




User and maintenance manual

Ice Cream Vending

SVE ICV



1 GENERAL INFORMATION	3
1.1 Purpose of Manual	3
1.2 Interested people.....	3
1.3 Responsibility	5
1.4 Manufacturer	6
1.5 Service Centres.....	6
1.6 Warranty	6
1.7 General safety warnings.....	7
1.8 Symbols	10
2 MACHINE PARTICULARS	11
2.1 Technical particulars	11
2.2 Description of components	12
3 INSTALLATION	13
3.1 Transport and positioning	13
3.2 Installation environment characteristics	14
3.3 Removing the wooden bases	15
3.4 Levelling.....	15
3.5 Connection to power mains	16
3.6 Installing the coin mechanism.....	17
3.7 Control settings	17
3.8 MDB / EXECUTIVE Protocol	18
3.9 Insertion of the labels	19
4 ACCESS TO INTERNAL PARTS.....	20
4.1 Access to the vending motors and to the product loading area.....	20
5 USING THE VENDING MACHINE	22
5.1 Warnings.....	22
5.2 Proper use.....	22
5.3 Preliminary operations.....	23
5.4 Loading operations	24
5.5 Start up	27
5.6 Description of cooling cycle	28
6 DESCRIPTION AND FUNCTION OF CONTROL UNIT	29
6.1 Control Unit EASY CAREL	29
7 MAINTENANCE	32
7.1 Access to maintenance area	32
7.2 Preventive maintenance	32
7.3 Replacing neon lamp.....	33
7.4 Cleaning the vending machine	34
7.5 Warnings.....	34
7.6 General cleaning operations.....	35
7.7 Recommended cleaning products	36
7.8 Cleaning safety devices.....	36
8 INFORMATION – DANGER SIGNS	37
9 TROUBLESHOOTING	39
10 STORAGE AND DISPOSAL	41
10.1 Storage	41
10.2 Disposal	41
10.3 Person in charge of disposal	42
10.4 Sanctions	42

 **CAUTION:** failure to follow the instructions contained in this manual may involve damages to the machine and/or personnel

Should this manual be lost or damaged, you may request a copy from the manufacturer: please enclose the serial number of your vending machine with your request.

1 GENERAL INFORMATION

1.1 Purpose of Manual

The manual contains the correct procedures for loading, usage, regular and extra-ordinary maintenance and installation of vending machines. This manual is a very important part of the vendor and therefore must be kept intact and available for the whole productive life of the vendor.

KEEP INSIDE THE MACHINE

1.2 Interested people

This manual is for the persons in charge of loading, cleaning and ordinary maintenance of the machine. (***Loading Operator***), the final user (***User***) and the people involved in *installing, setting, extraordinary maintenance* of the vendor (***Installer/Maintenance Technician***). The persons in charge must know the instructions and comply with the procedure of the manual.

Technicians allowed to operate one this vending machines

- **Operator** (person who only loads the machine with products to be sold)
 - The operator can only load products to be sold in the vending machine.
 - Doing this operation the operator should never move the protective lower carter as indicated on the related safety icon-label on the protection.

- **Maintenance Engineer / Skilled technician**
 - In order to perform all the operations requiring to dismount the protective lower carte, it is necessary to contact only SandenVendo technicians or only authorized (by SandenVendo) skilled and prepared technicians due to the potential electrical and mechanical risks.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning

use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

1.3 Responsibility

The responsibility of the manufacturer is limited to the correct usage of the vendor

“SandenVendo Europe S.p.A” declines any responsibility for possible damages caused to people and/or things as a result of:

- Incorrect installation.
- Usage of unoriginal spare parts.
- Unforeseen modifications/authorized by manufacturer.
- Improper use of vendor
- Connection to inadequate supply system and not in conformity with the regulations in force

1.4 Manufacturer

“**SandenVendo Europe S.p.A.**” claims more than 50 years of experience in the manufacturing of Vending machines, and it is the technical know-how acquired, after years of researches and close contact with the production and commercialisation at global level that represents the best warranty **SandenVendo Europe S.p.A.** can offer

1.5 Service Centres

“**SandenVendo Europe S.p.A.**” is represented by a solid and prepared Sales network not only in Italy but also in Europe (see cover page).

1.6 Warranty

The warranty of the vending machine components, starting from the date shown on the delivery note, is 12 months for the cooling unit. The warranty covers exclusively replaced parts, with labour excluded.

The warranty does not include, damages to the vendor caused by:

- Transport and/or handling
- Operator errors
- Lack of maintenance contemplated for in this Manual
- Failures and/or breakages not caused by the malfunction of the vending machine

1.7 General safety warnings

- Carefully read the manual before starting or loading the vendor
- Protect the vendor against weather conditions
- Do not remove the protection cover unless you are a maintenance technician
- Do not change the setting of the electronic board before reading this manual
- Do not place the vendor under direct sunlight
- Do not sell products with the door open
- Refer to routine maintenance chapter for cleaning the vendor
- Disconnect the power cable before doing assistance or freeing a jammed product
- Use a special protection system
- The vendor must be installed in a way that the electric plug is accessible after installation

- If the power cable is damaged, it should be substituted by the manufacturer or by his after-sales technicians or however by an equally qualified person, in order to avoid any risks
- The vendor should not be installed in an area where water jets are used
- The vendor should not be installed outdoor
- To prevent hazards due to machine instability, secure the machine according to the instructions
- In case of failure and/or poor operation, please contact exclusively the qualified personnel of our service centres
- Use only spare parts authorised by the manufacturer

The pictures and illustrations in this document are only indicative. **SandenVendo Europe S.p.A.** recalls that the technical and performance of products can change without notice.

“SandenVendo Europe S.p.A.” reserves the right of making changes on their vending machines without any advice; moreover they declare that the vendors listed in this manual are in conformity with the following directives: **2006/42/EC** (EC markings) and **2004/1935/EC**.














