

Automatic machine for espresso coffee and hot beverages



Type: D.A. 3P2016

# OPERATION AND MAINTENANCE



# **MAIN PARTS**

### **MAIN PARTS - ESPRESSO VERSION**



	$\checkmark$	
1	Top door	
2	Display	
3	Front door	
4	Keypad	
5	Full drip tray float	
6	Dispensing outlet (beverage dispensing)	
7	Water tank lock	
8	Water tank	
9	ON/OFF button	
10	Power cord socket	



11	Coffee bean hopper		
12	Container 2 (instant products)		
13	Container I (instant products)		
14	Instants opening		
15	Mixer		
16	Dispensing arm		
17	Door lock		

18	Coffee grounds drawer
19	Drip tray
20	Grill
21	Coffee grinder
22	Safety switch
23	CPU card
24	Brew group

## SAFETY INSTRUCTIONS

- For professional use only.
   The vending machine cannot be installed outdoors; avoid placing it in areas where the temperature is less than 2°C or more than 32°C and in particularly dump or dusty areas.
- Do not install the appliance in a location where water jets may be used.
- The vending machine must be installed on a flat surface.
- L is forbidden to: use jets of water for cleaning operations.
- The appliance is only to be installed in locations where its use and maintenance is restricted to trained personnel.

- The use by children older than 8 years or by persons reduced with physical, mental or sensory abilities or with lack of experience skills is allowed. and provided that they are supervised instructed or on how the to use appliance correctly and that they understand the hazards involved.
- Children must not play with the appliance.
- Children must not carry out any cleaning and maintenance operations without being monitored.
- Do not direct water jets on the components and/or on the vending machine.

- ▲ Before connecting the appliance to the water mains, please read and follow the applicable regulations in force in your country.
- ▲ If the power cord is damaged, it must be replaced by the manufacturer, its service centre or by adequately qualified personnel in order to avoid any risks.
- Access to the service area is restricted to persons having knowledge and practical experience of the appliance, in particular as far as safety and hygiene are concerned.
- Before performing any maintenance and/or cleaning operation, unplug the power cord.

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### INTRODUCTION TO THE MANUAL

### I.I Preamble

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This publication is an integral part of the vending machine and must be read carefully to ensure the machine is used correctly and in compliance with essential safety requirements.

- This manual contains the technical information required for the correct use, installation, cleaning, and maintenance of the vending machine.
- Always refer to this manual before carrying out any operation.

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### I.2 Icons Used

Various kinds of warnings are contained in this manual to highlight the different hazard or competence levels.

The symbol is integrated with a message suggesting use procedures or actions and providing useful information for the correct operation of the machine.

# \land Warning

Indicates dangerous situations for the users, supply operators and maintenance technicians dealing either with the vending machine or the product to be dispensed.

# Prohibition

It is used to highlight actions/operations not to be performed.

# 🖻 Important

Indicates the operations for keeping the vending machine in good working order.

# 🗑 Suggested solutions

It is used to indicate alternative procedures which make programming and/or maintenance operations quicker.

# Ŕ

### 🖄 User

Indicates the user of the vending machine. Users are not allowed to perform any cleaning or maintenance operations.

# 🗊 Supply operator

Indicates operations to be carried out only by personnel in charge of supplying and cleaning the vending machine.

Supply operators can not perform any operations requiring a Maintenance Technician.



It is used to signal those operations that must be performed only by the specialised maintenance technicians.

The Maintenance Technician is the only person authorized to keep the MICROSWITCH ENABLING KEY, by which the security systems can be disabled.

### 2 INFORMATION ON THE VENDING MACHINE

#### 2.1 Information for the Maintenance Technician

The vending machine must be installed in a well-lit, dry area, away from bad weather and dust, on a floor suitable to support its weight.

To ensure its correct operation and reliability over time, comply with the following recommendations:

- ambient temperature: from +2°C to +32°C;
- maximum humidity allowed: 80% (non-condensed).

For special installations, not covered by this manual, please contact the dealer or the local importer. If this is not possible, please contact the Manufacturer.

The technical service is available for any explanation or information regarding the correct operation of the vending machine and to satisfy any request for spare parts supply or technical assistance.

The Maintenance Technician must carefully read and observe the safety warnings contained in this manual to ensure that installation, start-up, use and maintenance operations are performed in complete safety.

It is the Maintenance Technician's absolute responsibility to give the keys to access the inside of the vending machine to another operator (Supply Operator), provided that the Maintenance Technician bears full responsibility for all work carried out.

This manual is an integral part of the machine and must be always read carefully before performing any operation.

#### 2.2 Description and Intended Use

The vending machine is intended for automatic distribution of coffee and hot beverages (decaffeinated coffee, cappuccino, chocolate, etc.) and is programmable for every single type of dispensing dosage. The instant products must be consumed immediately, and cannot be preserved for a long time. Using the machine for any other purpose is considered dangerous and as a misuse.

Do not place any product inside the vending machine which may be dangerous as a result of unsuitable temperatures.

With reference to the definition of "professional appliance" given by the standard EN60335-2-75 for vending machines, this appliance can not be classed as professional.

Misuse voids all forms of warranty, releasing the Manufacturer from any responsibility for damage to property and/or personal injury.

# The following are also considered misuse:

- any use other than the intended use and/or employing methods other than those described in this manual;
- any intervention on the vending machine which differs from the instructions given in this publication;
- any tampering with parts and/or safety devices not previously authorised by the Manufacturer and performed by unauthorised personnel;
- any location of the vending machine not provided in this manual.

#### 2.3 Vending Machine Identification

The vending machine is identified by the name, model and serial number which can be found on the relevant data plate.



I	Model	
2	Name of the Manufacturer	
3	appliance code.	
4	Supply voltage (V)	
5	Electrical power consumption (W)	
6	Serial number	
7	Supply frequency (Hz)	
8	Certifying organization	
9	9 Marks of conformity	
10	Year and month of manufacture	

- It is strictly forbidden to tamper with or modify the data plate.
- When contacting the technical service, always refer to this plate by indicating the technical data shown on it.



**Technical Specifications** 

2.4

Size (w x h x d)	350 x 550 x 542 mm	
Weight	30 kg	Espresso
		model
Power consumption	See the data plate	
Supply Voltage	See the data plate	
Electric voltage frequency	See the data plate	
Power cord length	1600 mm	
Water Tank Capacity	4 litres	
A-weighted sound pressure	less than 70 dB	
level		



PR Boiler pressure data plate

#### **Container capacity**

Coffee beans	l kg
Hot Chocolate	0,90 kg
Milk	0.35 kg

# 3 SAFETY

#### 3.1 Preamble

In compliance with the regulations and directives in force, SaGa Coffee has established at its offices a technical pamphlet relative to the IPERAUTOMATICA appliance.

### 3.2 General Safety Instructions

# It is forbidden to:

- tamper with or disable the safety systems installed on the vending machine;
- carry out maintenance on the vending machine without unplugging it first;
- install the vending machine on the outside. It is advisable to place it in a dry place where the temperature does not drop below 2°C, in order to prevent any possible freezing.
- use the vending machine for purposes other than those indicated in the sale contract and in this publication;
- electrically connect the appliance using multi-sockets or adapters;
- · immerse the appliance in the water;
- use jets of water for cleaning operations.



#### It is mandatory to:

- · check conformity of the power supply;
- use original spare parts;
- carefully read the instructions contained in this manual and in the attached documents;
- use personal protective equipment when performing installation, testing and maintenance operations.
- Use a new gasket kit each time you disconnect and connect the machine again to the water system.

#### Precautionary measures to prevent human errors:

- make the operator aware of safety issues;
- handle the vending machine, either packaged or unpackaged, in safe conditions;
- deeply know the installation procedures, its correct operation and its limits;
- dismantle the vending machine in safe conditions, in accordance with the environmental protection and health and safety laws in force.

🛆 To prevent machining residues from coming into with contact the beverages, dispense about 0.5 | of water for each dispensing path before definitely starting the machine. The dispensed beverages can be drunk only after performing this operation.



R The for damage liable to property or persons resulting from failure to follow safety the instructions provided in this section.

#### 3.3 **Operator Requirements**

Three operators with different skills are required in order to guarantee the appliance's safety:

### ŵ User

Access to the internal part of the vending machine is forbidden to the user.

# Supply operator

The Maintenance Technician assigns the safekeeping of the access key to the Supply operator who is in charge of product supply, external cleaning, and starting up / stopping of the vending machine.

The Supply operator is not allowed to carry out operations indicated in this manual as competence of Maintenance the Technician

# Maintenance technician

The maintenance technician is the only person authorised to service the machine, start the programming procedures and perform the adjustment, set up and maintenance operations.

manufacturer is not  $\Delta$  Access to the service area restricted to persons is having knowledge and practical experience of the appliance, in particular as far as safety and hygiene are concerned.

#### 3.4 Safety devices

#### The vending machine is equipped with:

- · a safety switch which cuts out the voltage to all the inside components any time the front door is opened.
- · A microswitch blocks vending machine operation when the drip tray is not correctly positioned. A message indicating the incorrectly positioned part appears on the display.
- · A sensor blocks vending machine operation when the water tank is empty. The message "Fill water tank" is displayed.



Safety switch

# Maintenance technician

In case of programming or setting up operations only the Maintenance Technician can intervene by inserting the relevant key into the safety switch and resetting the voltage even if the door is open.

- 🛆 This operation, necessary 📧 Before brewing a beverage for starting up the vending machine. disables the safety system.
- $\triangle$  It must therefore be carried out by qualified personnel (Maintenance Technician) aware of the risks resulting from the presence of live or moving components.

#### 3.5 **Residual Risks**

- Risk of burning if the hands are placed inside the outlet during beverage brewing.
- Before removing the cup from the outlet, please wait for the message "RFMOVF CUP" on display.

that the make sure previous one has already been picked up and that the cup support is empty.

#### English

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### HANDLING AND STORAGE

#### 4.1 Unloading and Handling

Unloading and handling operations after transportation must be carried out only by qualified personnel and using suitable equipment.

The vending machine will be delivered in a package, so as to ensure protection against any mechanical and environmental agent.

#### 4.2 Storage

If the vending machine is not installed immediately, it should be stored in a sheltered area, conforming to the following instructions:

- the packaged vending machine must be stored in a closed, dry area at a temperature between I°C and 40°C;
- do not put other appliances or boxes on the vending machine;
- it is always good practice to protect the vending machine from any deposits of dust or other material.





The vending machine must always be kept in the upright position.

### Do not:

- dragging the vending machine;
- overturning or laying the vending machine flat during transport and handling;
- shaking the vending machine;
- · lifting the vending machine with ropes or cranes;
- leaving the vending machine exposed to the elements, in humid areas or close to heat sources.

# Avoid that:

- · being bumped into
- being overloaded with other parcels

T

### 5 INSTALLATION

#### 5.I Cautions

🛆 The vending machine be installed cannot outdoors; avoid placing it where the in areas temperature is less than 2°C or more than 32°C and in particularly dump or should dusty areas. lt neither be installed in places where water jets used for cleaning are operations where nor there is a risk of fire or explosion.

