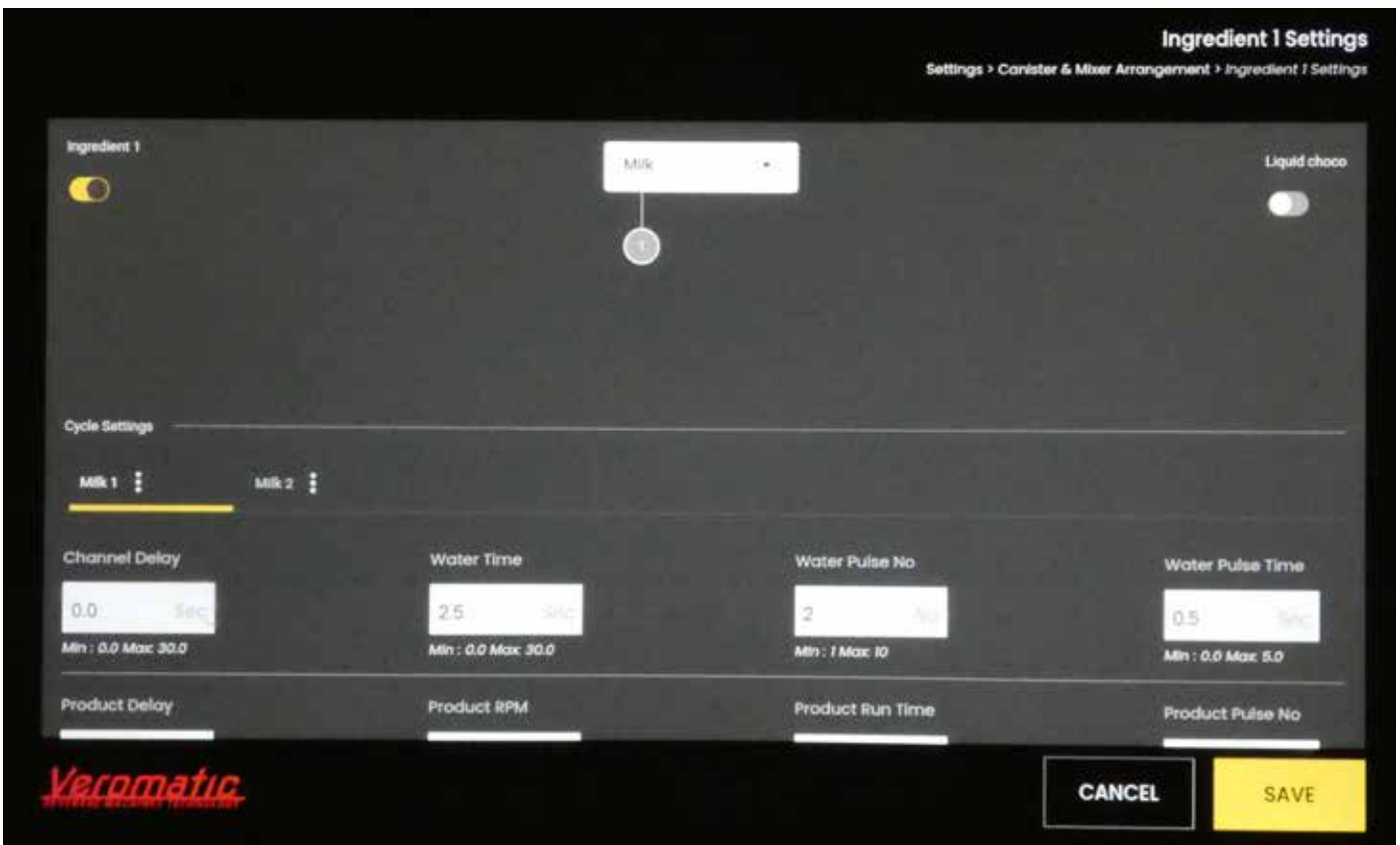
## Cycles

A Cycle is comparable to a **preset**. So the physical milk powder from the canister can have two different presets in timing, pulsation, etc. One cycle might be to make a perfect cappuccino, the second cycle might be more fit for a latte. So a Cycle determines the in-cup quality for that ingredient.

The Ingredient and Cycles settings can be customized by pressing the Edit button in the upper right corner of the screen.

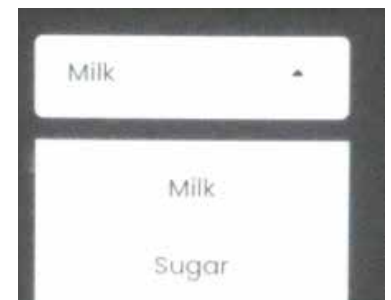


The following screen will appear.



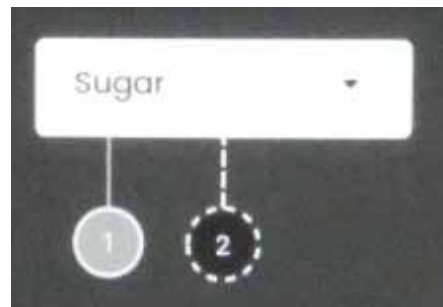
In the upper left corner, the canister can be (de-)activated by pressing the toggle.

In the middle is a drop down box with the ingredient and the designated mixer. If a different ingredient, like cacao or instant tea is desired for this first canister position, it can be chosen from the drop down list.



Also can a different mixer be chosen to be coupled for output. A second dotted circle will then be visible as option.

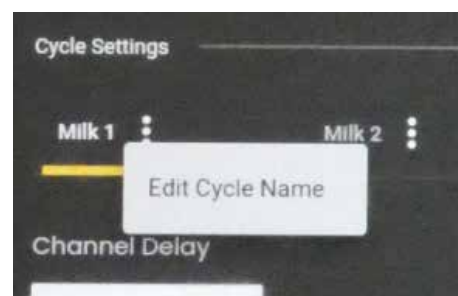
In above picture, as it is the first canister position, only the first mixer is able to be chosen. However in the picture on the right of the second canister, mixer 1 is active (indeed together with the first canister), but mixer 2 can be chosen by clicking on the dotted circle. Of course the physical canister should be changed accordingly with the correct type, ingredient powder and outlet into the correct mixer.



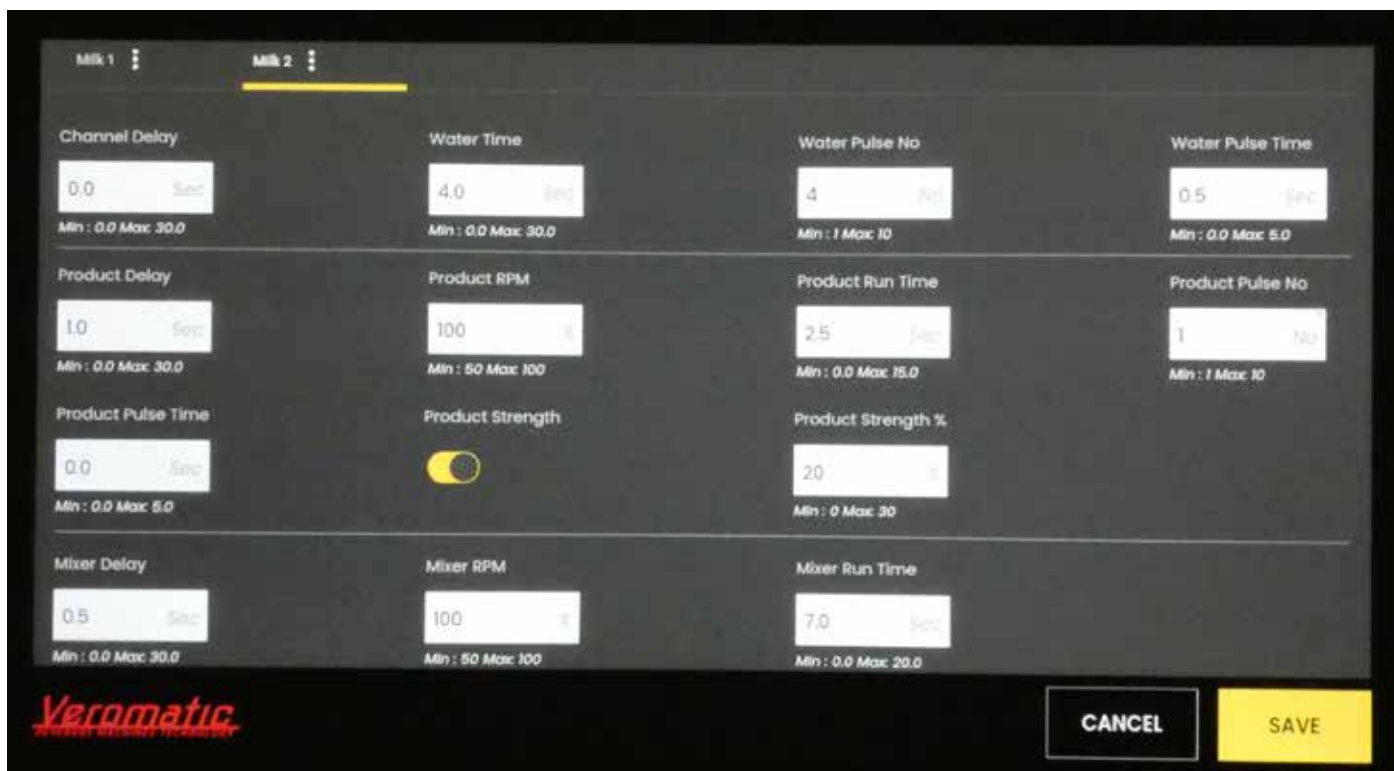
### 10.2.2. Changing Cycle settings

In the bottom part of the detail screen, two cycles can be made. A first is present by default, sometimes a second, if needed the second can be added. The cycle name can also be altered.

As said, a Cycle is a preset collection of settings for that specific ingredient. The values can be changed as per taste and in-cup quality required. These settings will be recalled later in making the final drinks.