“SandenVendo Europe S.p.A.” assumes no liability for the correctness of the contents or damages caused by using this manual.

“SandenVendo Europe S.p.A.” reserves the right to make changes to this manual without prior notice.

1.8 Symbols

In the manual and/or on the machine, dangerous areas are shown with signs, plates, symbols and icons that indicate danger or obligation in each case.

Here are the symbols used in the manual and on the vending machine:

SYMBOL	MEANING	COMMENT
	Compulsory	Compulsory for all personnel involved
	Compulsory	Compulsory for all personnel involved to wear protective gloves during maintenance of the vending machine
	Compulsory	Compulsory for all personnel involved to protective clothing during maintenance.
	Additional information	Additional information is given.
	Manual	Before carrying out this operation, refer to the Instruction Manual.
	Maintenance operations	In case of special operations and/or anomalies, a particular mechanical adjustment and/or electrical setting may be required.
	Warning	Indicates a warning, failure to comply may involve damages to the vending machine.
	Danger	Extreme care must be given whilst operating the coin mechanisms.
	Danger	Extreme care must be given whilst handling electric cables.
	Danger	Indicates information regarding personnel safety and machine integrity.
	Danger/prohibition	Indicates the danger of electric shocks and mechanical risks. Never remove this safety guard. Only SandenVendo Europe technicians or authorised personnel can open this safety guard.
	Disposal	Dispose in conformity with recycling procedures.
	Recycling	Recycling this product goes toward reducing the need of new materials and the accumulation of waste.

2 MACHINE PARTICULARS

2.1 Technical particulars

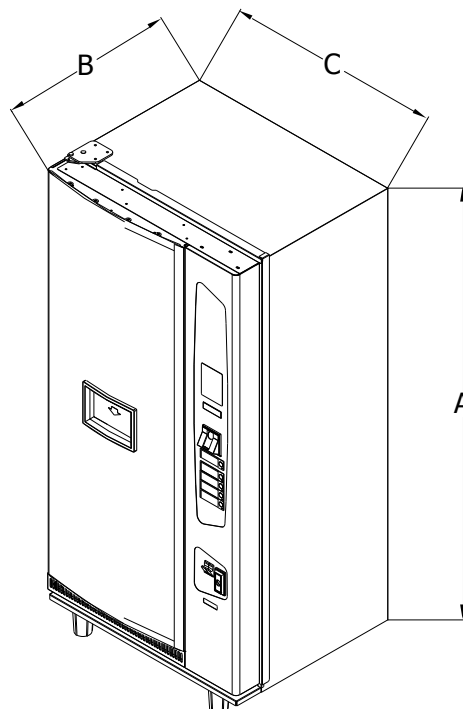
Model

ICV

Dimensions	
Height (A)	1830 mm
Width (C)	920 mm
Depth (B)	790 mm
Weight	306 Kg
Power supply	
Nominal voltage	230 V
Nominal frequency	50 Hz
Max. power consumption	1100 W
Refrigeration unit	
Compressor	17,40 cm ³
Expansion	Direct with capillary tube
Cooling system	Forced air with 3 evaporator fans
Refrigerant type	* R404a
GWP	3922
Refrigerant charge	0,220 kg
T e CO2	0,863
Adjustable temperature range	-25°C up to -10°C
Climate class	10°C / 32°C - 65% RH
Noise level	< 70 dB
Electronic control	MDB
Payment system protocol	MDB / Executive

* Equipment contains fluorinated greenhouse gases.

The fluorinated greenhouse gases are contained in hermetically sealed equipment.



2.2 Description of components

- 1 Delivery area
- 2 Neon advertising panel
- 3 Door lock
- 4 Coins return
- 5 Selection buttons
- 6 Coin insert slot
- 7 Card reader
- 8 Display area
- 9 Cabinet

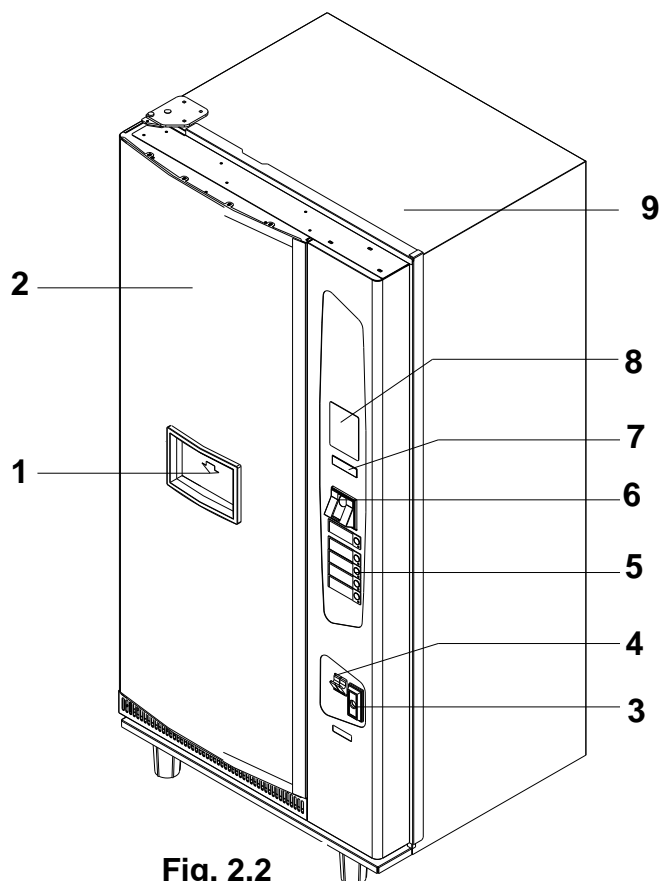


Fig. 2.2

- 1 Coinage
- 2 Coin return motor
- 3 Electric board box
- 4 Ballast box
- 5 Switch wicket
- 6 Loading products wicket
- 7 Chute
- 8 Security push button
- 9 Small table (to lay loading product)
- 10 Inner door
- 11 Refrigerant system
- 12 Thermometer
- 13 Transformer box
- 14 Neon lamps switch