Make sure that the installation place is compatible with the following specifications, before unpacking the appliance:

- the power socket must be located in an easily accessible area, not more than 1.5 meters away;
- the socket voltage must correspond to that indicated on the appliance data plate.
- the surface or floor must NOT have a gradient of more than 2°.

The vending machine must be installed on a flat surface.

If the vending machine needs to be positioned close to a wall, it is necessary to leave a space of at least 15 cm between the back and the wall in order to keep the air outlet grille free. Under no circumstances cover the vending machine with cloths or similar.



#### 5.2 Unpacking and Positioning

On receipt of the vending machine make sure that it has not been damaged during transportation and that package has not been tampered with or that internal parts have not been removed.

A bag, called "CUSTOMER KIT", is supplied with the vending machine. It contains the following items:

- Instruction manual.
- Power cord
- Door safety microswitch disabling keys (Maintenance Technician)
- · Product labels and prices



The vending machine is placed on a cardboard base - Take the key from the dispensing outlet. protected by a cardboard cover in the upper part and is delivered in a box.



If damage of any kind is found, the courier must be informed and notice must be immediately given to the importer or to the seller.

If these are not in the purchaser's country, please contact the manufacturing company directly.



Insert the key into the lock, turn clockwise and open the door.



### 5.3 Label application

#### 5.3.1 Product labels

Open the door. By using a screwdriver, unscrew the 5 screws fixing the protection carter to the door.



Remove the carter.

Unscrew the 2 screws that secure the 2 label plates with a screwdriver.



Remove the 2 label plates.

Take out the product label sheet included in the customer kit.

Remove the labels from the product label sheet by following the pre-cut line.

Cut the labels as shown in the figure to make the left ones or the right ones.







Right labels



English

English





Check the exact position of the labels against the selection key. Reinsert the 2 label plates. Tighten the 2 screws previously removed. Insert the door protection carter back into place. Tighten the 5 screws previously removed.

For printing labels other than those supplied, we recommend using paper with the following features: 170-g matte coated paper.

#### Standard product configuration





### 5.4 Installation of Payment Systems

The vending machine is designed for the installation of various payment systems, such as:

- cashless reader;

А



The vending machine is not supplied with any payment system, which must be installed by the person in charge of its fitting.

After the chosen payment system has been installed, the corresponding parameters can be set through the programming menu (see section "Programming menu"). ▲ The Manufacturer declines any liability for any damage to the vending machine, to property and/or injury to persons, caused by the installation of the payment system. The responsibility falls to the person who carried out the installation.

### 5.5 Connection to the Electric Network

- ▲ The Maintenance Technician, who is responsible for the installation of the vending machine, must ensure that:
- the power supply system complies with the safety instructions in force;
- the voltage corresponds to that indicated on the appliance data plate.

In case of doubt, do not proceed with the installation and ask qualified and authorised personnel to accurately check the system. The vending machine is equipped with a power cord which must be plugged into the appropriate socket on the vending machine back panel.



Do not use adapters or multi-sockets.



Make sure that the power cord plug is easily reachable after installation.

#### English

6

# DESCRIPTION OF CONTROLS

#### 6.1 Power button

It is located in the lower left part in the rear of the machine.

If set to the "I" position the machine turns on (electrical functions enabled).

If set to the "O" position the machine turns off (electrical functions disabled).



#### 6.2 Display

The display shows the messages during normal operation and during the programming and maintenance phase.

#### 6.3 Keypad

- Each key function changes according to the vending machine mode (ordinary dispensing or programming mode).
- Each key has a double function that varies according to the vending machine status (standard operation or programming).



### 6.4 Button Description during Normal Operation

#### 6.4.1 Set | Pre-selection button

The function connected to the button may be chosen from the following options:

- A. Beverage 5
- B. Pre-selection of beverages 9-16
- C. Disabled

#### 6.4.2 Keys (1 to 8)

By pressing these keys, the programmed beverages are dispensed.

#### 6.5 CPU card keys

The CPU electronic board has 3 buttons to allow the Maintenance Technician to carry out programming and maintenance operations.



- PI Programming menu key
- P2 Maintenance menu key
- P3 Machine Ready / Free Button

# 7 SUPPLY AND START UP

### 7.1 Container Configuration

### 7.1.1 Espresso Version

The containers delivered are designed to dispense the following products:





#### 7.2 Instant product supply

Open the vending machine front door. Open the top door. Open the cover of the container to be supplied.



Pour the instant product into the container.



Close the hopper lid.

### 7.3 Coffee Bean Supply

Open the vending machine front door. Open the top door. Remove the container cover.



Pour the coffee beans into the hopper.

If the message "NO MORE COFFEE" is displayed, refill the vending machine, turn it off and then on again.

### 7.4 Filling the Water Tank

Rotate the special key inside the lock of the water tank lid.



Remove the lid with lock.



Put the cover back on the container.

English

Remove the tank and place it under a water tap.

Replace the lid with lock.





Secure the cover by turning the key in the lock.

Fill the tank with tap water.



Put the water tank back in place.





English

#### 7.5 Dose calibration

The vending machine is delivered with standard calibration values set by the manufacturer.

Dose calibration can be performed by means of two calibration levels:

· remove the cover;



 free the adjusting lever from the rack and put the internal divider pulling peg into one of the 4 possible positions in the basic coffee quantity area (7 gr - 8 gr - 9 gr - 10 gr);



 move the adjusting lever into the rack and select the slot corresponding to the dose required.



#### 7.6 Coffee Grind Adjustment

Turn the ring until the required results are obtained.

After any calibration three selections are necessary before the new setting becomes effective.



# 7.7 First start-up of the vending machine

Supply the vending machine (following the instructions given previously) and plug it into the power supply (see section "Power Grid Connection").

At this point the message "IPERAUTOMATICA" will appear on the display and the self-diagnosis phase is activated to check the correct positioning of the machine devices.

Any faults detected during the self-configuration cycle are stored so that the vending machine can display them at the end of the self diagnostic phase.

Carry out the grinder adjustment as indicated in the instructions at section "Coffee Grinder Adjustment" after refilling the water circuit.

#### 7.8 Water circuit filling

At first VM start-up, the boiler is filled automatically.

#### 7.8.1 Filling the boiler manually

After switching the vending machine on it is possible to fill the boiler by activating the following procedure:

#### Procedure A

- press the P2 key to enter the maintenance menu;
- Enter the Maintenance/Washes menu and start the automatic washing cycle;

#### Procedure B

- press the P2 key to enter the maintenance menu;
- Enter the Maintenance/ Boiler Refill menu and start
  the automatic refill cycle;

The rinsing operation must be repeated until water flows out of the brewing nozzles regularly.

# 7.9 Washing the Parts coming into Contact with Food

Clean all the parts of the VM which are in contact with foodstuffs.

- · Thoroughly wash your hands.
- Prepare a chlorine-based, antibacterial disinfecting solution (the products can be purchased at the chemist's) following the concentrations indicated on the product.
- Remove all the product containers from the vending machine.
- Remove the container lids and product chutes. Immerse all these parts in the previously prepared solution.

#### 7.10 Use of the vending machine

The beverage selection modes are indicated in chapter "Operation and Use".

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### PROGRAMMING AND MAINTENANCE MENU

- This section illustrates how to set up or modify the vending machine programming and maintenance settings.
- Therefore it is necessary to carefully read it and to understand the exact sequence of operations before performing them.

#### "^" Key: UP

By pressing this key it is possible to access the next entry inside the same level. If used after requesting the change of a setting, the value of this setting increases.



### 8.2 Programming Menu

The structure of the programming menu is indicated in section "Structure of the Programming Menu".

The section "Description of Messages in the Programming Menu" describes all the items in the programming menu.

#### 8.2.1 Access to the Programming Menu

Open the door, disable the safety device (see section "Safety Devices") and press the PI key to enter the programming menu.



### 8.1 Key description of programming and maintenance phases

To scroll through the vending machine menu, the keys described below are used.

#### "e" Key: ENTER

By pressing this key it is possible to enter the following programming or maintenance level. It is also possible to modify or confirm the values set in the entries of the programming or maintenance menus.

#### "c" Key: CANCEL

By pressing this key it is possible to go back to the previous level of the programming or maintenance menu. It is also possible to avoid storing the previously modified values.

#### "v" Key: DOWN

Pressing this key it is possible to access the previous entry inside the same level. If used after a setting modification request, the value of this setting decreases. If no password has been assigned, the programming menu is entered directly.

If a password was assigned to the vending machine to enable the programming menu, the message "PASSWORD 000000" will appear on the display with a flashing cursor on the first digit.

Now the password should be entered using the UP and DOWN keys. Confirm the digit entered by pressing the ENTER key.

Proceed as follows to exit the programming menu and return to standard operation of the vending machine:

- Press the CANCEL button repeatedly until "EXIT ?" appears. Select YES and press ENTER;
- remove the key from the safety switch in order to turn off the vending machine;
- close the door and wait for the self-configuration process to end.

### 8.2.2 Structure of the Programming Menu

OPTION NO.	MENU ITEM	
1.	SYSTEM MANAGEMENT	
1.1.	VM Code	
1.2.	Stops	*
1.2.1.	Stop coffee	*
1.2.2.	Stop Pre-ground	*
1.2.3.	Stop beverages	*
1.2.4.	CofGrounds contr.	*
1.2.5.	Stop CofGrounds	*
1.2.6.	Reset	*
1.2.0.	Water filter	*
		*
1.3.1.	Last replacement	*
1.3.2.	Remaining qty	*
1.3.3.	Filter limit	*
1.3.4.	Filter reset	
1.3.5.	Filter enabled	*
I.4.	Boiler I temp.	
1.4.1.	Min. Temperature	
1.4.2.	Max. Temperature	
1.5.	Water tank	
1.6.	Energy save	
1.6.1.	Stand-by timeout	
1.7.	Preheating	
1.7.1.	Coffee preheating	
1.7.2.	RINSING	
1.7.3.	Delay	
1.8.	EV Water Assign	
1.8.	Rinsing time	
1.9.1.		
	Rinsing cycle	
1.10.	Pre-grinding	
1.11.	Programmable Texts	
1.11.1.	Ready	*
1.11.2.	Preselection	*
1.11.3.	Brewing	
1.11.4.	Out of service	
1.12.	Contrast	
1.13.	Pulse counter	
1.14.	Clock	
1.14.1.	Time	
1.14.2.	Date	
1.14.3.	Date/time format	
1.15.	Audit Msg. Enable	
1.16.	Reset Enabling	
1.17.	Free vend key	*
1.18.	Presel. button	*
1.19.	Language	*
1.12.		*
1.20.	Change Password	*
	Password prog.	*
1.20.2.	Service Password	Υ
1.21.	On/Off time	
1.21.1.	On I	
1.21.2.	Off I	
1.21.3.	On 2	
1.21.4.	Off 2	
1.22.	Audit Device	*
1.22.	r dale Defice	