Most settings will speak for themselves, a few will be highlighted.



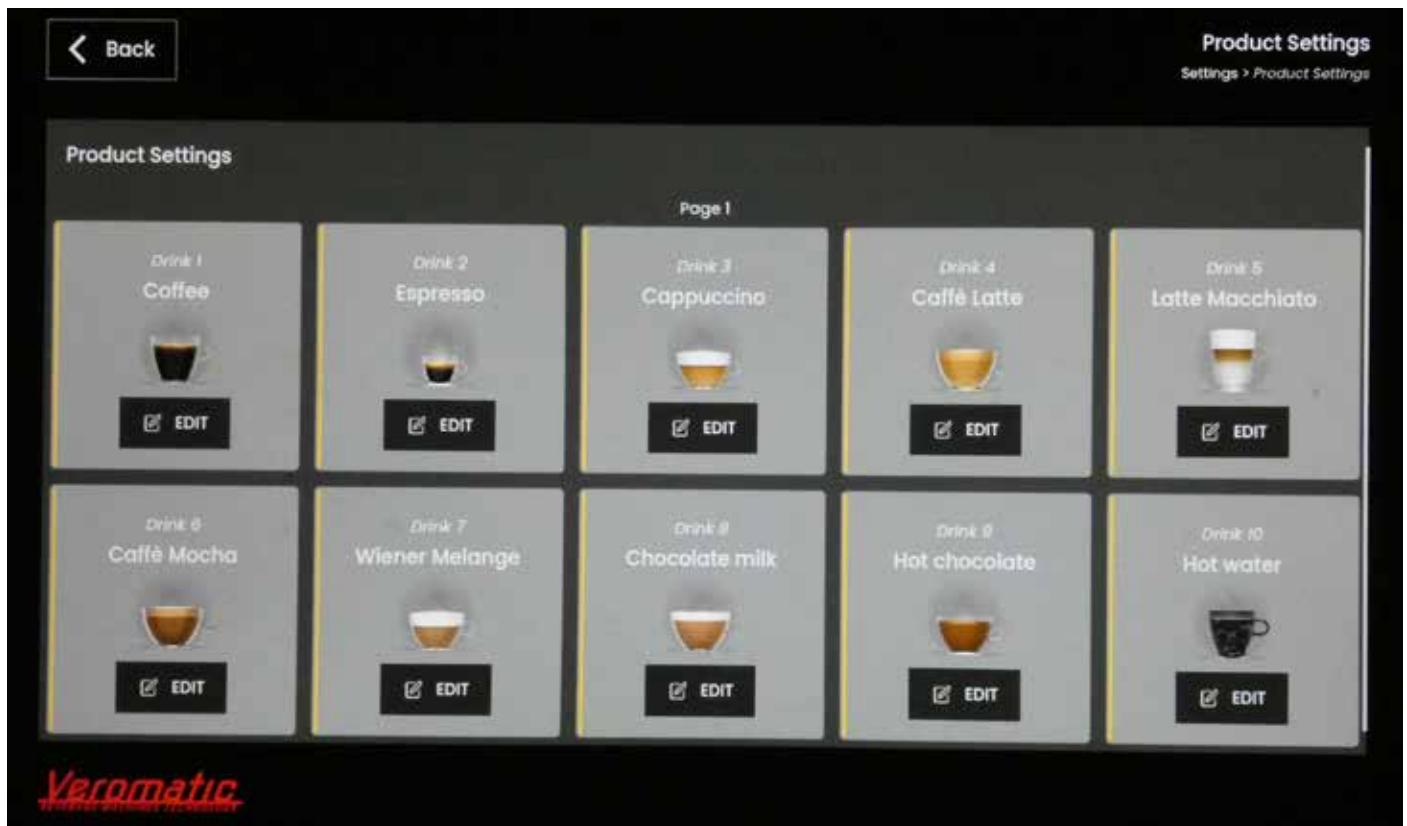
- Channel delay            The delay before this specific cycle will start (in the final recipe).
- Water settings        Timings for water output from the boiler valves
- Product settings     Timings for the ingredient (motor)
- Product strength     If product strength slider is enabled and in what amount.
- Mixer settings        Timings and speed for the mixer (motor)

Click on the Save button the return to saves the changes and return to the previous page.

### 10.3. Composing the final product

This section describes the composing of the final products/drinks which the end user can choose from, as well as the layout of the choice screen.

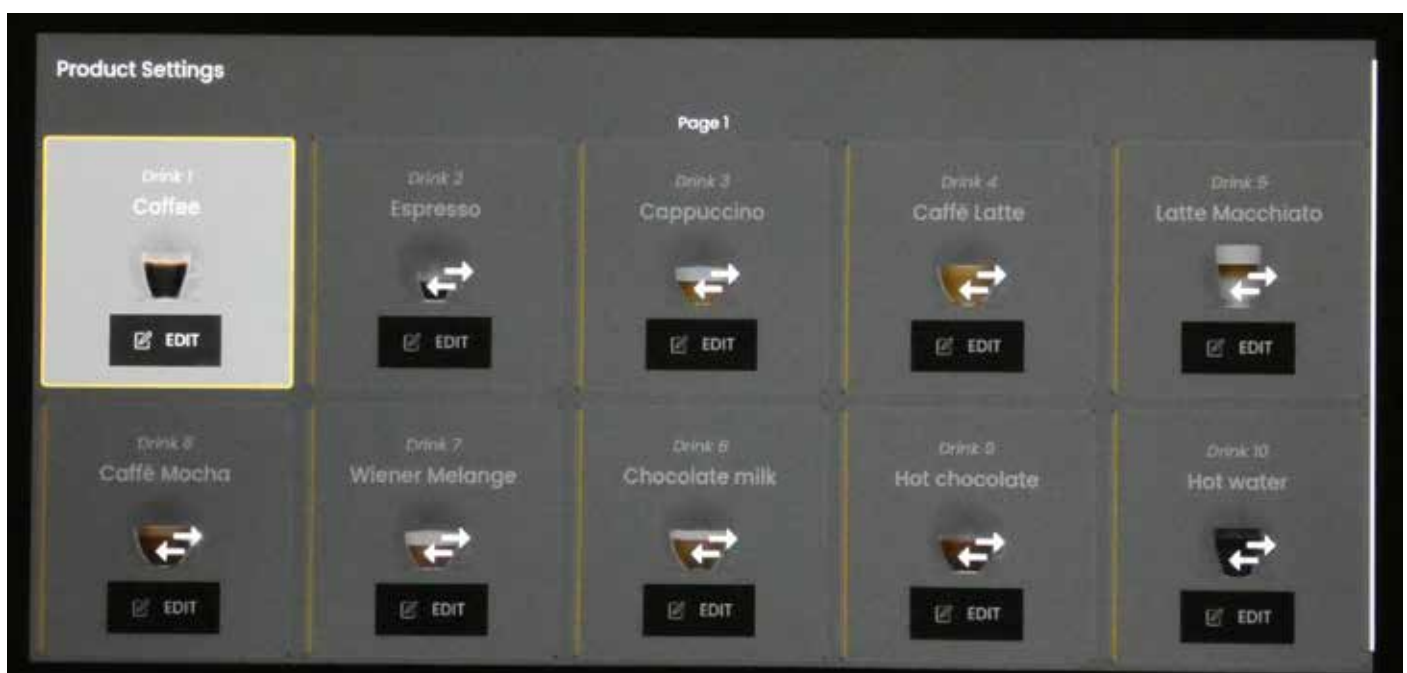
From the main Settings menu, choose “Product Settings”. The following overview appears.



#### 10.3.1. Changing the layout

The position of each drink can be changed in the final layout.

1. Long press on a drink.
2. The chosen drink will be highlighted, the appearance of other drinks will change accordingly
3. Tap on the desired position for the drink.
4. The existing drink on the target will switch to the first chosen position.



### 10.3.3. Composing the drink

By tapping the Edit button of a drink, it can be changed to the desired description and quality. The detail screen consists of four sections:

1. general product settings
2. settings method
3. recipe settings
4. dispense settings

The fourth section will appear after swiping the screen upward.

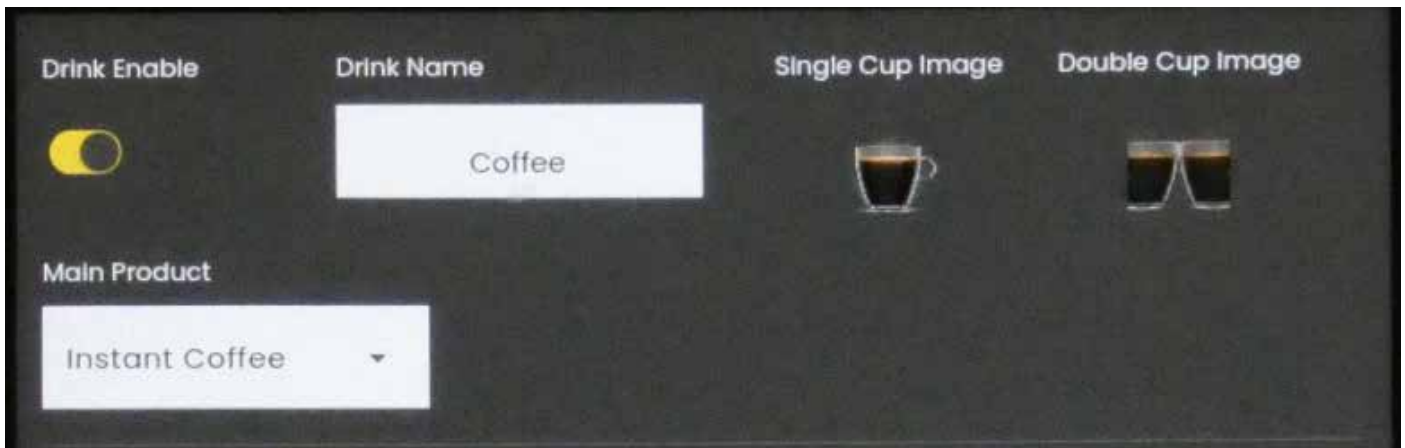


### General product settings

In the first section, some general settings can be changed.