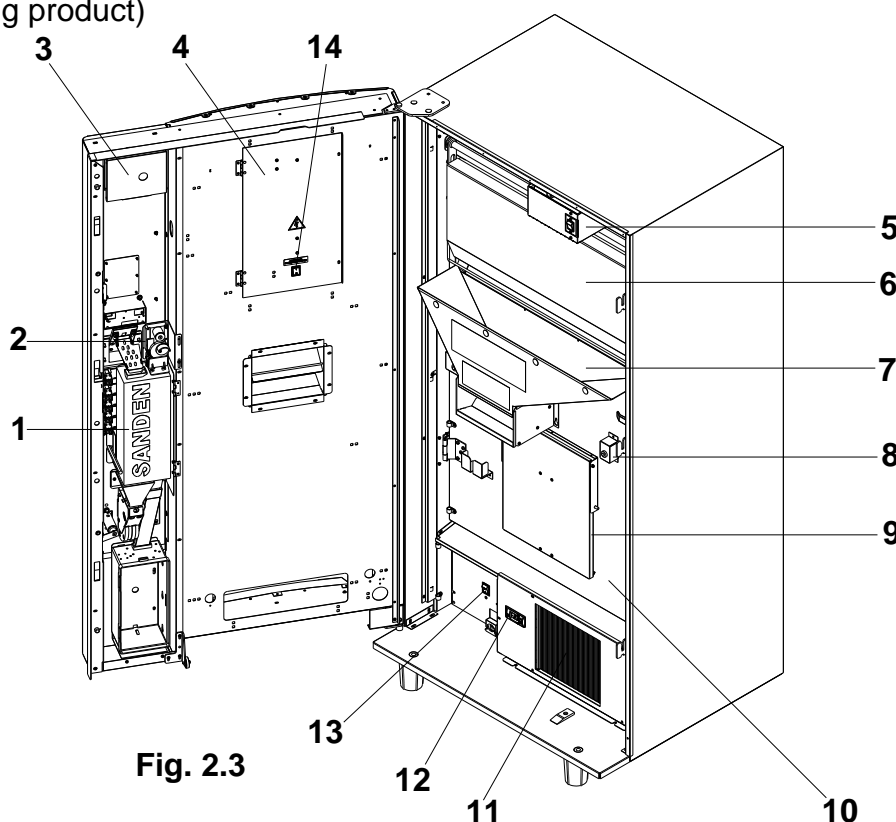


Fig. 2.3

3 INSTALLATION

3.1 Transport and positioning

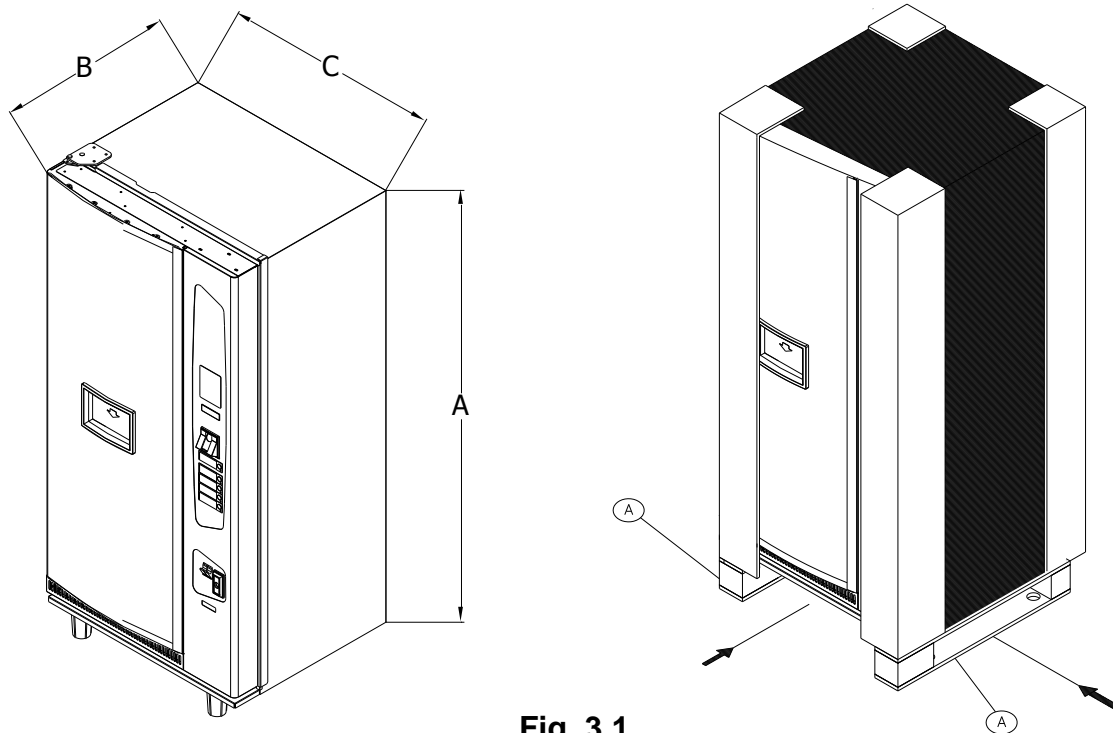


Fig. 3.1

MODEL	A (mm)	B (mm)	C (mm)	Gross Weight (Kg)	Net Weight (Kg)
ICV	1970	820	950	316	306



TO TRANSPORT AND HANDLE THE VENDING MACHINE, CAREFULLY FOLLOW THE INSTRUCTIONS BELOW:

- Use a transpallet/lift truck with minimum carrying capacity of 400Kg. The wooden bases (A) allow for gripping of the 4 sides of the vending machine (fig. 3.1).
- Should you not wish to install the machine immediately, position the vending machine vertically and in a dry and protected room.
- **CAUTION:** it is absolutely forbidden to transport and/or position the vending machine horizontally.
- In the event the machine is **mistakenly laid horizontally**, re-position it in the work position (vertically) and **wait at least 24 hours** before starting it; otherwise, you may cause damages and anomalies to the cooling system.
- Position the vending machine in the installation area, work carefully, avoid manoeuvres that may suddenly jolt and crash the machine.
- Remove all packaging from the vending machine, extract the power cable from the rear protective grille and carefully move it to its final position.