OPTION NO. 1.22.2.	MENU ITEM	
	EA12 (Events) EA35 (Readouts)	_
1.22.3.	· · · · ·	_
1.22.4.	LAI-Prices Lists LAI Normal Prices	
1.22.4.1.		_
1.22.4.2.	LAI DiffI Prices	_
1.22.4.3.	LAI Diff2 Prices	_
1.22.4.4.	LAI Card Prices	_
1.22.4.5.	LAI Free	
1.22.4.6.	LAI Test	
1.22.5.	PA - Products	
1.22.5.1.	PA2	
1.22.5.2.	PA7	
1.22.6.	VA13 Sales	
1.22.7.	BAI-CAI5-Cash	
1.22.8.	DA17-CashLess	
1.22.9.	Quick Reading	
1.22.10.	Extended Time-outs	
1.22.11.	Baud Rate	
1.22.12.	Enhanced BaudRate	
1.23.	Multiple beverage	*
1.23.1.	Multiple beverage	*
1.23.2.	Enable Multiple Bev.	*
1.23.3.	Free	*
1.24.	Complete menus	
1.25.	Grouping Powders	
1.25.1.	Enable	
1.25.2.	Grouping Powders	
1.26.	VM Model	
1.20.	Default Menu	-
1.27.1.	Factory default	-
1.27.2.	Custom Default	
1.27.2.1.	Read Custom	
1.27.2.1.	Write Custom	-
1.2/.2.2.	write Custom	
1.20	Sustana Infa	
1.28.	System Info	
2.	PAYMENT SYSTEMS	
2. 2.1.	PAYMENT SYSTEMS Protocol	
2. 2.1. 2.2.	PAYMENT SYSTEMS Protocol Parallel Coiner	
2. 2.1. 2.2. 2.2.1.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable	
2. 2.1. 2.2. 2.2.1. 2.2.29	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values	
2. 2.1. 2.2. 2.2.1. 2.2.29 2.3.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator	
2. 2.1. 2.2. 2.2.1. 2.2.29 2.3. 2.3.1.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable	
2. 2.1. 2.2. 2.2.1. 2.2.29 2.3. 2.3.1. 2.3.2.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level	
2. 2.1. 2.2. 2.2.1. 2.2.29 2.3. 2.3.1. 2.3.2. 2.3.37	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value	
2. 2.1. 2.2. 2.2.1. 2.29 2.3. 2.3.1. 2.3.2. 2.3.2. 2.3.37 2.4.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings	
2. 2.1. 2.2. 2.2.1. 2.29 2.3. 2.3.1. 2.3.2. 2.3.37 2.4. 2.4.1.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled	
2. 2.1. 2.2. 2.2.1. 2.2.2.9 2.3. 2.3.1. 2.3.2. 2.3.37 2.4. 2.4.1. 2.4.2.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled Max Card Recharge	
2. 2.1. 2.2. 2.2.1. 2.2.2.9 2.3. 2.3.1. 2.3.2. 2.3.37 2.4. 2.4.1. 2.4.2. 2.4.3.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled Max Card Recharge Max Card Value	
2. 2.1. 2.2. 2.2.1. 2.2.29 2.3. 2.3.1. 2.3.2. 2.3.2. 2.3.37 2.4. 2.4.1. 2.4.2. 2.4.3. 2.4.48	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled Max Card Recharge Max Card Value Coins Enabling	
2. 2.1. 2.2. 2.2.1. 2.2.2.9 2.3. 2.3.1. 2.3.2. 2.3.37 2.4. 2.4.1. 2.4.2. 2.4.3.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled Max Card Recharge Max Card Value	
2. 2.1. 2.2. 2.2.1. 2.2.29 2.3. 2.3.1. 2.3.2. 2.3.2. 2.3.37 2.4. 2.4.1. 2.4.2. 2.4.3. 2.4.48	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled Max Card Recharge Max Card Value Coins Enabling Alt. payout Max change	
2. 2.1. 2.2. 2.2.1. 2.2.29 2.3. 2.3.1. 2.3.2. 2.3.2. 2.3.37 2.4. 2.4.1. 2.4.2. 2.4.3. 2.4.48 2.4.5.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled Max Card Recharge Max Card Value Coins Enabling Alt. payout	
2. 2.1. 2.2. 2.2.1. 2.2.29 2.3. 2.3.1. 2.3.2. 2.3.37 2.4. 2.4.1. 2.4.2. 2.4.2. 2.4.3. 2.4.48 2.4.5. 2.4.6.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled Max Card Recharge Max Card Value Coins Enabling Alt. payout Max change	
2. 2.1. 2.2. 2.2.1. 2.2.29 2.3. 2.3.1. 2.3.37 2.4. 2.4.1. 2.4.2. 2.4.3. 2.4.48 2.4.48 2.4.5. 2.4.4. 2.4.5. 2.4.4.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled Max Card Recharge Max Card Value Coins Enabling Alt. payout Max change Exact change policy	
2. 2.1. 2.2. 2.2.1. 2.29 2.3. 2.3.1. 2.3.2. 2.3.2. 2.3.37 2.4. 2.4.1. 2.4.2. 2.4.3. 2.4.4.8 2.4.4.8 2.4.5. 2.4.6. 2.4.7. 2.4.8.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled Max Card Recharge Max Card Value Coins Enabling Alt. payout Max change Exact change policy Min Tube Level Manual Tube Filling	
2. 2.1. 2.2. 2.2.1. 2.2.29 2.3. 2.3.1. 2.3.2. 2.3.37 2.4. 2.4.1. 2.4.2. 2.4.3. 2.4.4.8 2.4.4.5 2.4.4.5 2.4.4.5 2.4.6. 2.4.7. 2.4.8. 2.4.9.	PAYMENT SYSTEMS         Protocol         Parallel Coiner         Enable         Coin Values         Banknote Validator         Enable         Inhibition Level         Banknote Value         MDB settings         Recharge Enabled         Max Card Recharge         Max Card Value         Coins Enabling         Alt. payout         Max change         Exact change policy         Min Tube Level	
2. 2.1. 2.2. 2.2.1. 2.29 2.3. 2.3.1. 2.3.2. 2.3.37 2.4. 2.4.1. 2.4.2. 2.4.3. 2.4.4.8 2.4.4.8 2.4.4.8 2.4.4.6 2.4.4.8 2.4.4.8 2.4.9. 2.4.8 2.4.9. 2.4.10. 2.4.11.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled Max Card Recharge Max Card Value Coins Enabling Alt. payout Max change Exact change policy Min Tube Level Manual Tube Filling Manual Tube Empty Commit to vend	
2. 2.1. 2.2. 2.2.1. 2.2.29 2.3. 2.3.1. 2.3.2. 2.3.37 2.4. 2.4.1. 2.4.2. 2.4.3. 2.4.48 2.4.5. 2.4.4.5 2.4.4.5 2.4.6. 2.4.7. 2.4.8. 2.4.9. 2.4.10. 2.4.11. 2.4.122	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled Max Card Recharge Max Card Value Coins Enabling Alt. payout Max change Exact change policy Min Tube Level Manual Tube Filling Manual Tube Empty Commit to vend Bill Enabling	
2. 2.1. 2.2. 2.2.1. 2.29 2.3. 2.3.1. 2.3.2. 2.3.37 2.4. 2.4.1. 2.4.2. 2.4.3. 2.4.4.8 2.4.4.8 2.4.4.8 2.4.4.6 2.4.4.8 2.4.4.8 2.4.9. 2.4.8 2.4.9. 2.4.10. 2.4.11.	PAYMENT SYSTEMS Protocol Parallel Coiner Enable Coin Values Banknote Validator Enable Inhibition Level Banknote Value MDB settings Recharge Enabled Max Card Recharge Max Card Value Coins Enabling Alt. payout Max change Exact change policy Min Tube Level Manual Tube Filling Manual Tube Empty Commit to vend	

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OPTION NO.	MENU ITEM	
2.4.15.	no change =no bills	
2.5.	Max credit	
2.6.	Multivend	
2.7.	Overpay Time	
2.8.	Fixed Zeroes	
2.8.	Decimal Digits	
2.9.	Credit Wdog	
2.10.	Preselection	
2.11.	Pre-selection Time	
2.11.1.		
	clear pre-selection	
2.12.	Cash sale cmd sending	
2.13.	(EXE/PHD) safe mode	
3.	PRODUCT SETUP	*
3.16	Product Before	
3.2.	Beverage Enabling	*
3.3.	Beverage Preparation	
3.3.	Sequence	
3.3.	H2O / Coffee	
3.3.	Just water	
3.3.	% instant product #:	
3.3.	% pump #:	
3.3.	InstProdDelay #:	
3.3.	Instant prod. dose #:	
3.3.	Inst. prod. water #:	
3.3.	Beverage test	
3.4.	Prebrewing [ml]	
3.5.	Pre-brew. pause[s/10]	
3.6.	Beverage Stop	
4.	SALE MANAGEMENT	
4.12	Price table	
4.2.	Beverage price	
4.2.1.	Normal	
4.2.1.1.	Global price	
4.2.1.2.	Single Prices	
4.2.2.	Differentiated I	
4.2.2.1.	Global price	
4.2.2.2.	Single Prices	
4.2.3.	Differentiated 2	
4.2.3.1.	Global price	
4.2.3.2.	Single Prices	
4.2.4.	Card	
4.2.4.1.	Card Prices	
4.2.4.2.	Global price	
4.2.4.3.	Single Prices	
4.3.	Free	
4.4.	Free On	
4.5.	Free Off	
4.6.	Diff Prices I-On	
4.7.	Diff Prices I-Off	
4.8.	Diff Prices 2-On	
4.9.	Diff Prices 2-Off	
	ble only if complete menus are enabled.	1

(\*) = Visible only if complete menus are enabled.