Drink Name	The name of the drink in the final layout
Single Cup Image	Click on the image to change the icon for single dispense drinks
Double Cup Image	Click on the image to change the icon for double dispense drinks
Drink Enable	Tap on the toggle to activate or de-activate the drink in the final layout
Main Product	The main ingredient source of the drink; this affects the possible settings.

If the enable toggle is switched off, the drink will not be shown on the final layout.



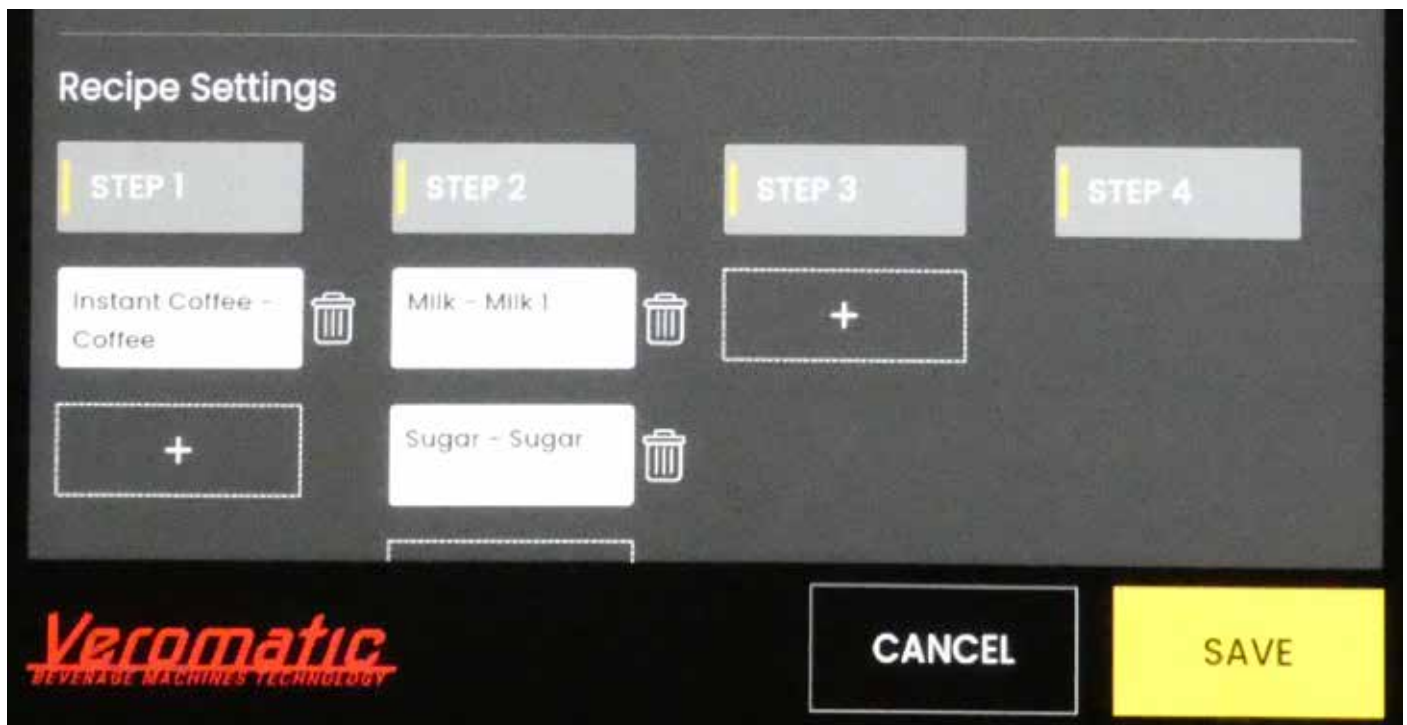
### Settings method

The second section determines if the drink uses a "Channel" or "Hot Water". A "Channel" has combined sources for the recipe, where "Hot Water" is a single source.

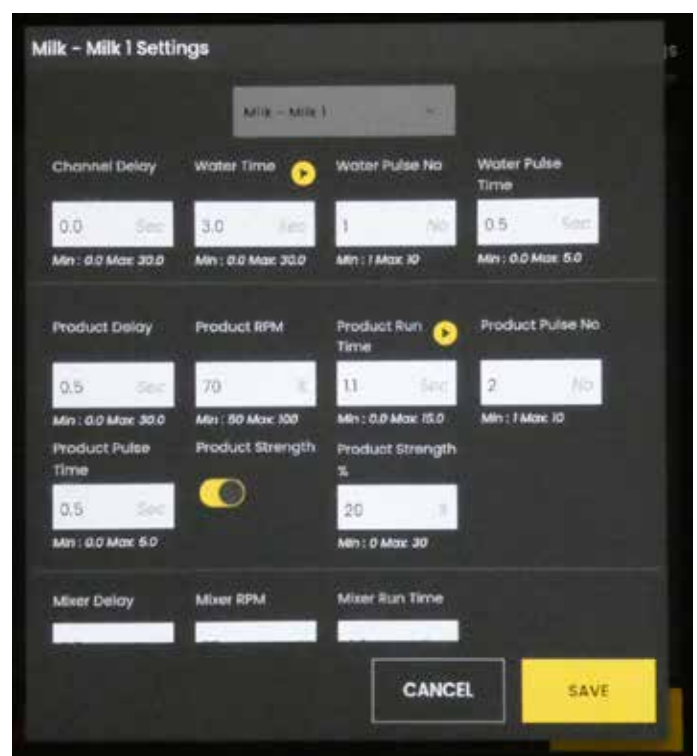
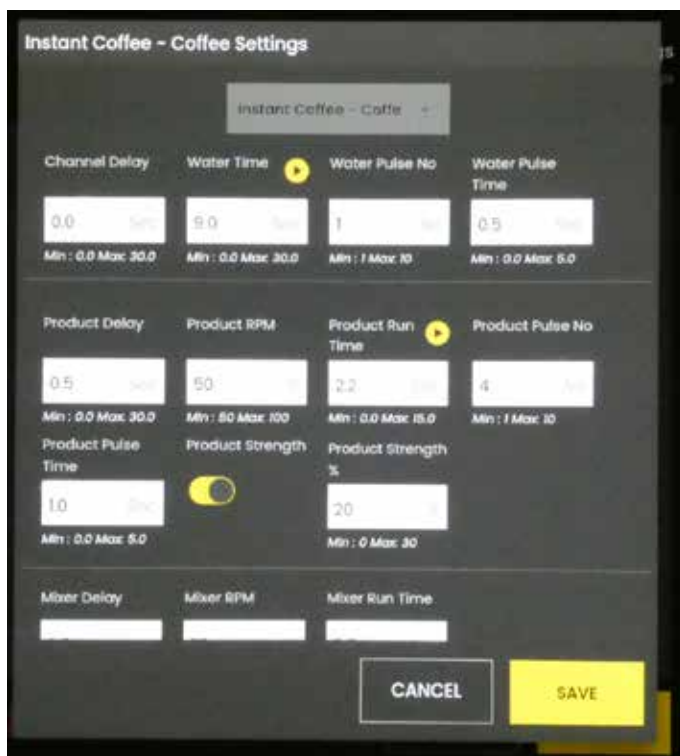


## Recipe settings

In the third section the drink can be composed by combining different sources. This is done in one to four "Steps". In each step the earlier defined "Cycles" can be chosen consecutive.



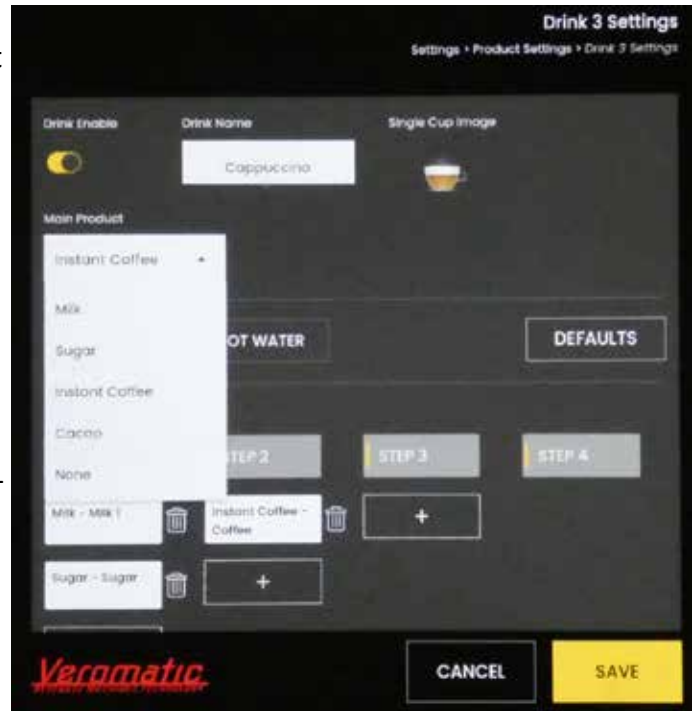
Tapping on a Cycle will show the underlying settings. The defaults presets earlier defined are shown, but can be finetuned specific for this drink. Below the settings for coffee and milk as example.



In the picture on the right, another example is shown for Cappuccino. Here the main product is again Instant Coffee. The steps are first cycle Milk1, then Sugar then instant coffee.

Although the sugar cycle is included in the steps, it will not always be used in the recipe. That is because sugar is set as an optional by-product. Milk however is a standard component of Cappuccino and will always be used.