3.2 Installation environment characteristics



CAUTION: THE APPLIANCE IS UNSUITABLE FOR INSTALLATION OUTSIDE



CAUTION: DO NOT USE JETS OF WATER TO CLEAN THE VENDING MACHINE. IT IS UNSUITABLE TO INSTALL IT IN ENVIRONMENTS WHERE WATER JETS ARE USED.

Environmental conditions for installing the vending machine

- The Vending Machine “**Model ICV**” should be installed in environments/rooms where the temperature does not exceed 32 °C or fall below 10°C. Failing this the electrical parts (compressor) may be subject to overheating or may not work properly.
- Air circulation is crucial for the cooling and heating systems, check that there is a 10cm gap between the rear of the vending machine and any obstacle (ex. a wall).
- Make sure that the capacity load of the surface on which the vending machine is positioned is adequate to support the weight declared by the manufacturer.
- Before connecting vending machine, make sure that the mains power supply has the correct voltage, frequency and power as those indicated on the technical data plate of the vending machine
- The Vending Machine complies with the latest directives as shown in their Declaration of Conformity, therefore can be installed in both public and industrial environments as long as they comply with the aforementioned points.

3.3 Removing the wooden bases

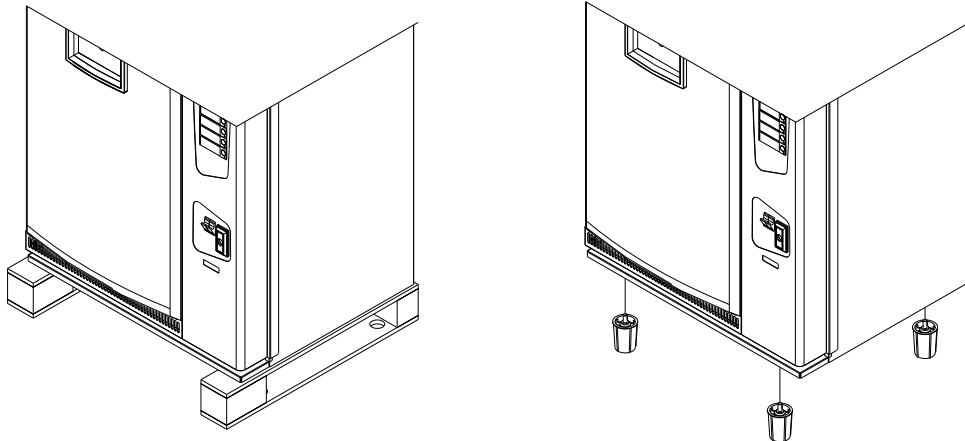


FIG. 3.2

To remove the wooden bases, work as follows:

- With a transpallet, lift the machine from the floor (holding it from the front)
- With a size 10 adjustable spanner (we recommend using a ratchet wrench) unscrew the screws that fasten the wooden bases to the machine: 2 screws for the right hand base and 2 screws for the left hand base.
- Fit the 4 feet onto the base of the machine
- Rest the machine on the floor.

3.4 Levelling

In order for the vending machine to run perfectly, position it on a perfectly levelled surface. Any irregularities in the floor can be compensated by adjusting the screw-on feet on the vending machine in order to get it perfectly levelled and to guarantee stability.

i THE VENDING MACHINE WILL OPERATE PERFECTLY WHEN POSITIONED ON A HORIZONTAL SURFACE

3.5 Connection to power mains

SERVICE CORD INSTALLATION

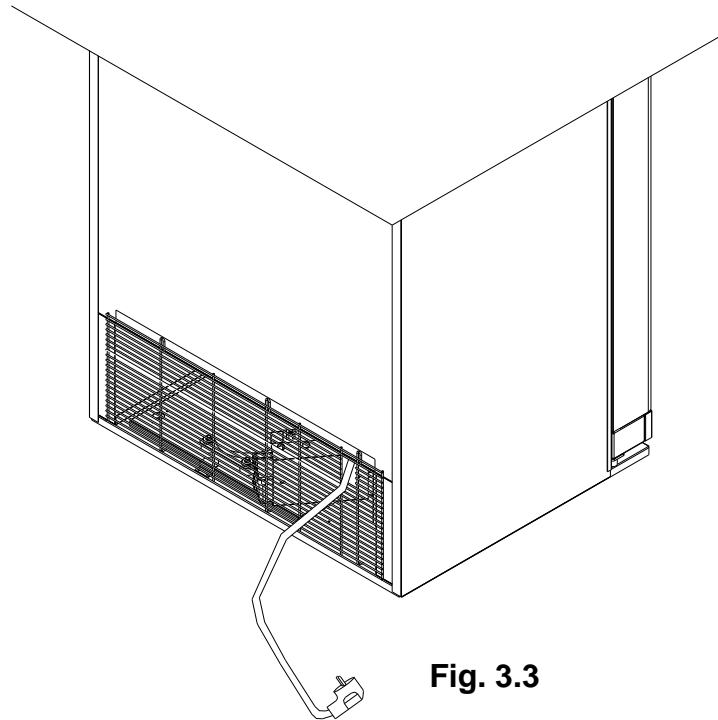


Fig. 3.3



CAUTION: BEFORE DOING THE ELECTRICAL CONNECTION MAKE THE FOLLOWING CHECKS:



Make sure that the particulars of the power mains (voltage and frequency) are the same as those indicated on the machine's rating plate: this vending machine must be connected to a 230V, 50Hz power mains, each voltage below 207V or over 253V can cause failures.