### 8.2.3 Description of Messages in the Programming Menu

DISPLAY	
	The SYSTEM MANAGEMENT items are:
SYSTEM MANAGEMENT	
	Eachles an identification code to be assigned to the vending people.
VM Code	Enables an identification code to be assigned to the vending machine.
1100	
1.2.	Enables setting of the maximum amount of beverage or coffee.
Stops	Once the maximum amount is reached, the vending machine stops dispensing the relevant beverages.
1.2.1.	Enables setting of the maximum number of coffee cups to be dispensed before the stop.
Stop coffee	5
1.2.2.	It allows setting the maximum number of pre-ground product servings to be brewed before
Stop Pre-ground	stopping the pre-grinding.
1.2.3.	Enables setting of the maximum number of beverages to be dispensed before the stop.
Stop beverages	
1.2.4.	Enables or disables control of the number of grounds discharged into the coffee grounds
	drawer.
CofGrounds contr.	When set to "YES" the machine will allow a certain number of cups of coffee to be brewed
	before requiring the drawer to be emptied (see "STOP COFGROUNDS"). When set to "NO" the machine will not control the number of grounds discharged into the
	drawer.
1.0.5	
1.2.5.	It allows you to set the maximum number of coffee cups to be brewed, corresponding to
	maximum dump box capacity.
	Once reached the set quantity, coffee-based beverages dispensing is stopped. Five cups of coffee before the lock is engaged, a blinking message appears on the display,
	"EMPTY COFGROUNDS".
Stop CofGrounds	Important
	This lock can be reset by removing the coffee grounds drawer for at least 10 seconds.
	Suggested solutions
	It is advisable to set a max. of 30 coffees when using the dump box supplied with the
	machine.
	Do not set any stop value if you are using the machine together with the supporting cabinet,
	which is equipped with its own dump box which is not controlled electronically.
1.2.6.	Enables resetting of all partial counters relative to product quantity stop functions.
Reset	
1.3.	Allows the use of the water filter to be checked.
Water filter	
	Date of the last filter reset.
Last replacement	Date of the last litter reset.
Last replacement 31/01/2017	
1.3.2.	Number of litres of water that can still be dispensed before the filter needs to be regenerated.
Remaining qty	When this value is less than 1, a Warning (W83) is recorded in the Error LOG.
95	
1.3.3.	Number of litres of water that can still be dispensed from the filter.
Filter limit	· · · · · · · · · · · · · · · · · · ·
100	
1.3.4.	Select YES to indicate a new filter has been installed
Filter reset	This operation returns "Remaining Qty" to the same value as "Filter Limit" and the date in the
	"Last Filter Change" is changed to today's date.
L	1

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DISPLAY		Description
1.3.5.		Enables management of the "Remaining Qty" countdown.
Eilean anablad		Important
Filter enabled		From the maintenance menu (button P2 on the CPU), you can access "Water Filter", "Last
	yes	Filter Change", "Remaining Qty" and "Filter Reset".
1.4.		This menu option allows setting the operating temperature of the boiler.
Boiler I temp.		
Denier i terripi		
1.4.1.		It allows you to set the temperature that the vending machine keeps for a few minutes after
Min. Temperature		a beverage has been brewed.
	94	
1.4.2.		It allows you to assign the temperature to which the vending machine is brought after a
1.7.2.		certain time from the last dispensing, so that the natural lowering of the temperature of the
Max. Temperature		hydraulic circuits can be compensated.
	102	The set value is expressed in centigrade.
	102	
1.5.		It allows selecting whether the vending machine must operate with its own tank (setting =
Water tank		YES) or with an external one (or with water network connection).
l.6.		The "Stand-by" and "ECO" modes allow reducing the energy consumption of the machine.
Energy save		It is possible to select one or both modes.
1.6.1.		The "Stand-by" mode is activated after some minutes of inactivity which can be set by mean
		of this menu option. By setting it to zero the function is disabled.
Stand-by timeout		In"Stand-by" mode the coffee and steam boilers are turned off (instant product boiler
stand-by timeout		remains on) and the display shows the message "Stand-by".
		To exit the "Stand-by" mode, press any button or insert some credit.
		When normal operation is restored, the boilers are turned on and the vending machine
		starts the warm-up phase.
1.7.		This menu allows setting the parameters related to the the preheating operations for the
Preheating		brew group, the brewing circuits for instant products or the steam dispensing circuit.
1.7.1.		It allows enabling (ON/OFF) a pre-heating cycle of the brew group if it remains inactive for a
Coffee preheating		period of time.
Coffee preheating	00	penoa of time.
	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending
	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending
	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending
1.7.2.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a
1.7.2.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a
1.7.2.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "I.7.3") has passed from the last use of the brew group.
1.7.2.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons.
1.7.2.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml.
1.7.2.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are:
1.7.2. RINSING	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml.
1.7.2. RINSING 1.7.3.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml. The default value is 0.
1.7.2. RINSING 1.7.3.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml. The default value is 0. Through this menu you can set the number of minutes of inactivity after which the initial
1.7.2. RINSING 1.7.3.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml. The default value is 0. Through this menu you can set the number of minutes of inactivity after which the initial pre-heating or rinse cycle of the brew group must be performed.
1.7.2. RINSING 1.7.3.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml. The default value is 0. Through this menu you can set the number of minutes of inactivity after which the initial pre-heating or rinse cycle of the brew group must be performed. The settable values are:
I.7.2. RINSING I.7.3. Delay	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml. The default value is 0. Through this menu you can set the number of minutes of inactivity after which the initial pre-heating or rinse cycle of the brew group must be performed. The settable values are: from 1 to 60. The default value is 5.
1.7.2. RINSING 1.7.3. Delay	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml. The default value is 0. Through this menu you can set the number of minutes of inactivity after which the initial pre-heating or rinse cycle of the brew group must be performed. The settable values are: from 1 to 60. The default value is 5. By setting the "W" value in the product list, hot water will be dispensed.
1.7.2. RINSING 1.7.3. Delay 1.8.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml. The default value is 0. Through this menu you can set the number of minutes of inactivity after which the initial pre-heating or rinse cycle of the brew group must be performed. The settable values are: from 1 to 60. The default value is 5. By setting the "W" value in the product list, hot water will be dispensed. This menu allows choosing the solenoid valve to be used for dispensing
1.7.2. RINSING 1.7.3. Delay 1.8.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml. The default value is 0. Through this menu you can set the number of minutes of inactivity after which the initial pre-heating or rinse cycle of the brew group must be performed. The settable values are: from 1 to 60. The default value is 5. By setting the "W" value in the product list, hot water will be dispensed. This menu allows choosing the solenoid valve to be used for dispensing If the "hot water solenoid valve" kit is installed, set the value to 0 (zero) or select the
1.7.2. RINSING 1.7.3. Delay 1.8.	00	It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml. The default value is 0. Through this menu you can set the number of minutes of inactivity after which the initial pre-heating or rinse cycle of the brew group must be performed. The settable values are: from 1 to 60. The default value is 5. By setting the "VV" value in the product list, hot water will be dispensed. This menu allows choosing the solenoid valve to be used for dispensing
I.7.2. RINSING I.7.3. Delay I.8. EV Water Assign		It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml. The default value is 0. Through this menu you can set the number of minutes of inactivity after which the initial pre-heating or rinse cycle of the brew group must be performed. The settable values are: from 1 to 60. The default value is 5. By setting the "W" value in the product list, hot water will be dispensed. This menu allows choosing the solenoid valve to be used for dispensing If the "hot water solenoid valve" kit is installed, set the value to 0 (zero) or select the
Coffee preheating 1.7.2. RINSING 1.7.3. Delay 1.8. EV Water Assign 1.9. Rinsing time		It allows enabling a rinse cycle to pre-heat the brew group when turning on the vending machine and when exiting the "Stand-by" mode if a certain period of time (that can be set a item "1.7.3") has passed from the last use of the brew group. The rinse cycle can be stopped by pressing one of the beverage buttons. Through this menu it is possible to set the quantity of water to be used. The settable values are: 0 (zero) rinse cycle disabled, from 1 to 200 ml. The default value is 0. Through this menu you can set the number of minutes of inactivity after which the initial pre-heating or rinse cycle of the brew group must be performed. The settable values are: from 1 to 60. The default value is 5. By setting the "W" value in the product list, hot water will be dispensed. This menu allows choosing the solenoid valve to be used for dispensing If the "hot water solenoid valve" kit is installed, set the value to 0 (zero) or select the

English	
DISPLAY	Description
1.9.1.	It allows enabling of the automatic rinsing of the mixing bowls.
	The automatic rinsing is performed as follows: the first rinsing takes place 10 minutes after
Rinsing cycle	the "machine ready" status; if necessary, other rinses occur 7 hours after the last dispensing.
yes	
1.10.	Enables instant pre-grinding of the coffee dose.
Pre-grinding	
yes	
1.11.	
Programmable Texts	
1.11.1.	It enables setting the message appearing on the display when the vending machine is in
Ready	standard operating mode.
IperAutomat	
ica	
1.11.2.	It allows setting the message appearing on the display when the preselection mode of the
Preselection	preselection key is active.
Barley	
beverages	
1.11.3.	it allows setting the message appearing on the display when the vending machine is
Brewing	dispensing a product.
Please wait	
1.11.4.	It enables setting the text on the display when the vending machine stops due to a fault.
Out of service	
Call service	
centre.	
1.12.	Adjusts the contrast of the display.
Contrast	
1.13.	Enables selection of whether the 24 V dc electromechanical pulse counter (optional - to be
Pulse counter	connected to the CPU card) has to count the coffees or all dispensed beverages.
Coffee	
1.14.	Enables setting of the hour, minute, day of the week, day of the month, month and year.
Clock	
1.14.1.	
Time	
08:00	
1.14.2.	
Date	
01/01/2008	
1.14.3.	Enables date and time display in US format - enables temperature display in °F
Date/time format	
1.15.	It allows displaying for a few seconds the selection counters (total and since last reset) during
Audit Msg. Enable	the machine start-up phase.
-	
1.16.	It allows enabling of the "RESET" for data in the statistics maintenance menu.
Reset Enabling	
no	
1.17.	It enables the P3 key of the CPU card for free dispensing of a product during standard
Free vend key	operation.
no	
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DISPLAY	Description	
1.18.	The function connected to the button may be chosen from the following options:	
	A. Beverage 5	
	B. Set I Pre-selection	
	C. Disabled	
Presel. button	A - Beverage button 5:	
	this is the default function.	
	Button 9 functions as a regular button.	
	B - Set I pre-selection: by choosing this function, the button becomes a pre-selection but	tton
Beverage		
	When pressed, the vending machine shows the pre-selection message on the display ("	
	DECAFF " as default) and makes the new beverage group available.	
	C Disabled: pressing the key has no effect.	
1.19.	It allows to select the language to be used by the machine.	
Language	The available languages are:	
	Italian, English, French, German, Spanish, Portuguese and Dutch.	
1.20.	Enables setting of a password or modification of the current one.	
	The password consists of a number between 000001 and 999999.	
Change Password	The 0000 value (default value) means no password.	
	To set the password, press the UP and DOWN keys and confirm using the ENTER key.	
1.20.1.	Allows setting a password to access the programming menu.	
Password prog.		
1.20.2.	Allows setting a password to access the maintenance menu.	
Service Password		
1.21.	Allows setting the vending machine's automatic on and off time ranges over the course o	of a
On/Off time	week.	
1.21.1.	On I	
On I		
Immgvsd 00:00		
1.21.2.	Off I	
Off I		
Immgvsd 00:00		
1.21.3.	On 2	
On 2		
Immgvsd 00:00		
1.21.4.	Off 2	
Off 2		
Immgvsd 00:00		
1.22.	It allows selecting the protocol to be used for transferring data from the VMC (DDCMP)	0
Audit Device	DEX) and which data category has to be transferred during an audit session.	
1.22.1.		
Protocol		
1 22 2		
1.22.2.		
EA12 (Events)		
1.22.3.		
EA35 (Readouts)		
1 22 4		
1.22.4.		
LAI-Prices Lists		