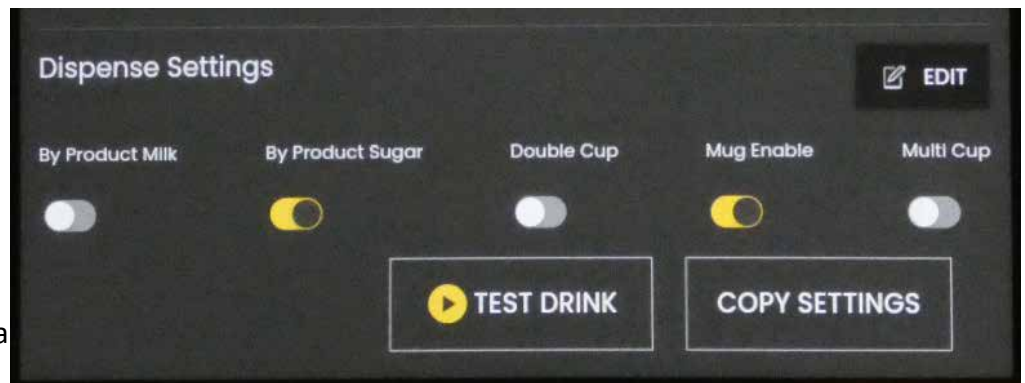
Whether sugar or another ingredient/cycle is optional or not, is determined in the fourth section, the dispense settings.



### Dispense settings

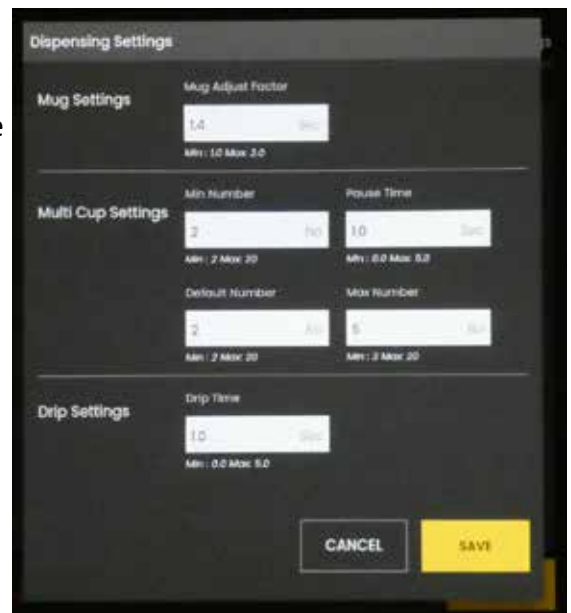
The dispense settings are additional to the total drink options. As shown by the picture the following options are possible.

Visible now is why sugar in the Cappuccino is optional for the user with or without a slider and milk not.



- |                  |   |
|------------------|---|
| By Product Milk  | Use the Milk Cycle as optional setting in the choice screen             |
| By Product Sugar | Use the Sugar Cycle as optional setting in the choice screen            |
| Double Cup       | Enable the double dispense option                                       |
| Mug Enable       | Enable the mug option for larger volumes                                |
| Multi Cup        | Enable the multi cup for filling larger containers or jugs              |
| Test Drink       | Dispense a test drink straight from this interface to test the settings |
| Copy Settings    | Copy the drink settings to another drink                                |

By tapping on the Edit button, some additional options for the above options appear as well as the drip time as final step in the recipe.



## Hot water

For hot water, a simplified set of settings will be shown only.

The screenshot shows the 'Drink 10 Settings' interface for a hot water drink. At the top right, it says 'Drink 10 Settings' and 'Settings > Product Settings > Drink 10 Settings'. The interface is divided into several sections:

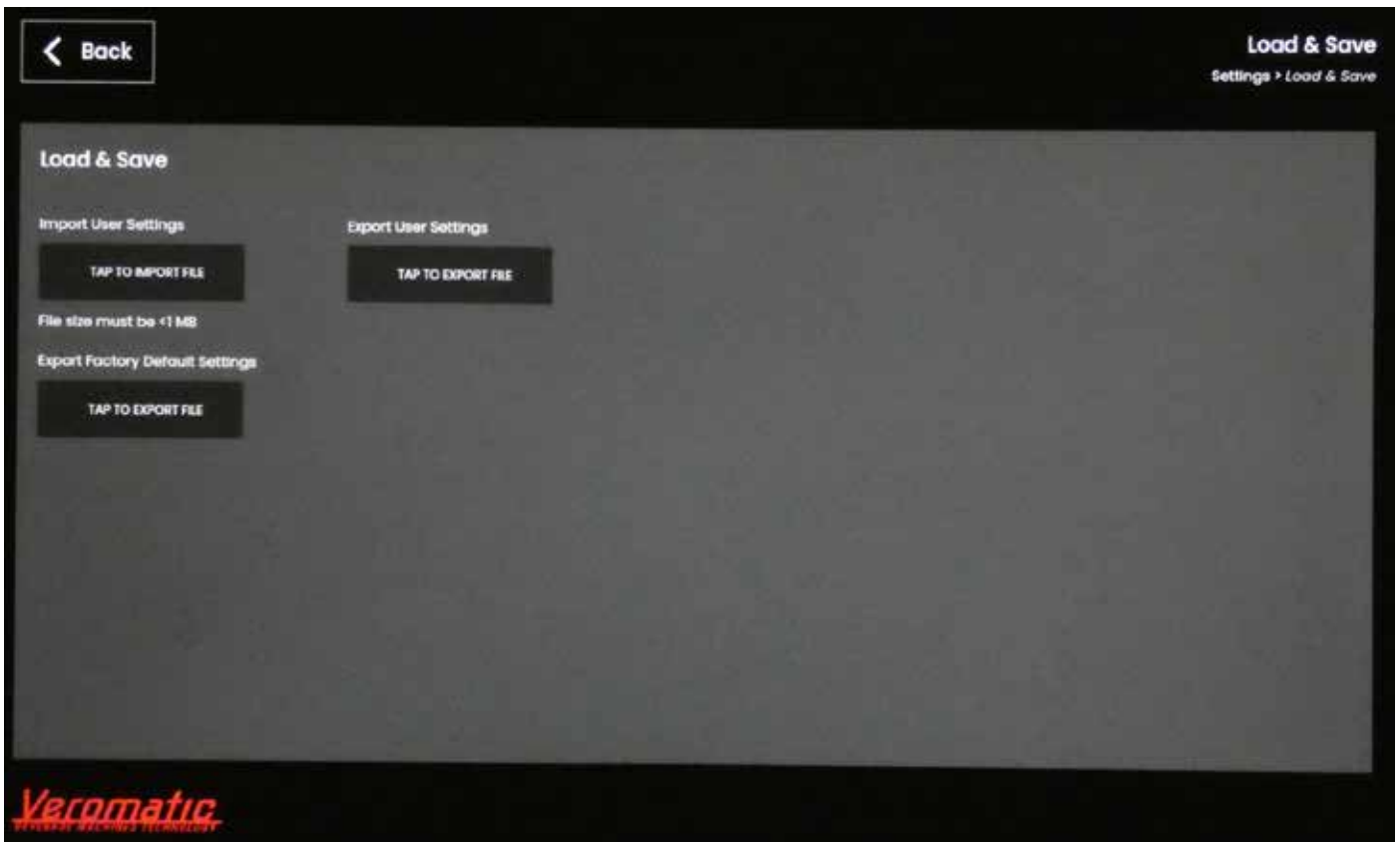
- Drink Enable:** A toggle switch is turned on (yellow).
- Drink Name:** A text input field contains 'Hot water'.
- Single Cup Image:** A small icon of a hot water cup.
- Main Product:** A dropdown menu is set to 'None'.
- Channel Selection:** Three buttons are visible: 'CHANNEL', 'HOT WATER' (which is highlighted), and 'DEFAULTS'.
- Recipe Settings:**
  - Water Delay:** A numeric input field shows '0.0' with 'Sec' to its right. Below it, the range 'Min: 0.0 Max: 30.0' is displayed.
  - Water Time:** A numeric input field shows '6.0' with 'Sec' to its right. Below it, the range 'Min: 0.0 Max: 15.0' is displayed. A yellow play button icon is to the right of the field.
- Bottom Bar:** The 'Veromatic' logo is on the left. On the right, there are two buttons: 'CANCEL' and 'SAVE' (which is highlighted in yellow).

To save all the adjustments tap on the Save button.

# 11. Overall system settings

## 11.1. Load or save settings on USB storage

The machine settings can be saved and re-loaded by means of a USB storage device.



1. In the Main Settings screen tap on Load & Save to enter the detail screen.
2. Remove the rubber cap of the USB port inside the door and insert a USB drive
3. Choose the desired option.
4. When the export is done, press back
5. Go to the main settings menu and tap on "Eject USB" to safely close and remove the USB drive (see picture).



## 11.2. Boiler settings

Choose “Boiler Settings” from the main settings screen to view or change the boiler settings. Tap on the Edit button to go to the detail screen to edit the values.



### **WARNING:**

Be careful what settings to use, as this might affect the correct working of the machine. Wrong settings might invoke errors caused by safety functions which are activated, like the boiler clixon.