Make sure that the supply outlet is grounded and that, after making the connection, the entire appliance is ground connected.

Make sure that the appliance is positioned so that the plug connecting it to the power mains can be easily accessed after installation.

Make sure that the neutral wire is blue; otherwise, you must invert the poles.



CAUTION: should you find any anomalies with the supply cable or should it be damaged, it must be replaced. For the safety of personnel and to prevent all risks of damages to the machine never replace the supply cable, contact the manufacturer or the technical assistance service.



CAUTION: NEVER USE EXTENSION LEADS

You may now connect the machine to the power mains, the neon advertising panel and all the signal lamps of the empty columns should light up and the cooling system should start.

3.6 Installing the coin mechanism

The **ICV** Vending Machine is wired for pay system connection according to a world wide standard of parallel communication, therefore a lot of devices can be used.

You can use the following kind of payment system: **MDB - EXECUTIVE – ELECTRONIC VALIDATOR** (type G18 NRI)

To install the coin mechanism work as follows:

- hook up the coin mechanism (G) on the screws (E) of the wicket
- check that the coin mechanism money's inlet is in line with the outlet of the curved groove and that the distance between the two parts is above 10 mm

Activate the coin return button and check that the mechanism works correctly: mainly it is important that the selector opens as much as possible. If it doesn't happen you will have to adjust the height of the coinage door.

Connect the coinage plug to the receptacle on the control box.

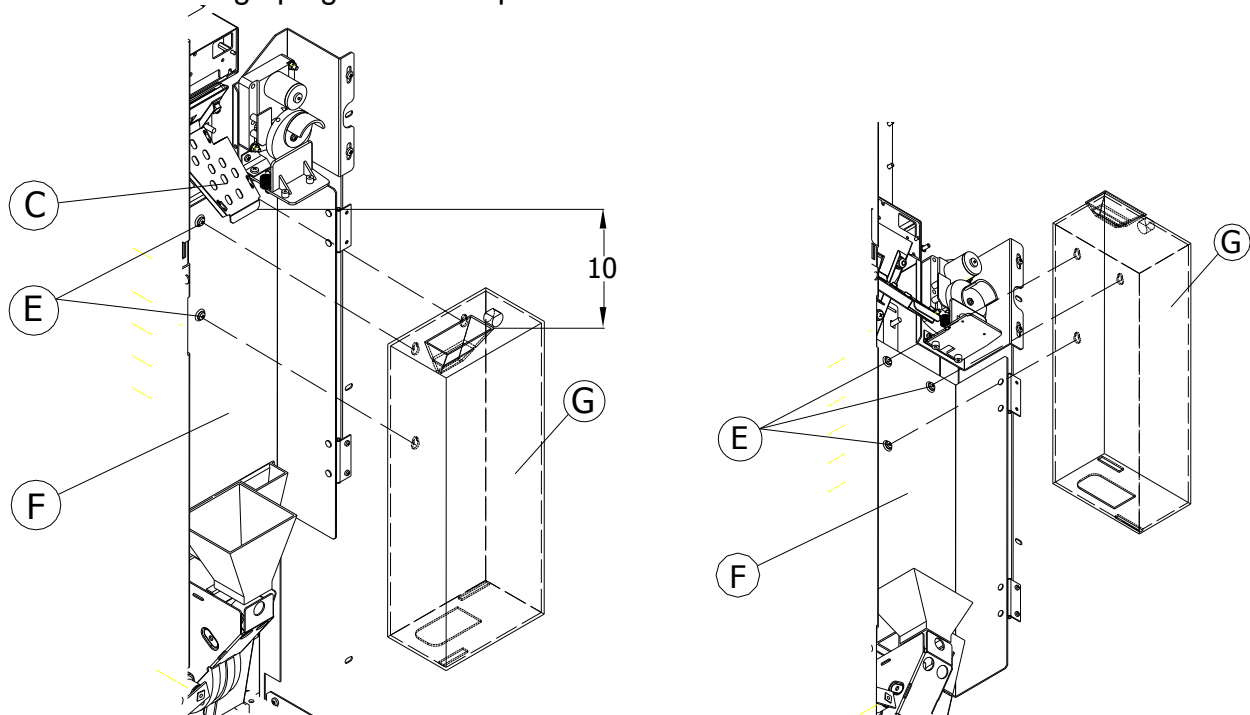


Fig. 3.4

3.7 Control settings

All the machine's control and operation settings can be set through the programming routine of the SF01 electronic board.