English	
DISPLAY	Description
1.22.4.1.	
LAI Normal Prices	
1.22.4.2.	
LAI DiffI Prices	
1.22.4.3.	
LAI Diff2 Prices	
1.22.4.4.	
LAI Card Prices	
1.22.4.5.	
LAI Free	
1.22.4.6.	
LAI Test	
1.22.5.	It enables categories in report EVA-DTS
PA - Products	
1.22.5.1.	It enables categories in report EVA-DTS
PA2	
1.22.5.2.	It enables categories in report EVA-DTS
PA7	
1.22.6.	
VAI3 Sales	
1.22.7.	
BAI-CAI5-Cash	
1.22.8.	
DA17-CashLess	
1.22.9.	Delete value = 0 data from EVA-DTS report
Quick Reading	
1.22.10.	Prolongation of response waiting time from EVA-DTS data players
Extended Time-outs	
1.22.11.	It allows you to set the "Baud Rate" communication speed on the serial line dedicated to
Baud Rate	EVA-DTS devices. Note: the selected speed will be used if Enhanced mode is not selected,
1.22.12.	Select YES to set the communication speed automatically adapted to that of the slowest
Enhanced BaudRate	device (starting from 2400 Baud). Select NO to use the Baud Rate set in the Baud Rate menu
1.23.	Allows selecting which beverages will be enabled for multiple brewing and the number of
	brewings.
Multiple beverage	The upper line will remain the same for all following operations, while the lower line will
	display the number of consecutive beverages. It is possible to set a value between 2 and 8.
1.23.1.	
Multiple beverage	
000	

DISPLAY	Description
1.23.2.	It allows to enable or disable the beverage keys.
Enable Multiple Bev.	By pressing a disabled key during operation, the message "NOT AVAILABLE" will be displayed.
1.23.3.	enables the free-of-charge dispensing of the multi beverage, even if the machine works upon
Free	payment. If the parameter is set on NO, machine settings apply to the multi beverage.
1.24.	Enables selection of whether the entries of the programming menu should be shown fully or
Complete menus	only partially.
1.25. Grouping Powders	It enables creating a group of 2 instant product containers. The groups of containers can be used when a higher capacity of instant powder is required for a particular product (e.g. when chocolate is largely used in a certain location, 2 chocolate powder containers can be dedicated accordingly).
	The machine software will be responsible for alternatively starting the two powder motors, to guarantee equal product consumption in the 2 containers. To use the instant product groups proceed as follows: enter the System Management through the Groups option enable groups management select the pair of containers you would like to group together programme the beverage recipe by introducing one of the 2 instant products that have been grouped.
1.25.1.	Enables the instant product containers groups
Enable	
1.25.2. Grouping Powders	Choosing the powder motor pair to be grouped together
I.26. VM Model	It allows selecting the current model of the vending machine. The vending machine model is specified on the label located in the inside of the right-hand side panel.
1.27. Default Menu	Management of default values for machine configurations. The user can create and recall their own configuration.
1.27.1. Factory default	It allows reverting the programmable parameters to factory preset values. This operation does not reset the product counter.
1.27.2. Custom Default	Management of the configuration which has been created by the user
I.27.2.I. Read Custom	Restore on machine the configuration saved by user
1.27.2.2. Write Custom	Saving the user machine configuration
1.28.	System Info This option allows accessing a page showing the overall machine configuration. The display shows the following information: FIRST ROW: Sw version ("x.yy.zz" format) / Program CRC ("abcd" format)
System Info	Example: "SW v1.02.12/087c" SECOND ROW: Boot loader version ("xx" format) and name of the file searched for by the boot loader on the USB key (".s19" extension not displayed) Example: "Boot 08SAE_DA5P" THIRD ROW: Memory version ("xxx.yyy." format) / Content CRC ("zzz" format) Example: "Mem 123.456.789"
2. PAYMENT SYSTEMS	The entries of the PAYMENT SYSTEMS are:

English		
DISPLAY		Description
2.1. Protocol		It allows you to choose the protocol used by the vending machine to dialogue with the payment system installed on it: EXECUTIVE Protocol; PRICE HOLDING/DISP Protocol; BDV Protocol; MBD Protocol; NO PROTOCOL (no serial protocol); Master/Slave executive (the Vending machine operates as Master for another vending
		machine); PHD Master/Slave (the Vending machine operates as Master for another vending machine that works with the PRICE HOLDING/DISP protocol); MDB SLAVE (the Vending machine acts as Slave to another vending machine); PHD REMOTE (select if you want to use the app Breasy to select products); The "NO PROTOCOL" setting will be used when a payment system operating with one of the protocols provided by the other settings "EXECUTIVE", "PRICE HOLDING", "BDV", "MDB" "MDB SLAVE" or "EXEC MASTER/SLAVE" is not installed on the VM. This setting is necessary to allow the VM to continuously checks for dialogue with the provided payment system. If the VM detects no dialogue, it signals this fault on the display and shows the message "NO LINK".
2.2.		Allows enabling of the parameters of the parallel coiner, the mechanical coiner, the cancelling
Parallel Coiner		machine and the choice of values to be assigned to the single money channels. Entry description:
2.2.1.		By setting "Y", the parallel coiner, the mechanical coiner and the cancelling machine control are enabled.
Enable	no	If set on "N", the parallel coiner (if any) connected to the vending machine will be excluded.
2.2.29		It allows you to set the value of the coins forwarded to the vending machine by the parallel coiner, the mechanical
Coin Values		coiner and the punching machine. The following "PAIRING TABLE" indicates how channels and related payment systems are connected to each other.
2.3. Banknote Validator		It enables the parameters of the parallel banknote validator and the choice of values to be assigned to single banknote channels. Entry description:
2.3.1. Enable	no	By setting "Y", the management of the parallel reader is enabled. By setting "N", a parallel reader which may be connected to the vending machine is always disabled.
2.3.2. Inhibition Level	0	Enables setting of the active level of the banknote reader inhibition signal.
2.3.37 Banknote Value		Enables setting of the value of banknotes transferred to the vending machine from the parallel reader.
2.4. MDB settings		Enables access to particular functions of the MDB protocol.
2.4.1. Recharge Enabled	no	It allows disabling or enabling the possibility of performing any Saeco Card recharge operation By setting RECHARGE = NO the vending machine will only deduct the cost from MDB cards.
2.4.2. Max Card Recharge	10.00	Enables setting of the maximum credit level, beyond which all recharge operations (if enabled) are ineffective. By setting MAX RECHARGE = 20.00, the credit on the vending machine will be transferred to the card if the sum does not exceed 20.00.
	English	
------------------------------------	--	--
DISPLAY	Description	
2.4.3. Max Card Value 120.00	It enables to set the maximum credit level, beyond which the card is rejected by the system By setting MAX CARD VALUE = 25.00, the vending machine will reject all cards with a credit which exceeds this amount. If this card is detected, the display will not show the credit but a " —— " message will be displayed and no sale will be carried out.	
2.4.48	Enables selecting which coins can be accepted by the coin return.	
Coins Enabling	If set on "Y", the specified coin will be accepted. On the contrary, if set on "N", the specified coin will be rejected by the coin return. The coins with a value lower than the scale factor of the vending machine are always disabled and marked with "N".	
2.4.5. Alt. payout no	It enables / disables the use of Alternative Payout for the level 3 MDB change-giving coiner. By setting "Yes" the change-giver is called on to dispense change. Change is limited to 255 times the scaling factor (typically € 12.75 for the Euro area - with scaling factor of 5). By setting "No" change is given by exploiting the machine's algorithm. Max. change is 60000 units (typically € 600 for the Euro area).	
2.4.6. Max change 10.00	Enables setting of the maximum amount of change which can be dispensed by the change-giving coiner. Default = $10.00$ .	
2.4.7. Exact change policy 0	With MDB coin return, the "no change available" status can be selected through the "CHANGE TABLE". Notes Even if the no change available message is displayed, the vending machine continues to give change as long as coins are present in the channels. The minimum level (the same for all channels) can be set on a special menu item.	
2.4.8. Min Tube Level 4	Enables setting of the minimum number of coins in the channels. Default = 4.	
2.4.9. Manual Tube Filling	Allows the coin return tubes to be filled by hand. Press Esc to exit the channel loading mode.	
2.4.10. Manual Tube Empty	Allows the change-giving coiner channels to be emptied by pressing the beverage selection keys.	
2.4.11. Commit to vend yes	By setting "N", the credit inserted can be returned even if no sale has been made. This function may be useful, for example, for changing banknotes into coins. By setting "Y", the credit inserted can be returned as change only after the sale has been completed. Default = YES.	
2.4.122 Bill Enabling	It allows you to select the bills accepted by the MDB bill reader. If set on "Y", this specific bill will be accepted. On the contrary,if set on "N", the bill reader will reject this specific bill. Default = All enabled.	
2.4.13. Bill Escrow	By setting "Y", an inserted banknote is stored in the escrow position by the banknote reader (if supported); this function is supported by the banknote reader. In this way, if the sale fails or the card system fails to charge, the banknote will be returned. By setting "N", any inserted banknote goes to the banknote reader's stacker, so that the banknotes cannot be returned. Default = No.	

English		
DISPLAY		Description
2.4.14. MDB Slave Address	0×40	When the vending machine is in Master mode, this menu enables setting of the address of any slave connected vending machine. If the vending machine is in Slave mode, it enables setting of its address. Possible addresses are 0x40, 0x48 and 0x50. Default = 0x40.
2.4.15. no change =no bills		Allows you to disable the bill reader if there is no change.
2.5. Max credit	20.00	It allows the user to set the maximum credit which can be accepted by the vending machine. Once this limit has been reached, the payment systems are disabled so that no more credit can be accepted. Default = 20.00.
2.6. Multivend	no	Enables the user to use any residual credit to purchase other beverages. By setting "N" (no), the residual credit will be collected by the vending machine.
2.7. Overpay Time	180	It establishes the maximum time (expressed in seconds) beyond which the vending machine collects the displayed residual credit. The time is adjustable at intervals of 10 seconds. Setting "000" the function is disabled.
2.8. Fixed Zeroes	0	Enables setting of the number of fixed zeros of the credit.
2.9. Decimal Digits	2	Enables setting of the position of the decimal point of the credit.
2.10. Credit Wdog	2	Enabling this option, an internal control is activated, which resets the communication with the payment systems if the communication is blocked.
2.11. Preselection		Management of pre-selection options
2.11.1. Pre-selection Time	8	Pre-selection time duration (in seconds)
2.11.2. clear pre-selection	yes	It enables the current pre-selection deletion by pressing any button other than sugar buttons and by pressing the change return button of the change giver.
2.12. Cash sale cmd sending	yes	It enables the management of the cash sale notification command (for card reader MDB)
2.13. (EXE/PHD) safe mode	yes	"safe" mode of protocol EXE/PHD. It does not accept selling controls outside the pre-selection time of the machine.
3. PRODUCT SETUP		
3.16 Product Before		It allows selecting the instant product for which you wish to enable powder dispensing before water dispensing. This brewing cycle will be carried out only when the quantity of powder to be brewed does not exceed 34.
3.2. Beverage Enabling	yes	It allows to enable or disable the beverage keys. By pressing a disabled key during operation, the message "NOT AVAILABLE" will be displayed.