Setting	Description
Min Operating Temp	The minimal temperature when choosing drinks will be available.
Operating Temp Setpoint	The working temperature of the boiler
Max Temp Variation	The tolerance on the working temperature
Standby Temperature	The temperature for energy saving mode

## 11.3. General settings

**General Settings**  
Settings > General Settings

**1. Date & Time Settings** EDIT

Date	Time	Time Zone
29/01/2025	13:26	GMT+100

**2. Jug Settings** CANCEL SAVE

Jug Tray Sensor	Jug Password	Set Jug Password	Interrupt On Multicup
<input type="checkbox"/>	<input type="checkbox"/>	1234	<input type="checkbox"/>
Set Multicup Count At Direct Start	Use Multicup Functionally	By Product Blocked For Jug Consumption	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**3. Input Output Settings** CANCEL SAVE

Cup Sensor	Beeper	Canister Empty Notification
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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**4. LED Settings** CANCEL SAVE

Cup Sensor	Beeper	Canister Empty Notification	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Fan Continuous	Fan On Time	Drip Tray Present Switch	Canister Sensor
<input type="checkbox"/>	4	<input type="checkbox"/>	<input type="checkbox"/>

Display Backlight Brightness  
100

**5. Dispensing Settings** CANCEL SAVE

Allow Product Skip	Second Product Cycle	Return To Selection Screen	Return Delay Time
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.0
Direct Start			
<input type="checkbox"/>			

## 11.4. Maintenance settings

← Back
Maintenance Settings  
Settings > Maintenance Settings

### Maintenance Settings

Use Water Filter Counter	<input checked="" type="checkbox"/>	Water Filter Expire Warning	5000	CANCEL
Water Filter Expire Error	7000			SAVE
Service Date Settings	<input checked="" type="checkbox"/>	Service Date Warning	01-01-2100	CANCEL
Service Date Error	01-01-2100			SAVE
Use Daily Rinse	<input checked="" type="checkbox"/>	Daily Rinse Time	07:00:00	CANCEL
				SAVE



				CANCEL
Use Daily Rinse	<input checked="" type="checkbox"/>	Daily Rinse Time	07:00:00	SAVE
Use Auto Idle Rinse	<input checked="" type="checkbox"/>	Auto Idle Rinse Time	480.0	CANCEL
				SAVE
Cold Drinks Use Water Counter	<input checked="" type="checkbox"/>			CANCEL
				SAVE
Mandatory initial rinse	<input checked="" type="checkbox"/>			CANCEL
				SAVE

## 11.5. Payment settings

[← Back](#) Payment Configuration  
Settings > Payment Settings > Payment Configuration

Payment Configuration EDIT

Payment Mode	Free	Discount Percentage	0 %
Currency	Euro €	Use Exact Change Function	OFF
Use Password For Free Vend	OFF	Use Password As Token	OFF
Set Payment Password	1234		

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[← Back](#) Payment Configuration  
Settings > Payment Settings > Payment Configuration

Payment Configuration CANCEL SAVE

Payment Mode	<input type="text" value="Free"/>	Discount Percentage	0.0
Currency	<input type="text" value="Euro €"/>	Use Exact Change Function	<input type="checkbox"/>
Use Password For Free Vend	<input type="checkbox"/>	Use Password As Token	<input type="checkbox"/>
Set Payment Password	<input type="text" value="1234"/>		

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Veromaxx Machine Technology

## 11.6. Product pricing

Product Pricing

Settings > Payment Settings > Product Pricing

Product Pricing

EDIT

Product Name	Rate	Product Name	Rate
Coffee	€ 0.2	Espresso	€ 0.2
Cappuccino	€ 0.2	Caffè Latte	€ 0.2
Latte Macchiato	€ 0.2	Caffè Mocha	€ 0.2
Wiener Melange	€ 0.2	Chocolate milk	€ 0.2
Hot chocolate	€ 0.2	Hot water	€ 0.2
Americano	€ 0.2	Long Black	€ 0.2
Drink	€ 0.0	Drink	€ 0.0
Drink	€ 0.0	Drink	€ 0.0
Drink	€ 0.0	Drink	€ 0.0

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Product Pricing

Settings > Payment Settings > Product Pricing

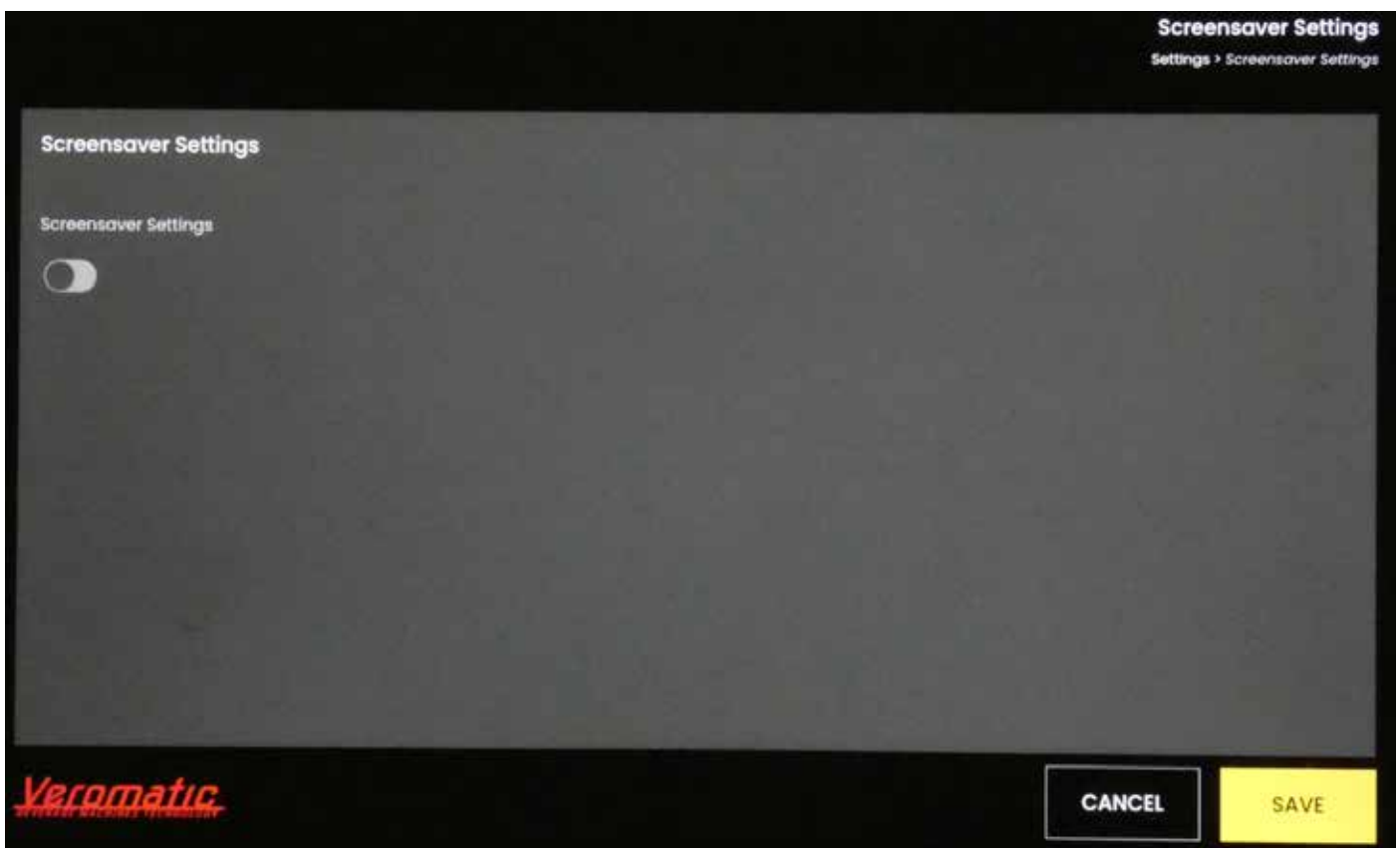
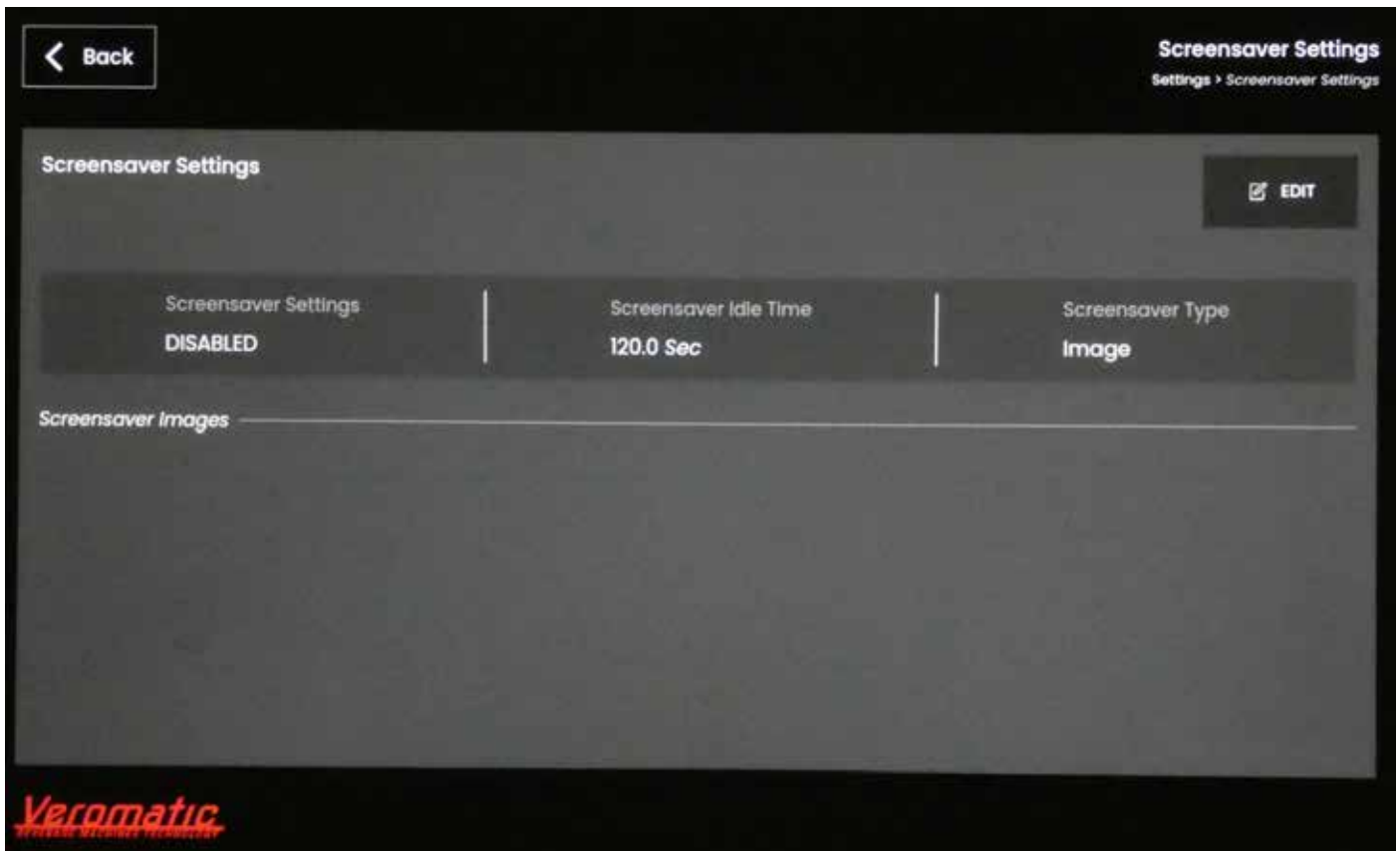
Product Pricing