The programming routine of the electronic board is described in the SF01 PROGRAMMING MANUAL supplied with the vending machine.

i REFER TO THE SF01 PROGRAMMING MANUAL

3.8 MDB / EXECUTIVE Protocol

To change MDB protocol in executive protocol, you have to enter in the programming menu (ref. to SF01 Programming Manual) working as follows:

- with the special key open the door machine;
- enter in the programming way pushing the button located in the centre of the electric board SF01;
- choose “confirm” from the “**PAYMENT SYSTEM**” menu and then enter in the payment system configuration;
- it's shown “**MDB**” for the multi drop bus or “**EXE**” for the executive bus;
- choose the payment system using the push button 2 or 3 and confirm with “**enter**”, the vending machine will be re-started;
- to modify this parameter, move the “dip” pushbutton positioned between the “**MDB**” and the “**EXE**” connector and follow serigraphy on the electric board (rif. Fig. 3.5)

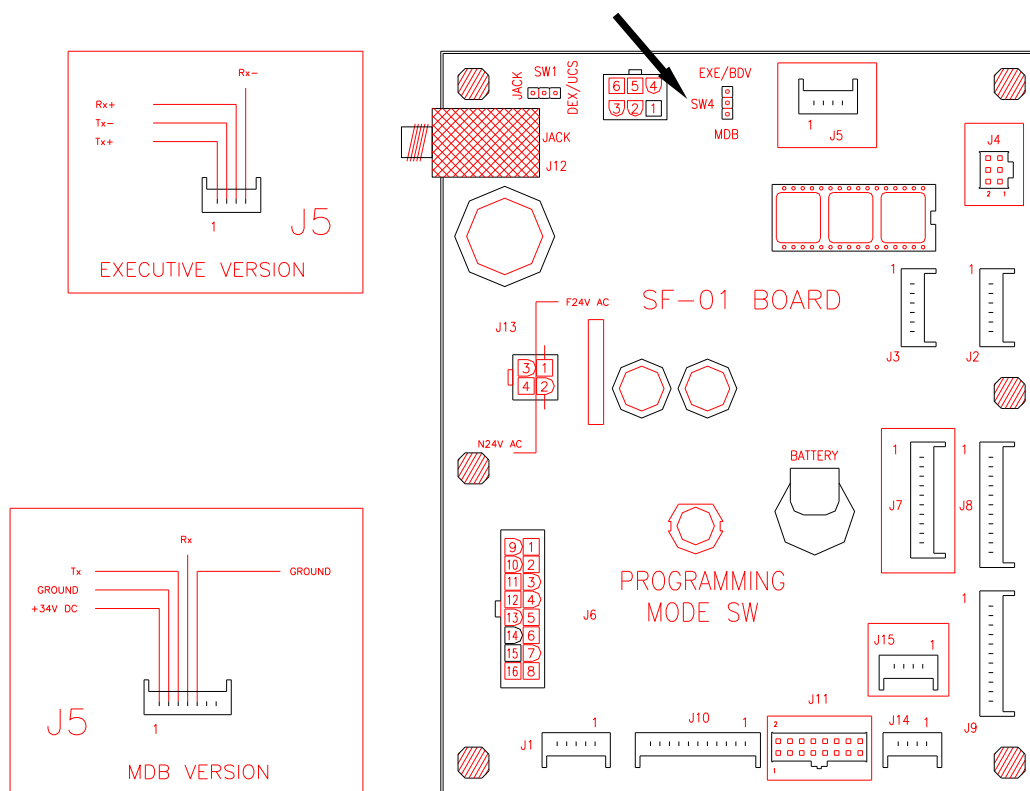


FIG. 3.5 – TURNING MDB / EXECUTIVE - SFO1 BOARD

3.9 Insertion of the labels

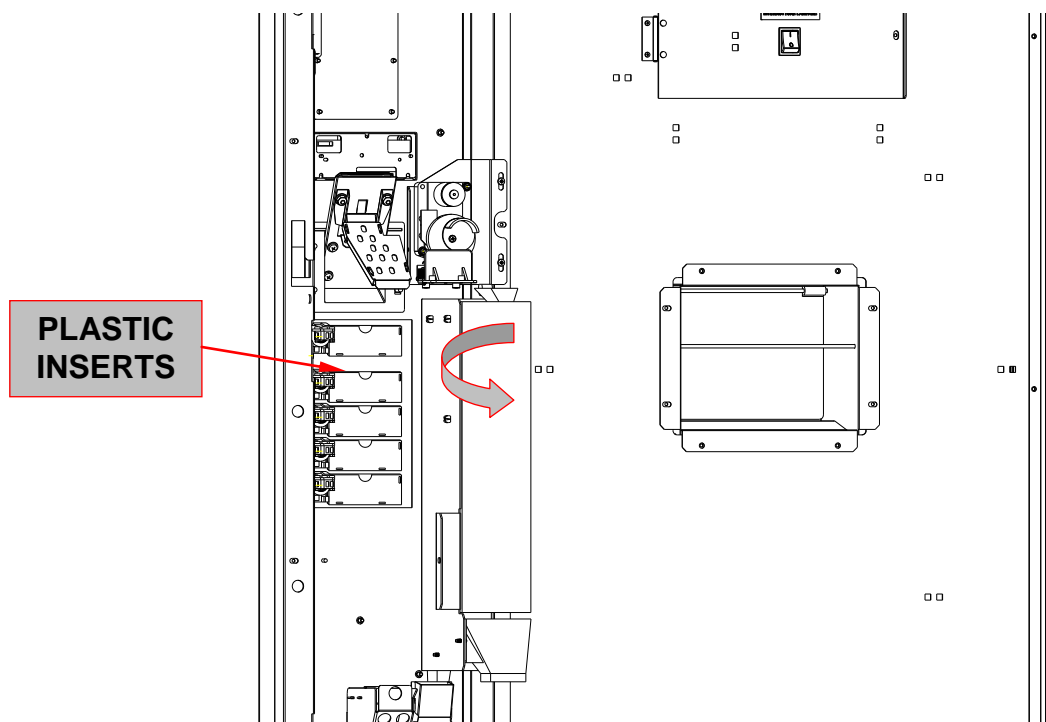


FIG. 3.6 – LABELS INSERTION

To install the product's labels on the machine, work as follows:

- unscrew the stop screw of the coinage door
- open the door and insert the labels in the proper transparent plastic inserts

4 ACCESS TO INTERNAL PARTS

You can only access to the internal parts of the machine (***maintenance area***) using the specially provided key supplied with the vending machine (ref. Fig. 4.1).