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			English
DISPLAY		Description	
3.3. Beverage Preparation		The vending machine is able to dispense 14 beverages. Each beverage can be prepared by using ground coffee and/or instant products. Technicians can select the desired products for the recipe (max 4) and their order o	f use.
		Each component is identified by a number or a digit.	
3.3.		Defines with which and the dispensing order of the products composing the beverage. The possible choices are: 0 =does not dispense any product 1 = dispenses product 1	ge.
Sequence		2 = dispenses product 2 3 = dispenses product 3 4 = dispenses product 4	
		5 = dispenses product 5 C = dispenses coffee using freshly ground coffee F = brews "fresh brew" coffee using pre-ground coffee	
	0C00	P = brews espresso coffee using pre-ground coffee B = dispenses "fresh brew" coffee using freshly ground coffee W = dispenses hot water S = disp. steam in Cappuccinatore	
		Consequently, the combination of "3C00" or "30C0" or "03C0" will always dispense p 3 and coffee beans. The settings of products making up the beverage will be requested according to the sequence.	
3.3.			The
H2O / Coffee	38	Sets the quantity of water to be dispensed for the programmed coffee type (C or B) quantity can be set from "I" to "999".	). The
3.3.		Defines the amount of hot water to be dispensed.	
Just water	110	The quantity can be set from "I" to "999".	
3.3.		It determines the instant powder delivery rate.	
% instant product #:		The value can be set between 10 and 100.	
	100	The lower the value the smaller the powder delivery rate.	
3.3.		It determines the water delivery rate.	
		The value can be set between 20 and 100. The lower the value the smaller the water delivery rate. Important	
% pump #:		If the sequence includes several instant products, the sequence "INSTANT PRODUC WATER - DELAY INSTANT PRODUCTS - % OF INSTANT PRODUCT" will be sh	
	100	again. If the setting relative to the instant product ("INSTANT PRODUCT - WATER") mea the powder dispensing lasts longer than the water dispensing, the vending machine s powder dosing (to avoid insufficient rinsing of the mixer) and emits a beep.	tops
		Readjust the set parameters in order to have a correct dispensing procedure, i.e. the dispensing should stop a few seconds before the water stops flowing out. This is inte allow correct mixer washing.	
3.3. InstProdDelay #:		Delay (in tenths of second) between instant product and water start	
3.3. Instant prod. dose #:		This defines the quantity of instant product to be brewed. Example: "5.0" quantity indicates that the motor of the instant product 3 will be activ 5 tenths of a second.	rated for
	55.0	The quantity of instant product is adjustable from "0.1 to "500.0" in steps of 0,1. Brewing of the instant product does not occur when the parameter is set at "000.0" case water is brewed).	(in this

English	
DISPLAY	Description
3.3. Inst. prod. water #:	It defines the amount of water to be mixed with the instant powder. Example: "3" indicates that water will be mixed with the instant product 3. "022" indicates that 22 units of water will be brewed with the instant product. The reference unit is preset by the manufacturer.
80	The amount of water can be adjusted from ""1" to "1500" in steps of 1.
3.3. Beverage test	Enables brewing tests to be carried out on the beverage just set. By pressing ENTER the message "PRESS KEY" is displayed and it is possible to choose the key to be pressed, relative to the type of brewing test: 3 key = Full beverage; 7 key = Water only; 8 key = Powder only.
3.4. Prebrewing [ml]	Prebrewing water quantity
3.5. Pre-brew. pause[s/10]	Prebrewing pause duration
3.6. Beverage Stop	It allows to stop dispensing by pressing any button
4. SALE MANAGEMENT	The SALE MANAGEMENT items are:
4.12 Price table	99 price levels can be set.
4.2. Beverage price	Enables association of one of the price levels set in the PRICE TABLE to each beverage. The association can be:
4.2.1. Normal	
4.2.1.1. Global price P00 0.50	All beverages are given the same price level. Global price setting By pressing the UP and DOWN keys and confirming with ENTER, it is possible to choose the price level to associate to all beverages.
4.2.1.2. Single Prices	Each beverage will be given a specific price level. Single price setting Enables selection of the price level to associate to each beverage. Select the beverage to associate to a price using the UP and DOWN keys and confirm with
	ENTER, then select the price level (from 001 to 099) again with the UP and DOWN keys and confirm with ENTER.
4.2.2. Differentiated I	
4.2.2.1. Global price P00 0.50	All beverages are given the same price level. Global price setting By pressing the UP and DOWN keys and confirming with ENTER, it is possible to choose the price level to associate to all beverages.
4.2.2.2.	Each beverage will be given a specific price level. Single price setting
Single Prices B01:P00 0.40	Enables selection of the price level to associate to each beverage. Select the beverage to associate to a price using the UP and DOWN keys and confirm with ENTER, then select the price level (from 001 to 099) again with the UP and DOWN keys and confirm with ENTER.

		English
DISPLAY		Description
4.2.3. Differentiated 2		
4.2.3.1.		All beverages are given the same price level.
Global price		Global price setting
P00	0.50	By pressing the UP and DOWN keys and confirming with ENTER, it is possible to choose the price level to associate to all beverages.
4.2.3.2.		
4.2.3.2.		Each beverage will be given a specific price level. Single price setting
Single Prices		Enables selection of the price level to associate to each beverage.
Single Trices		Select the beverage to associate to a price using the UP and DOWN keys and confirm with
B01:P00	0.40	ENTER, then select the price level (from 001 to 099) again with the UP and DOWN keys
		and confirm with ENTER.
4.2.4.		This function enables the application of differentiated prices if the card is used for payment.
Card		
4.2.4.1.		By setting CARD PRICES = YES a new menu entry will appear in PRICE MANAGEMENT,
Card Prices		enabling setting the price level to be applied to the product (beverage or snack) if payment
	no	is made by card.
4.2.4.2.		All beverages are given the same price level.
Global price		Global price setting By pressing the UP and DOWN keys and confirming with ENTER, it is possible to choose
P00	0.50	the price level to associate to all beverages.
4.2.4.3.		Each beverage will be given a specific price level.
т.2.т.3.		Single price setting
Single Prices		Enables selection of the price level to associate to each beverage.
		Select the beverage to associate to a price using the UP and DOWN keys and confirm with
B01:P00	0.40	ENTER, then select the price level (from 001 to 099) again with the UP and DOWN keys
		and confirm with ENTER.
4.3.		Allows you to select if the beverages will be provided free-of-charge, upon payment, or
Free		free-of-charge within a time range.
	Never	
4.4. Errog Op		Allows the beginning and end of the free-of-charge beverage supply to be set.
Free On Immgvsd	00:00	
4.5.	00.00	
Free Off		
Immgvsd	00:00	
4.6.		Allows the beginning and end of beverage supply with differentiated prices to be set.
Diff Prices I-On		
Immgvsd	00:00	
4.7.		
Diff Prices I-Off	00.00	
Immgvsd 4.8.	00:00	Allows the beginning and end of beverage supply with differentiated prices to be set.
4.8. Diff Prices 2-On		Anows the beginning and end of beverage supply with differentiated prices to be set.
Immgvsd	00:00	
4.9.	00.00	
Diff Prices 2-Off		
Immgvsd	00:00	
•		1

#### PAIRING TABLE

Channel	Payment system	
	Coin validator	
2	Coin validator	
3	Coin validator	
4	Coin validator	
5	Coin validator	
6	Coin validator	
7	Cancelling machine	

#### **CHANGE TABLE**

No.	Description
0	L or M or HL or HH
	LorM
2	HL or HH
3	L or HH
4	L
5	М
6	HL
7	L and HH
8	HL and HH
9	L and M
10	L and M and HL and HH
11	L and HL or L and HH
12	L or HL and HH
13	HH
4	L and M and HL
15	Never (change always available)

Key:

 $\mathsf{L}=\mathsf{channel}$  with the lowest coin value below the minimum level

 $\mathsf{M}=\mathsf{channel}$  with the medium-low coin value below the minimum level

 $\ensuremath{\mathsf{HL}}\xspace$  = channel with the medium-high coin value below the minimum level

 $\ensuremath{\mathsf{HH}}\xspace$  = channel with the highest coin value below the minimum level

#### **BUTTON - BEVERAGE NUMBER CONNECTION**



#### **IPERAUTOMATICA BUTTONS TABLE**

KEY 5 = BEVERAGE 5		
BUTTON	Press	
	BUTTON	
	Beverage I	
2	Beverage 2	
3	Beverage 3	
4	Beverage 4	
5	Beverage 5	
6	Beverage 6	
7	Beverage 7	
8	Beverage 8	

KEY 5 = PRESELECTION			
BUTTON	Press	Press	
	BUTTON	PRESEL. +KEY	
	Beverage I	Beverage 9	
2	Beverage 2	Beverage 10	
3	Beverage 3	Beverage	
4	Beverage 4	Beverage 12	
5	Preselection	Preselection	
6	Beverage 6	Beverage 14	
7	Beverage 7	Beverage 15	
8	Beverage 8	Beverage 16	

#### 8.3 Maintenance menu

The structure of the maintenance menu is indicated in section "Structure of the Maintenance Menu".

The section "Description of Messages in the Maintenance Menu" describes all the options in the maintenance menu.

# 8.3.1 Access to the Maintenance Menu

Open the door, disable the safety device (see section "Safety Devices") and press the P2 key to enter the maintenance menu.



# To exit the maintenance menu and return to the standard operation of the vending machine:

- Press the CANCEL button repeatedly until "EXIT ?" appears. Select YES and press ENTER;
- remove the key from the safety switch in order to turn off the vending machine;
- close the door and wait for the self-configuration process to end.

# 8.3.2 Structure of the Maintenance Menu

OPTION NO.	MENU ITEM	
1.	Maintenance	
1.1.	Error log	
1.2.	Rinsing time	
1.3.	Water filter	
1.3.1.	Last replacement	
1.3.2.	Remaining qty	
1.3.3.	Filter reset	
1.4.	Calibrations	
1.4.1.	Coffee dosing unit	
1.4.2.	Brew Group Calib.	
1.5.	Cool Down Boiler	
1.6.	Drain boiler	
1.7.	Boiler filling	
2.	STATISTICS	
2.1.	Total sales	
2.2.	Overpay	
2.3.	Card-In	
2.4.	Card-Out	
2.5.	Total coins	
2.6.	Total banknotes	
2.7.	Counters	
2.8.	Free	
2.9.	Beverage test	
2.10.	VM Code	
2.11.	Slave sales	
2.12.	Reset	
3.	USB KEY functions	
3.1.	Write on USB KEY	
3.1.1.	Parameters writing	
3.1.2.	Counters writing	
3.1.3.	Write Param.+Count.	
3.2.	Read from USB KEY	
(*) = Visible only if complete menus are enabled		

(\*) = Visible only if complete menus are enabled.