CANCEL SAVE

Product Name	Rate	Product Name	Rate
Coffee	0.2	Espresso	0.2
Cappuccino	0.2	Caffè Latte	0.2
Latte Macchiato	0.2	Caffè Mocha	0.2
Wiener Melange	0.2	Chocolate milk	0.2
Hot chocolate	0.2	Hot water	0.2
Americano	0.2	Long Black	0.2
Drink	0.0	Drink	0.0
Drink	0.0	Drink	0.0
Drink	0.0	Drink	0.0

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## 11.7. Screen Saver Settings



### Screensaver Settings

Screensaver Settings



Screensaver Idle Time

Min: 60.0 Max: 240.0

Idle time should be between 60.0 - 240.0

Screensaver Media Type

Image

Video

Up to 25 Images can be added.



CANCEL

SAVE

### Images



- File must be in PNG, JPEG, JPG format
- File must be less than 1MB
- Resolution should be 1280x800 or 800x1280 depending on the orientation




Total Images(25)



## 12. Machine electronics

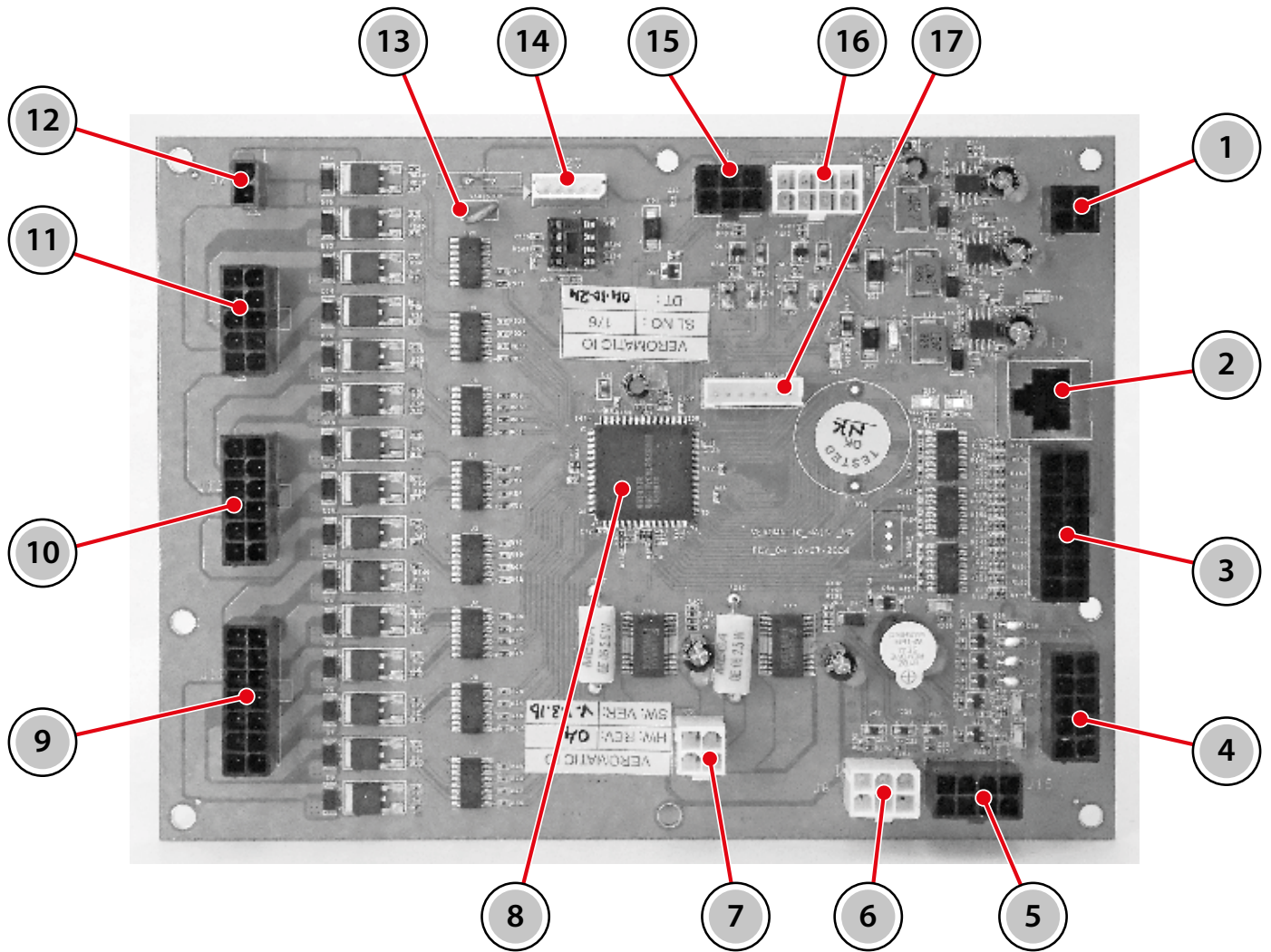
### 12.1. Overview electronics

The Attento ATI1 is based on Veromatics new electronics platform for 10" display technology. Unlike the 7" platform the complete main I/O PCB as well as the display control PCB are 100% 24VDC based. Components which need 230VAC voltage are connected to solid state switches outside the boards.

Item	Code	Photo	Description
Main I/O PCB	PP-01020	 A red printed circuit board (PCB) populated with various electronic components including integrated circuits, capacitors, and connectors. It features several multi-pin headers along the edges.	Input and output of sensors and actuators.
10" touch display and control	SM-03800	 A red PCB with a large black touch display panel attached to the bottom edge. The board contains a central microcontroller and other control components.	Main controller for display, touch screen, sensors and UX.
24VDC SMPS 180W	SM-03790	 A green PCB housing a power supply unit. It includes a large black electrolytic capacitor, a transformer, and various passive components. A yellow label is visible on the top surface.	Power conversion from 230VAC to 24VDC.

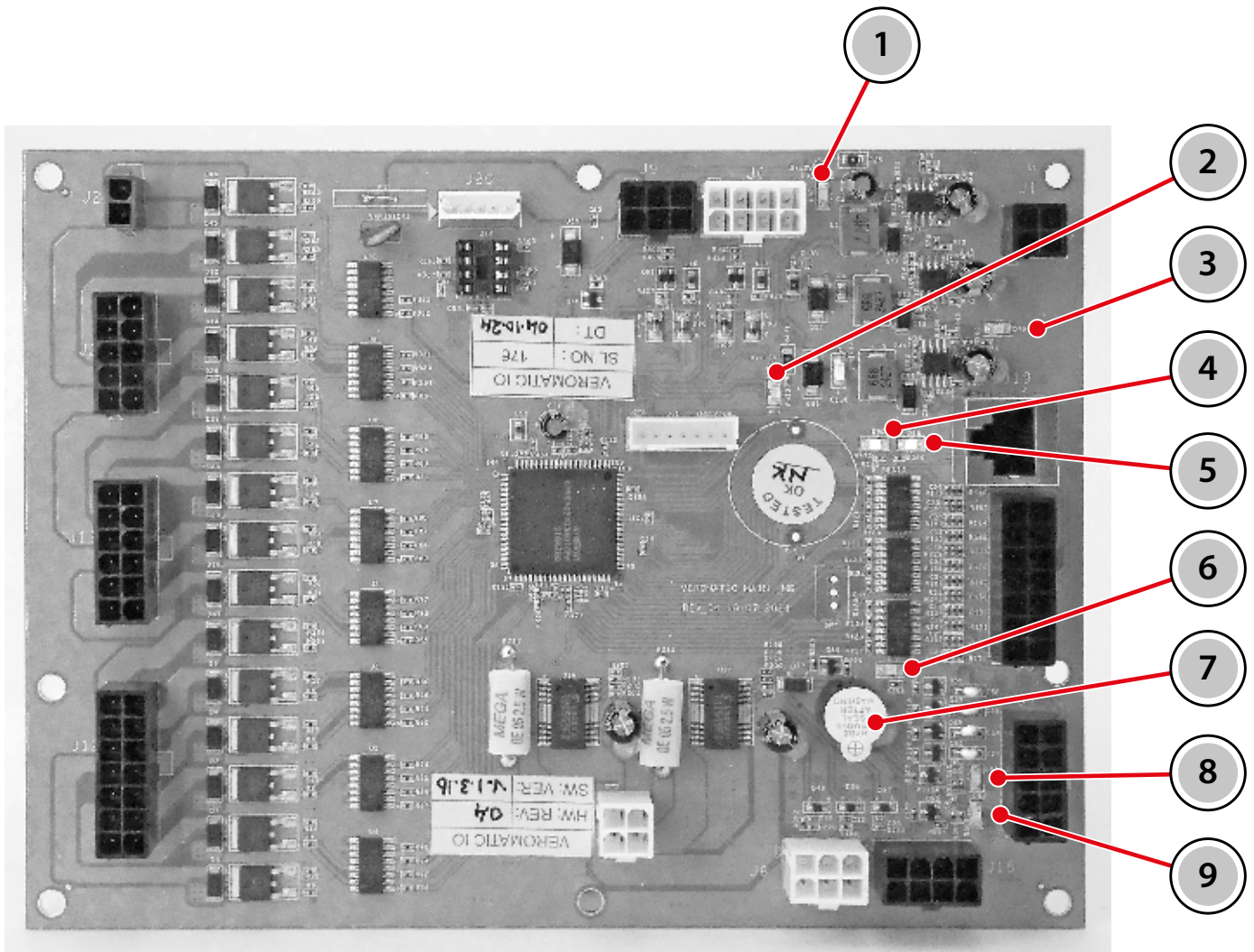
## 12.2. PP-01020 Main I/O PCB

### 12.2.1. I/O board connectors



No	ID	Description
1	J1	Power supply 24VDC in
2	J19	UART interface to display controller
3	J5	(not used)
4	J7	(not used)
5	J15	(not used)
6	J8	Temperature sensor
7	J4	(not used)
8	-	Main control CPU
9	J12	Ingredient and whipper motors
10	J13	Inlet and outlet water valves
11	J3	Heater control
12	J2	Exhaust fan
13	VAR1	Varistor protection
14	J20	(not used)
15	J9	MDB/telemetry
16	J6	Miscellaneous sensors
17	J11	Emulator (not used)