Access to the ***service area*** is only possible using the specially provided tool.

Hereunder is a list of the *service areas* of Vending Machine “VDI ICV”.

- Vending motors (product loading area)
- Neon lamps, reactors (lighting area)
- Evaporator
- Compressor and transformer box

4.1 Access to the vending motors and to the product loading area

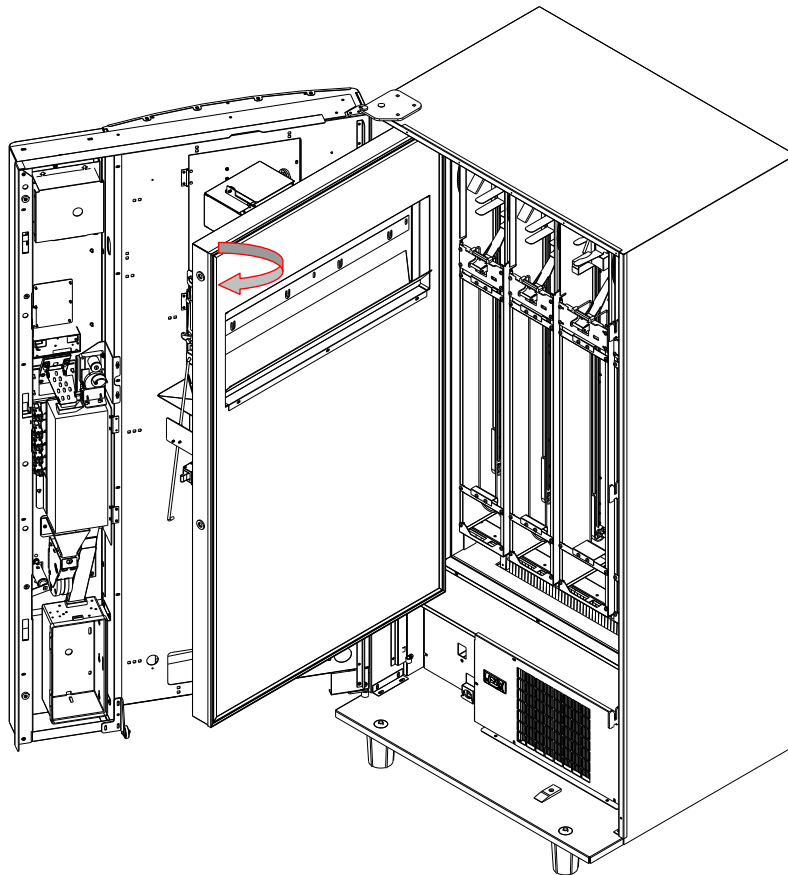


FIG. 4.1 – VENDING MECHANISM

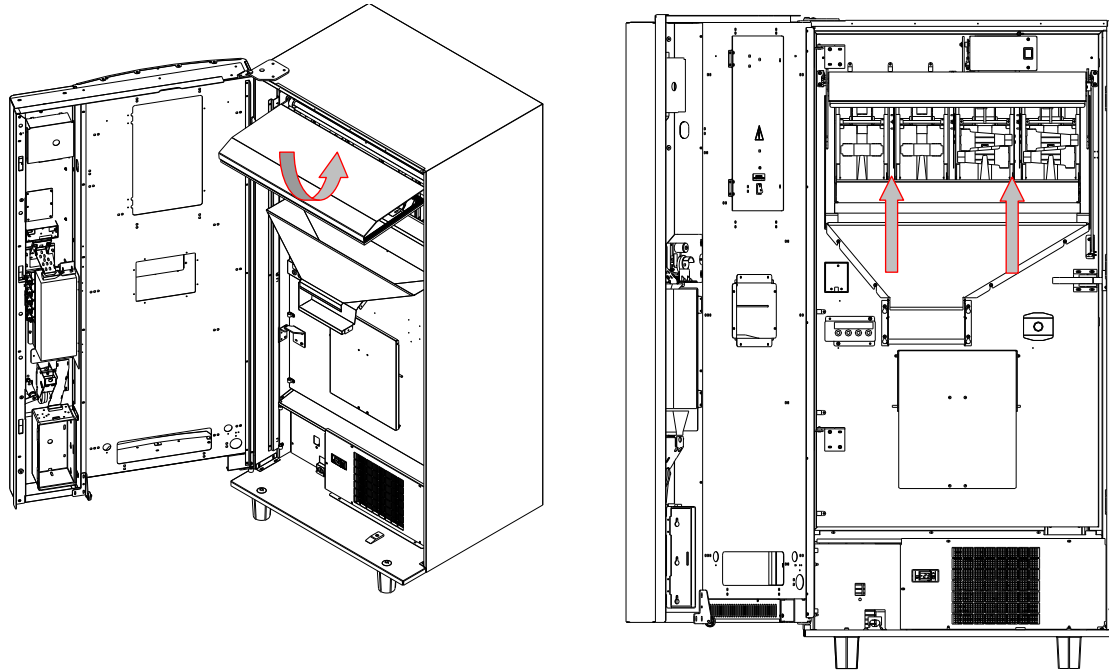


FIG. 4.2 – PRODUCTS LOADING AREA

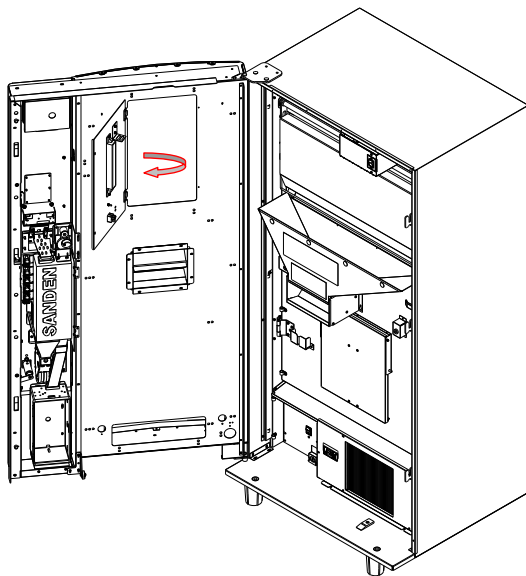


FIG. 4.3 – BALLAST AND NEON LAMPS

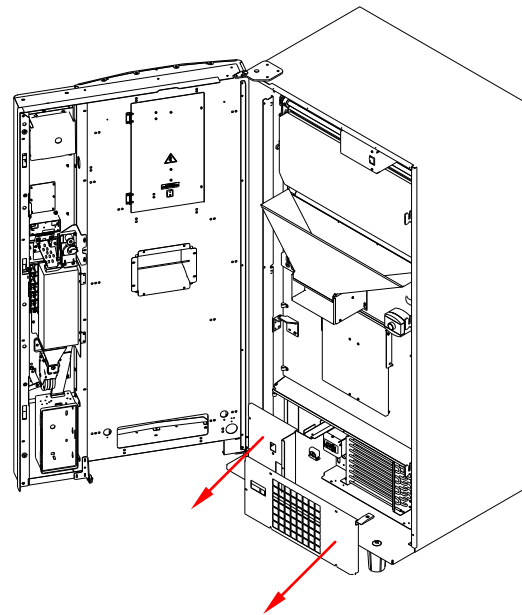


FIG. 4.4 – TRANSFORMER BOX AND REFRIGERANT SYSTEM

5 USING THE VENDING MACHINE

5.1 Warnings

- **CAUTION:** NEVER LOAD THE VENDING MACHINE WITH PRODUCTS DIFFERENT FROM THOSE RECOMMENDED BY THE MANUFACTURER (REFER TO CHAPTER: PROPER USE).