### 8.3.3 Description of Messages in the Maintenance Menu

DISPLAY	Description
1.	This function allows to show and reset the errors that may be present.
	It is also possible to carry out maintenance on the vending machine.
	To reset the errors, use the menu under the maintenance item.
Maintenance	Important
	To correct errors see chapter "Troubleshooting" and section "5-button Keypad".
1.1.	The VM stores in its internal storage significant incidents occurring in the VMC (for example errors, trouble
	signals etc.)
	Recording takes place when the error condition is detected and consists of saving the following information:
	I - error code (or warning code) occurred 2- location of signal source (e.g., which spiral motor, if the
Error log	error is due to a spiral motor, or which coffee or instant
	product)
	3- day, month, hour and minute of error detection (this information is available only if the VM is equipped
	with a timekeeper).
	<ul> <li>The recordings are included in a list which may contain up to 50 elements;</li> </ul>
	when this limit is exceeded the information is input again starting from position 1 (previous information will
	be lost).
	Display:
1.2.	It allows to rinse the brewing circuits of instant products.
Rinsing time	By pressing the ENTER key the automatic cycle starts, thus activating in sequence each
	instant product circuit.
1.3.	Allows the use of the water filter to be checked.
Water filter	
1.3.1.	Date of the last filter reset.
Last replacement	
1.3.2.	Number of litres of water that can still be dispensed before the filter needs to be regenerated.
Remaining qty	When this value is less than I, a Warning (W83) is recorded in the Error LOG.
1.3.3.	Select YES to indicate a new filter has been installed
Filter reset	This operation returns "Remaining Qty" to the same value as "Filter Limit" and the date in the
	_ "Last Filter Change" is changed to today's date.
1.4.	
Calibrations	
	x
1.4.1.	Allows you to check the coffee dose in the dosing unit.
	To perform the check, you must:
	remove the brew group
Coffee dosing unit	position a container under the dosing unit to collect the coffee that will be ground.
	select YES from the menu.
	When you press the ENTER button, a coffee dose will be ground and discharged by the dosing unit.
	<ul> <li>Check that the weight of the coffee dose is within the limits for the brew group used</li> </ul>
	(between 6 and 9 grams for Group 7 g, or between 7 and 11 grams for Group 9 g).
	perment o and y grants for Group Y g, or between Y and TT grants for Group Y g).
1.4.2.	Brew group settings.
Brew Group Calib.	Diew group settings.
Brew Group Callo.	
	Allows handling the coffee brew group.
Test	
1.030	
· · · ·	•

English	
DISPLAY	Description
1.4.2.2.	"setting for brew unit timing."
BU Home delay	 Off position (any higher number corresponds to greater clockwise movement of the brew group)
I.4.2.3. BU Work delay	 "setting for brew unit timing." Working position.
1.5.	Allows quick cooling of the boiler. By selecting the item " BOILER COOLING " the VM dispenses water until the temperature
Cool Down Boiler	 detected by the sensor placed on the boiler has fallen below 50°C. A coloured bar on the display indicates the current temperature of the boiler. When the bar disappears the temperature detected is less than 50° and the cooling down operation is completed; the VMC must be turned off.
1.6. Drain boiler	It enables start-up of the automatic discharge cycle of the boiler.
1.7.	 Allows you to automatically fill the coffee boiler with water.
Boiler filling	 Repeat the cycle until the boiler is full (until water is dispensed from the coffee nozzle).
2. STATISTICS	
2.1.	The total revenue from the sales of all selections and beverages is displayed. Push "ENTER" to see the details of these proceeds according to:
Total sales	beverages (further divided according to price level, if required), cups sold discounts and increases made
2.2.	 The amount of credit collected when the OVERPAY time has elapsed is displayed.
Overpay	 The amount of credit collected when the OVERFAT time has elapsed is displayed.
2.3. Card-In	 The amount of credit collected from cards is displayed.
2.4. Card-Out	The amount of credit charged on cards is displayed.
2.5. Total coins	 The total value of the coins inserted is displayed.
27	 The state of the barbara inclusion in the state of
2.6. Total banknotes	 The total value of the banknotes inserted is displayed. By pressing "ENTER" it is possible to display the number of banknotes inserted according to their denomination.
2.7. Counters	In this menu it is possible to display the total and partial number of beverages, following the price band.
2.8. Free	 The total number of free beverages dispensed is displayed.
2.9. Beverage test	 The total number of test beverages dispensed is displayed.
2.10. VM Code	 Assigned by the manufacturer.
2.11. Slave sales	 The amount of sales made by the Slave is displayed.

	English		
DISPLAY	Description		
2.12.	Allows resetting the statistical data.		
Reset			
3.	by entering this menu, the user can access reading and writing functions from and on USB		
USB KEY functions	key memory		
3.1.	enters the submenu which allows the user to write machine parameters, statistic (counters)		
Write on USB KEY	parameters - or both - on the USB key		
3.1.1.	copies machine parameters on the USB key		
Parameters writing			
3.1.2.	copies the machine counters on the USB key (these values cannot be transferred to another		
Counters writing	machine: they just can be displayed with external devices).		
	 Reserved for future use.		
3.1.3.	copies machine parameters and counters on the USB key		
Write Param.+Count.	Reserved for future use.		
3.2.	upload to the machine the parameters stored in the file within the USB key		
Read from USB KEY			
	upload to the machine the parameters stored in the file within the USB key		

Exx	WHAT ==>	LOG TABLE xx code error/warning alarm	
aabb	WHERE ==>	if Myy = spiral motor yy	
aabb	WHERE ==>	if Syy = yy instant product dispensing	
aabb	WHERE ==>	if Lyy = yy instant product rinsing	
aabb	WHERE ==>	if C — = coffee brewing	
aabb	WHERE ==>	if aabb = hexadecimal codes	
dd MMM	WHEN ==>	day in figures, month in string (3 letters)	
hh:mm	WHEN ==>	hour:minutes	
ii	error index in LOG		
NN	number of errors in LOG		

#### 8.4 Machine Ready / Free Button

Open the door, disable the safety device (see section "Safety Devices") and press the P3 key.



If pressed during the initial warm-up, this button allows inducing the "MACHINE READY" status before the boilers reach their set temperature.

If pressed after the "MACHINE READY" status is reached, this button allows dispensing a free product (this function can be enabled from the menu "FREE BUTTON").

### 9 OPERATION AND USE

- 📧 The use by children older than 8 years or by persons reduced with physical, mental or sensory abilities or with lack of experience and skills is allowed. provided that they are supervised instructed or how the on to use appliance correctly and that they understand the hazards involved.
- Children must not play with the appliance. Children must not carry out any cleaning and maintenance operations without being monitored.

#### 9.1 Beverage Selection

The vending machine IPERAUTOMATICA is able to dispense 14 beverages. The conditions necessary to select a beverage are the following:

- the vending machine has reached the set temperature after the start-up. Otherwise, once a beverage key is pressed, the display shows the message "HEATING";
- the credit available is sufficient or the vending machine has been set in free mode. If this is not the case, the display shows the message "INSERT XXX";
- There is no error condition that prevents brewing beverages. If this is not the case, the display shows the error message "OS BEVERAGES XXX" alternated with "NOT AVAILABLE";
- the selected beverage is enabled. If this is not the case, the message "NOT AVAILABLE" will be displayed;
- there is no block condition for the beverage selected. If this is not the case, the message "BEVERAGE XXX" alternated with "NOT AVAILABLE" is displayed before the key is pressed. After the key is pressed, the display shows the message "NOT AVAILABLE";

# When dispensing a beverage:

- · payment systems are disabled;
- the first line on the display shows the programmable dispensing message (default message is: "WAIT FOR PRODUCT").

#### **Beverage selection**

If the vending machine is not set to dispense free beverages, insert the credit required.

Press the button corresponding to the beverage required.

When the beverage is dispensed, the message "REMOVE CUP" is displayed. Take the beverage out of the dispensing outlet.

- ▲ To avoid scalding, wait for the end of brewing signal (the message "REMOVE CUP" will appear on the display) before placing your hand in the dispensing outlet.
- If an anomalous condition occurs during the brewing phase, e.g. a fault or a product shortage, a message indicating the causes of the block will be displayed.
- ▲ Special messages and signals are indicated in chapter "Troubleshooting".

### 9.2 Warning signals

The table below shows a list of messages displayed during the standard operation.

Message	Cause	Action		
IperAutomatica	The vending machine is in stand-by.			
WAIT FOR	Product dispensing in progress.			
PRODUCT				
REMOVE CUP	Product dispensing finished.	Take the product.		
COFFEE NOT AVAILABLE	The coffee beans hopper is empty.	Carry out the supply.		
NOT AVAILABLE A type of product not available.				
NO CHANGE	The level of coin stacking tubes is below the preset limit.	Add coins into the change-giving coiner.		
AVAILABLE				
NO LINK	No dialogue with the selected payment system is detected	Check for dialogue with the payment		
	by the VM.	system.		

#### **CLEANING AND MAINTENANCE** 10

- Before performing any Avoid using chlorine-based and/or maintenance cleaning operation, unplug the power cord.
- $\bigtriangleup$  It is prohibited to perform cleaning or maintenance operations on the internal components of the vending machine with the safety microswitch disabling key inserted.
- 🛆 The Manufacturer is not 🕒 Do not direct water jets on malfunctions caused by a lack wrong of or maintenance.
- 🖻 During the loading operations do not stress any of the live electrical parts and do not clean them with damp cloths.

tablets so as to prevent oxidation phenomena inside the vending machine.

#### 10.1 General Notes for Correct Operation

- ▲ The vending machine and its non-removable components must be cleaned using non abrasive sponges or damp cloths.
- liable for damage or the components and/or on the vending machine.

Check for correct brewing of beverages and adjust the grinding when necessary.

To guarantee the correct operation of the vending machine it is recommended to conform to the indicated instructions and times in the "MAINTENANCE SCHEDULE".

#### 10.2 Cleaning and Scheduled Maintenance

- All parts must be washed with lukewarm water only and without using detergents or solvents that could change their shape or performance.
- All removable parts cannot be washed in the dishwasher.
- During the cleaning and maintenance operations do not stress the following electrical components: CPU card; starter port; interconnection port.
- Do not clean the electric parts with wet cloths and/or with degreasing detergents. Remove any dust residues with a jet of dry compressed air or with an antistatic cloth.

### 10.2.1 Maintenance Schedule

COMPONENTS TO BE CLEANED	Maintenance	Α	В	С	D
Display	Use a cloth dampened with cleansers suitable for contact with food.	×	-	-	-
Beverage dispensing outlet	Use a cloth dampened with cleansers suitable for contact with food.	X	-	-	-
Keypad	Use a cloth dampened with cleansers suitable for contact with food.	Х	-	-	-
Drip Tray and Dump box	See section "Cleaning Drip Tray and Dump box".	-	X	-	-
Brew group	See section "Cleaning the Brew Group".	-	X	-	-
Mixer	See section "Cleaning the Instant Product Dispenser and the Mixer".	-	X	-	-
Coffee bean hopper	See section "Cleaning the Containers".	-	-	X	-
Instant products container	See section "Cleaning the Containers".	-	-	X	-
Water tank	See section "Cleaning the Containers".	-	-	X	-
Dispensing arm	See section "Cleaning the Brewing Arm".	-	-	-	X
Coffee grinder	See section "Cleaning the Coffee Grinder".	-	-	-	Х

Α	Daily

, Weekly В

At each supply Every month С

D

#### 10.2.2 Brew Group Cleaning

Disconnect the pipe from the brew group.