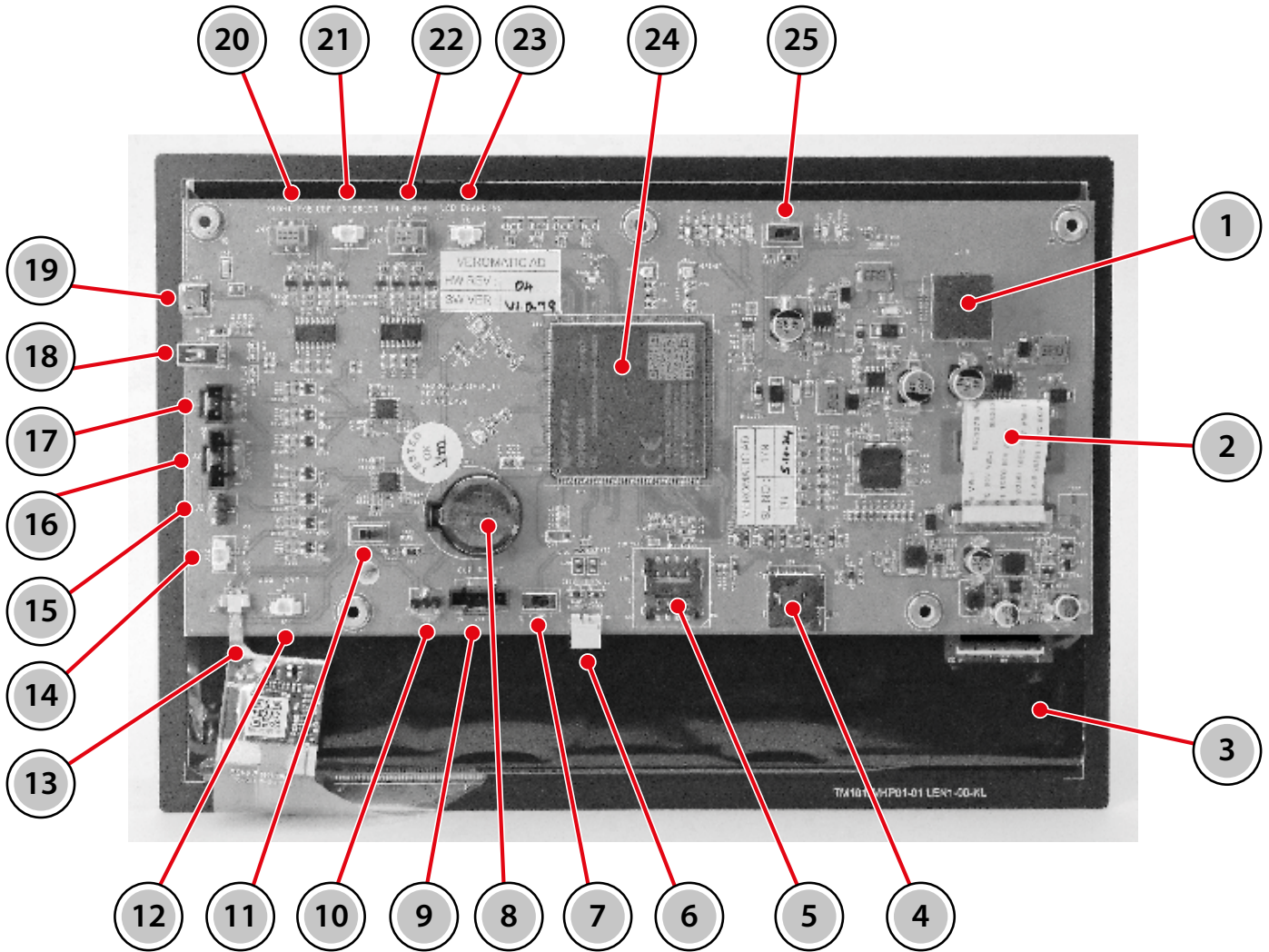
## 12.2.2. I/O board indicators



No	ID	Description
1	D80	Voltage indicator 12VDC LED (blue)
2	D91	Voltage indicator 3.3VDC (green)
3	D79	Voltage indicator 24VDC (red)
4	D90	UART LED
5	D86	UART LED
6	D78	Voltage indicator 5VDC LED (green)
7	LS1	Buzzer
8	D65	Flow meter 1 LED
9	D64	Flow meter 2 LED

## 12.3. SM-03800 10" touch display and controller PCB

### 12.3.1. Controller board connectors

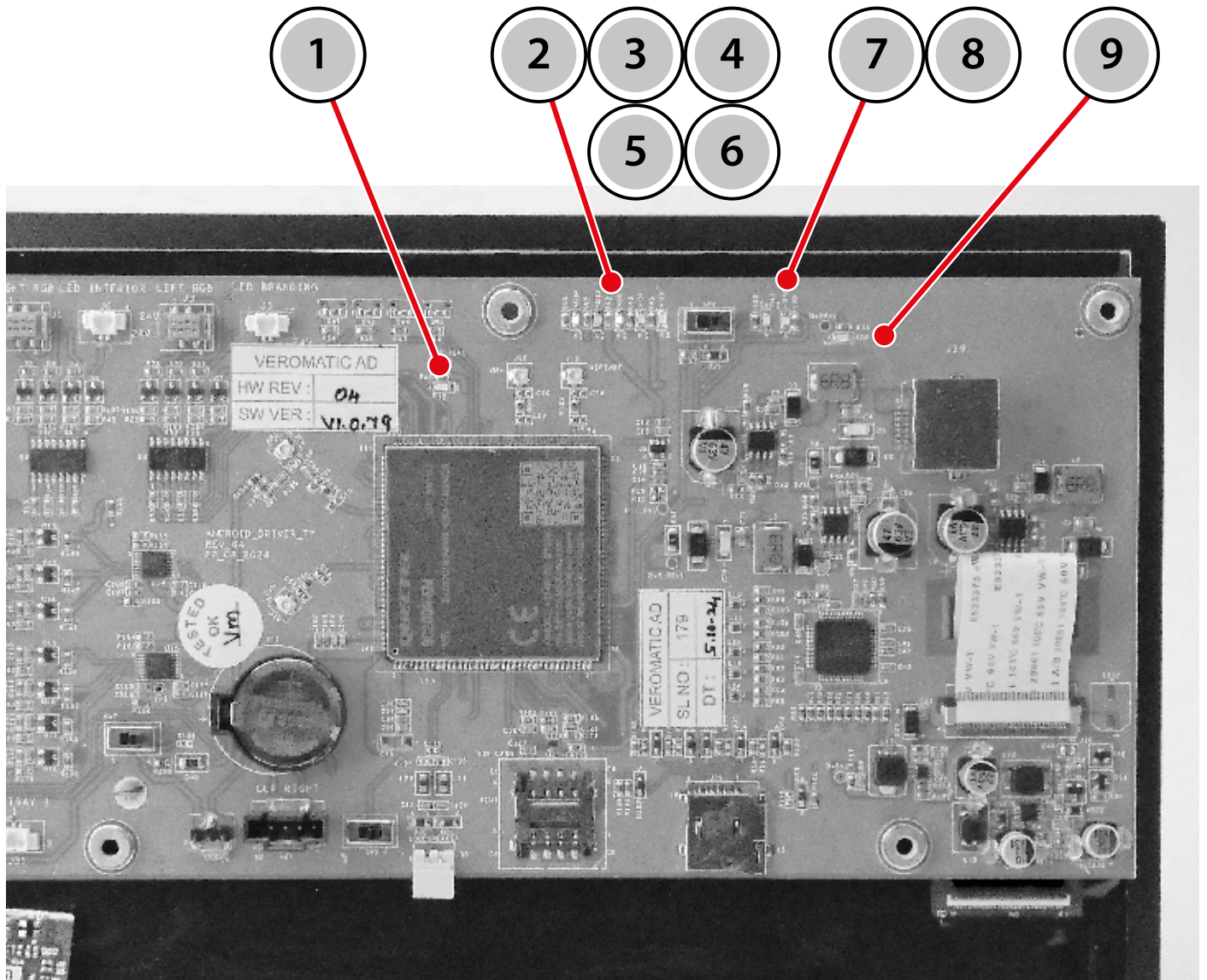


No	Description		
1	UART interface to I/O board	14	(not used)
2	Flat cable to display	15	(not used)
3	Display module with touch screen	16	Cup sensor left
4	SD-card slot	17	Door switch
5	(not used)	18	USB interface
6	(not used)	19	(not used)
7	(not used - keep in right position)	20	Cup RGB LED indicator right
8	CMOS battery	21	(not used)
9	Cup sensor right	22	Cup RGB LED indicator left
10	(not used)	23	(not used)
11	Battery power ON (right pos) / OFF (left pos)	24	Main CPU
12	(not used)	25	(not used - keep in right position)
13	Flat cable / touch controller		

#### **⚠ WARNING:**

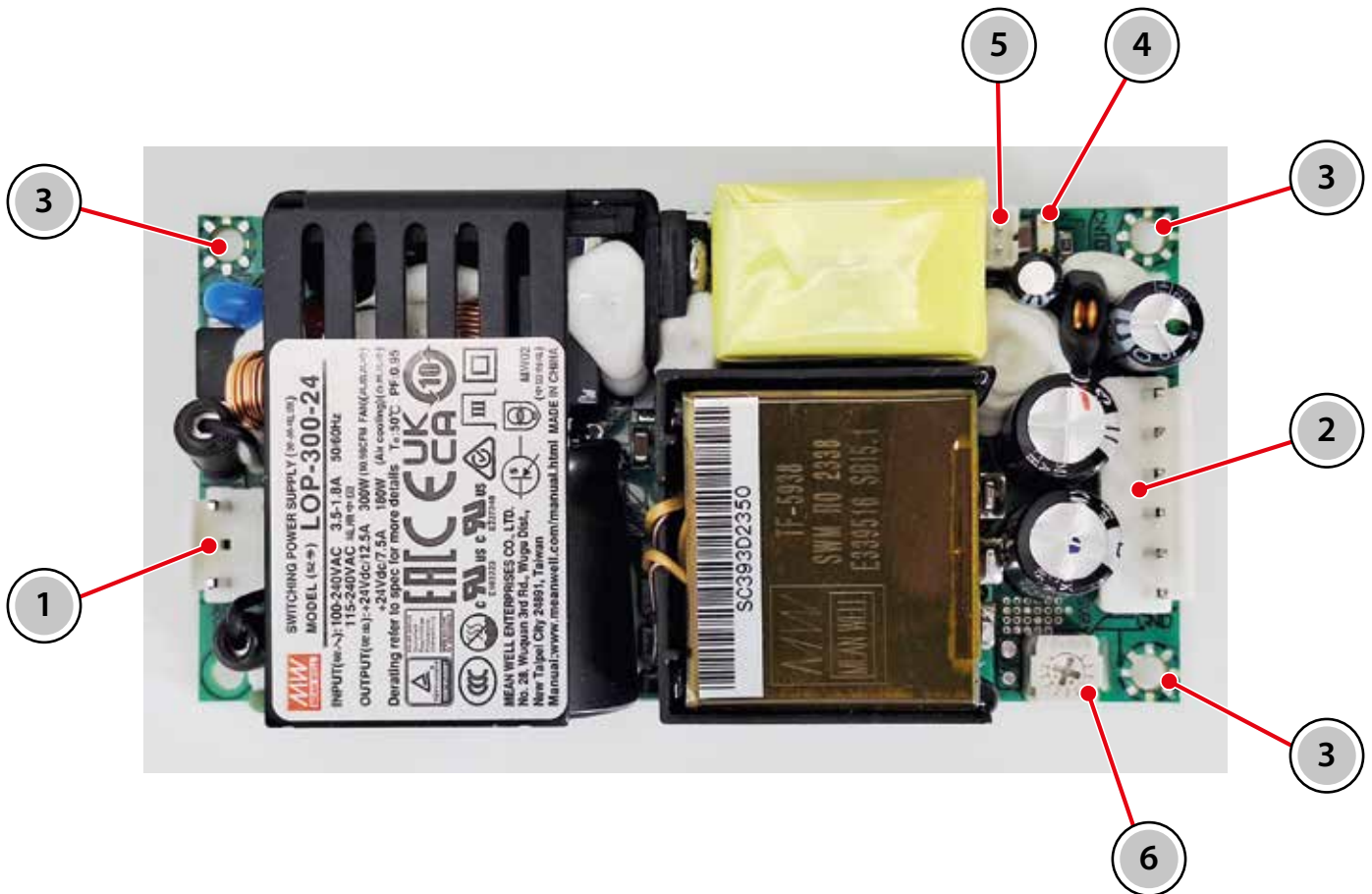
Beware of electrostatic discharge which could damage the PCB. Be carefull not to damage the flat cables.

### 14.5.1. Controller board indicators



No	ID	Description
1	D12	Voltage presence indicator 2,8VDC
2	D14	Voltage presence indicator 1,2VDC
3	D13	Voltage presence indicator 1,8VDC
4	D8	Battery voltage indicator
5	D7	Voltage presence indicator 3,3VDC
6	D9	Voltage presence indicator 5VDC
7	D41	UART
8	D40	UART
9	D6	Voltage presence indicator 24VDC

## 12.4. SM-03790 SMPS 24VDC



General description of connectors

No	Description
1	230VAC input
2	24VDC output
3	Protective earth points
4	Power LED
5	External SMPS cooling fan (NOT USED)
6	Voltage adjustment (VDC out) - NOT TO BE ALTERED!!

Pin layout 230VAC input connector

No	Description
1	230VAC line input
2	- (removed)
3	230VAC neutral input

Pin layout 24VDC output connector

Pin no	Signal name
1,2,3	+ 24VDC
4,5,6	- 24VDC

**⚠ WARNING:**

Beware that the power supply works with 230 VAC.



## 14. Service

It is important for the safety and hygiene of the machine that it receives a service inspection each year and optionally parts are replaced. Use only original spare parts of Veromatic International BV. Take precautions for your personal safety as described in the safety chapter in the beginning of this manual.

### 14.1. Water lock and water filter

Veromatic International BV strongly advises to use a water lock (ordering code HL-00190) to prevent high damages in case of leakages and will accept no responsibility nor liability with regard to water damage if the vending machine is installed without this protection.

A water filter is advised by Veromatic International BV to:

- Keep the in-cup quality consistent
- Minimise limescale buildup

The filter must be replaced after a certain period (given by the supplier of the filter). A too long used water filter is detrimental to the operation of the machine and can be dangerous to health.

### 14.2. Safety inspection

When checking the machine, make sure to use this checklist:

- Check all seals for leakage, in special:
  - The boiler connections
  - The inlet valve
  - The outlet valves
- Check all electrical wiring. In special all wiring and connectors which are in connection with the heating element and replace if necessary
- Check all hoses for cleanliness and tears and replace if necessary
- Inspect all relais and replace if necessary

### 14.3. Hygiene

For proper hygiene and safety, it is important to check the machine for proper maintenance; is there no accumulation of product residue in the outlets for example. If the machine is not well maintained, inform the operator of the risks and, if necessary, give proper instructions.

## 14.4. Maintenance schedule



**ATTENTION!**

When inspection shows defect / worn parts, they need to be replaced.

Part	Maintenance	Frequency of maintenance		Replace after
		Inspect	Clean	
Mixers	Check if the mixer parts are cleaned properly by the operator. If contaminated too much, replace those parts	Every visit	Every 3 months	Max. 2 years
	Check the locking ring: <ul style="list-style-type: none"> <li>The outer O-ring</li> <li>The shaft seal (no signs of leakage behind on the shaft)</li> </ul>	Every visit	Every 3 months	1 year
	Remove the motor: <ul style="list-style-type: none"> <li>Check/clean the base ring from residue</li> <li>Clean the motor housing from dust/residue</li> </ul>	Every 6 months	-	1 year
	Check if the hoses don't have excessive dirt, discoloration or contamination.	Every 6 months	-	1 year
2 Liter boiler	Empty the boiler and check for limescale	Every 6 months	Yearly	-
	Descale the boiler when necessary, especially when no filter is used	Every 6 months	Every 6 months	-
	Check the valves for signs of leakage	Every 6 months	Yearly	-
	Check the seals of the valves, and replace if needed	Yearly	Yearly	Max. 2 years
Canisters	Empty the instant canisters and clean thoroughly. Re-place them completely dry	Monthly	Monthly	-
	Empty the bean hopper and clean thoroughly. Depending on the beans used, the surface may get sticky. Re-place completely dry	Monthly	Monthly	-
Cabinet	Check if the fan is clean	Every 6 months	Every 6 months	-
	Check all wiring harnesses for signs of damage	Yearly	-	-
	Check the power cable for signs of damage	Every 6 months	-	-
	Check the water connection	Every 3 months	Every 3 months	-
	Check if the machine is maintained/cleaned properly by the operator. If not, clean the machine properly and instruct the operator.	Every visit	Every 3 months	-

## 14.5. Repairs

### **WARNING:**

Repairs are understood to be anything for which tools are needed to work on the machine. Those repairs may only be done by authorized technicians. For any repairs only original parts may be used.

For your safety understand that the machine works with 230 VAC, 230 VDC and hot water. Earthing connections and several sensors are provided for a safe installation and use of the machine.

The demands made from a technician are:

- The technician has to be informed of all laws and regulations regarding electrical connections, electrical symbols, etc.
- The technician is very familiar with the machine, by training with Veromatic International B.V. or similar training obtained elsewhere.
- The technician uses the instructions, diagrams etc., applicable for this type and model.
- The technician takes all security precautions for himself and others so as not to be exposed to any danger, electrical as well as mechanical.
- The technician is well aware of the applicable guidelines regarding hygiene.

The technician must take the following precautions while working on this machine:

1. Unplug the plug from the wall outlet.
2. Observe all general safety direction
3. Check to see if ground connections that have been removed are properly installed and functioning again. Failing to do so may cause a dangerous situation for both mechanic as users.
4. Micro-electronics are used in this machine. It is therefore necessary to wear a grounded bracelet with such service operations. For the same reason, the printed circuit boards that need to be repaired must be packaged in antistatic packaging material before they are transported.

To replace parts, use only original (spare) parts, issued by Veromatic International B.V. These satisfy strict quality demands which assure that the machine continues to function optimally. If original parts are not used, the warranty is null and void and Veromatic International B.V. is not responsible for possible damages resulting thereof.

**Wiring diagram**