Remove the brew group keeping the lever in 3 position.



Wash the brew group with lukewarm water and clean the upper filter carefully.



- FS Upper filter
- When inserting the brewing group, make sure that the reference arrows are aligned. If this is not the case, align them using the key provided.

#### 10.2.3 Cleaning the instant product dispenser and the mixer

Disconnect the dispensing hose from the nozzle and Remove the lid. from the dispensing arm.





Rotate the locking ring nut counter-clockwise and remove the mixer housing.







Wash all components with lukewarm water and pay particular attention not to damage the fan. Assemble the components in reverse order and connect the dispensing hose correctly.

#### 10.2.4 Cleaning the Containers

Wash regularly using non abrasive detergentsand dry with care:

• the water tank.

#### To clean the coffee bean hopper, follow the procedure below:

- push the moving shutter inwards;
- Brew a few coffee cups as a test, to remove the coffee beans from the coffee grinder;
- Lift up the container and remove the bean residues using an aspirator;
- Wash the inside of the container and dry it carefully before reassembling it.



To clean an instant products container, follow the instructions below:

• Rotate the dispenser as shown in the figure.



· remove the container by lifting it upwards;



- wash the inside of the container and dry it carefully before reassembling it;
- To reinstall the hopper proceed in reverse order, making sure that the two retainers A are inserted into the special slots.

#### 10.2.5 Cleaning the dispensing arm

Disconnect the hoses from the dispensing arm.



Remove the brewing unit.



Wash the arm with lukewarm water and follow the above procedure in the reverse order to refit into place

### 10.2.6 Cleaning the coffee grinder

Each month, clean the coffee grinder of any residues that might lead to deposits. After removing the coffee bean hopper (see section "Cleaning the Containers"), clean the coffee grinder carefully with an aspirator.

# 10.2.7 Cleaning the drip tray and coffee grounds drawer

Open the door. Take out the drip tray assembly.



Remove, empty and thoroughly clean the coffee grounds drawer.



Empty out the liquid in the drip tray assembly. Separate the upper part of the drip tray assembly from the lower part. Thoroughly clean the two disassembled parts.



Reassemble the upper part of the drip tray assembly with the lower part. Insert the coffee grounds drawer back into place. Insert the drip tray assembly back into the vending machine.

#### 10.3 Unscheduled maintenance

The operations described in this section are intended as an example as they depend on different variables, such as: water hardness, humidity, products used, conditions and quantity of work.

A Make sure the vending machine is off before performing any operation requiring to disassemble some of its parts.

Have the following operations performed by qualified personnel only. If the operations are to be performed with the machine on, choose trained personnel.

More complex interventions, such as removing limescale from the boiler, require a deep knowledge of the machine.

Disinfect all the parts in contact with foodstuffs using chlorine-based products on a monthly base, as described in section "Cleaning the parts in contact with foodstuffs".

#### 10.3.1 Brew group maintenance

Plastic group. It is advisable to remove it and rinse carefully with hot water on a monthly base; every 5,000 strokes and, in any case, every month all moving parts of the group must be lubricated with silicon grease for food use:

- lower filter rod (1)
- connecting rod (2)
- rails (3).



Replace gaskets and filters every 10,000 strokes.

#### Upper filter:

- loosen the upper pin (1) using the key (not supplied)
- manually unscrew the filter (2).



 unscrew the two side screws (1) and remove the upper piston stop (2)



- manually rotate using the key (not supplied) until the lower filter is flush with the cup
- unscrew screw (1) and replace filter (2)
- · reassemble all the parts following the reverse order.



Carefully blot the upper and lower filter and blow with compressed air.

#### 10.4 Software update

The vending machine management program is stored in the flash memory inside the CPU board.

#### The software update can be performed by using:

- a USB key (Pen Drive);
- a file containing the new software to be loaded.

#### Update procedure:

- copy the file received for update "XXXXX.prg" (where XXXXX is the version number) onto a USB key\* (the file should be stored on the device root);
- switch off the vending machine;
- insert the USB key into the CNI connector;



- · Switch on the vending machine;
- The CPU recognises the USB stick and searches for the file with the software to be loaded. The software loading bar with the completion percentage is shown on the display;
- In the event of an error, an error message appears on the display.
- The USB stick should be removed when loading is complete, as indicated on the display.

## \*All common USB keys used on PCs are suitable. Some restrictions are:

• the device has to be FAT12, FAT16 or FAT32 formatted

#### 10.5 Management of default values

The vending machine software allows you to create and recall the set of the default values.

To recall the factory preset values, the function to be used is "Factory default".

If you wish to create a set of default values you can recall later, the function to be used is "Custom default".

The "Custom default" function allows you to create and recall later your own set of default values.

To create the set of values, use the "Write custom" subfunction.

To recall your saved set of values, use the "Read custom" subfunction.

The parameters which are affected by the Factory/Custom default functions are all those contained within the Programming Menu.

### II TROUBLESHOOTING

The following table indicates the possible error or alarm causes which may lead to a partial or total arrest of the vending machine.

#### The following is reported for each cause:

- associated code, reported in the error LOG;
- the consequence of the occurred event on the vending machine operation when the VM works as a single machine for hot beverage brewing;
- the consequence of the occurred event on the vending machine operation when the VM works in association with one or two spiral slaves;
- a note to help identifying the warning and restore the normal operation.

Cause	Error code	Effect	Notes / Recommended Intervention
Flowmeter pulses not	I	Vending machine out of	Check the water network connection or fill
detected		service	in the water tank
Coffee dosing unit filling not	2	Coffee beverages not	Fill in the coffee bean hopper.
detected (no more coffee?)		available	Or check the coffee dosing unit operating
			condition.
Group gearmotor	3 and 4	Coffee beverages not	Check the brew group gearmotor and/or
movement not detected		available	the positioning microswitches.
reading of coffee boiler	14	Vending machine out of	Check the coffee boiler (connections,
temperature sensor out of range		service	thermostats, temperature sensor)
Brew group not detected	20	Coffee beverages not	Warning report only in the LOG.
		available	"No more coffee beans" message is displayed.
			Check the brew group inserting status.
Water tank not detected	21	The message requesting to	Warning report only in the LOG.
		insert the water tank	
		appears on the display.	
		Machine blocked and	Insert water tank.
		waiting for servicing.	
Abnormal coffee brewing	22	Coffee beverages not	Check the brew group cleaning.
flow detected		available	Set a coarser coffee grind.
			Check the flowmeter.
pump used beyond	23	Warning only	Check:
maximum time limit			beverage programming, flowmeter and
			water circuit.
No filling of the instant	24	Models with 2 boilers	Check the instant product boiler water
product boiler		==>beverages with instant	circuit.
		products not available Instant Models ==> Vending	-
		0	
Desired a sint a solition	31	machine out of service Vending machine out of	Check for consistency between decimal
Decimal point position setting not consistent with	31	service	point settings in the vending machine and
the payment system		service	in the payment system
the payment system			in the payment system
Credit management restart	32	Warning only	Warning report only in the LOG.
Warning for normal	34	Warning only	Warning report only in the LOG.
situation restoring after			
abnormal flow			Check the ground coffee granulometry.
MDB slave error detected	35	Warning only	Warning report only in the LOG.
Slow coffee boiler warm-up	36	Vending machine out of	Check the coffee boiler (connections,
		service	thermostats)

Cause	Error code	Effect	Notes / Recommended Intervention	
Credit Manager warning	42	Warning only	The credit management system has overcome a possible blocking condition (credit watch-dog enabling).	
Watchdog operation	72	Warning only	Warning report only in the LOG.	
MDB coin return error message	80	Warning only	Warning report only in the LOG. Check the coin return.	
Consumed softener filter signal	83	Warning only	Maintain the softener filter	
l stop funds intervened	84	Coffee products disabled	Remove and empty the coffee grounds drawer	
Boiler filling procedure not completed successfully	85	Blocked V. M.	Repeat automatic filling (turn the vending machine off and on again) Check water circuit	
Sensor type incorrect (probably a wrong VM model has been selected)	87	Blocked V. M.	Select the correct vending machine model (System Management Menu) Check connections of temperature sensors	
Flowmeter pulses not detected during loader steam cycle	88	Steam stop	Check flowmeter, water pump and steam solenoid valve operation.	
Steam boiler sensor error	92	Beverages with steam not available	Check the steam boiler (connections, thermostats, temperature sensor).	
Both boilers out of service	93	Blocked V. M.	Check boilers (connections, thermostats, temperature sensor)	
Slow steam boiler warm-up	94		Check the steam boiler (connections, thermostats, temperature sensor).	
Coffee boiler filling failed	95	Coffee beverages not available	Check the water circuit (pump, flowmeter).	
No dreg drawer detected	98	"Insert coffee grounds drawer" message displayed	Warning report only in the LOG. Insert coffee grounds drawer.	

### 12 STORAGE - DISPOSAL

#### 12.1 Location Change

Should the vending machine be positioned in another site it is necessary to carry out the following operations:

- unplug the vending machine;
- Empty the instant product containers and the coffee
  bean hopper
- carry out the boiler draining cycle (maintenance menu);
- Empty the drip tray and the coffee grounds drawer (see paragraph "Cleaning the Drip Tray andthe Coffee Grounds Drawer")
- carry out the general cleaning of the vending machine as indicated in chapter "Cleaning and Maintenance";
- · put the parts back into place and close the doors;
- lift and place the vending machine in the assigned location following the instructions given in section "Vending Machine Unpacking and Positioning".

#### 12.2 Inactivity and Storage

If the vending machine needs to be stored or remains inactive for a long period, carry out the same operations as described in section "Change Location", therefore:

- wrap the vending machine in a tarpaulin to protect it from dust and damp;
- check that the vending machine is in a suitable place (the temperature should not be less than I°C) taking care not to place any boxes or appliances over it.

### 13 INSTRUCTIONS FOR END OF OPERATIONAL LIFE DISPOSAL



#### INFORMATION TO THE USER

pursuant to Art. 13 of Legislative Decree no. 151 of 25 July 2005 "And in compliance with the provisions of the RAEE Directive relative to the reduction of the use of hazardous substances in electric and electronic appliances, as well as the disposal of the waste".

The crossed-out wheeled bin icon on the appliance or its packaging indicates that the product must be disposed of separately from other waste at the end of its operational life.

Separate collection of the appliance at the end of its operational life is organised and managed by the manufacturer. Therefore, for an appropriate disposal, the user must contact the manufacturer and observe its separate collection management adopted for this appliance at the end of its operational life.

Separating this product for subsequent recycling, treatment and environmental-friendly disposal will help prevent potential environmental and health risks, and allow the materials which make up the appliance to be re-used and/or recycled.

Specific administrative sanctions provided for by current regulations will be applied for illicit disposal of the product by the user.

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