- **CAUTION:** NEVER LOAD THE VENDING MACHINE WITH PRODUCT FORMATS DIFFERENT FROM THOSE RECOMMENDED BY THE MANUFACTURER.

5.2 Proper use

The Vending Machine “ICV” has been designed and built for the sale and distribution of the following food products:

product type	product FORMAT	COLUMN	n° of products for each column
Ice-cream	Biscuit	1-2	51
Ice-cream	Cone or similar	3-4	39

The deliverable products by ICV Vending Machine are loaded in 4 columns inside the machine.

 **CAUTION: ATTENZIONE: REFER TO THE FOLLOWING INSTRUCTIONS TO LOAD THE PRODUCTS IN EACH COLUMN**

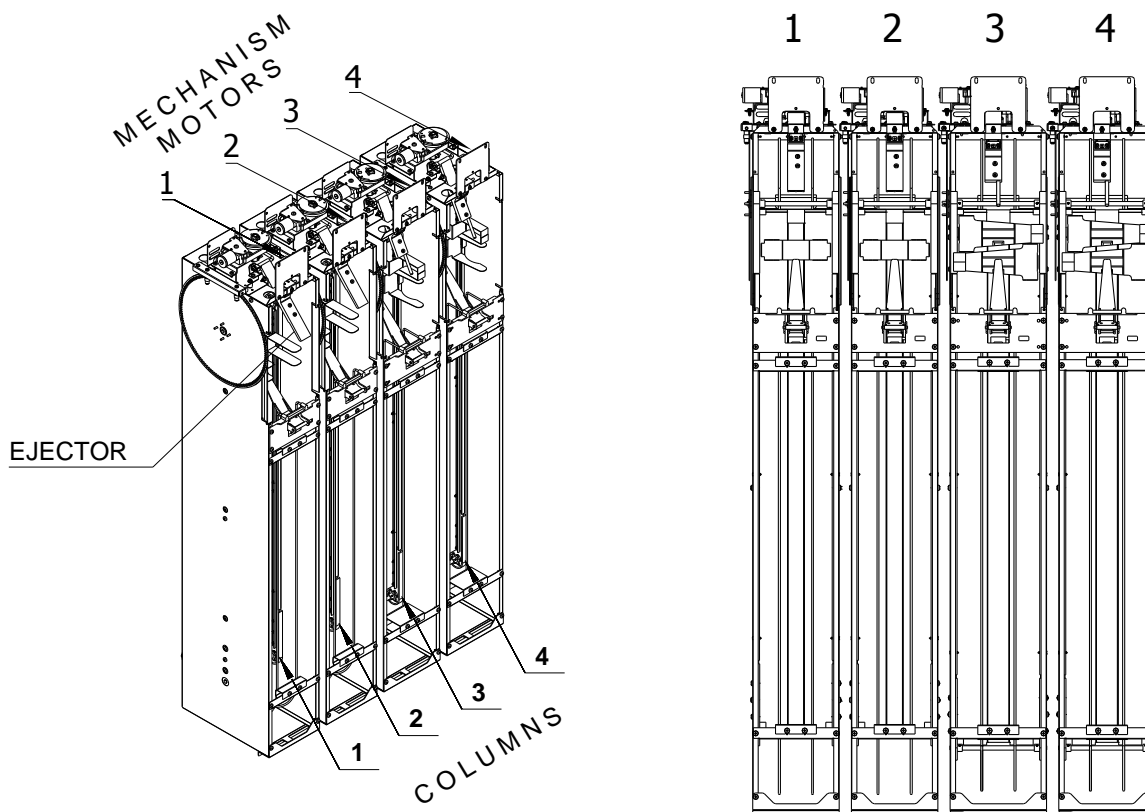


FIG. 5.1 –ICV VENDING MECHANISM

5.3 Preliminary operations

Before starting the loading operations, work as follows:

- 1) check the temperature inside the machine (rif. fig. 5.2): if it is sufficiently low, proceed to load the machine;
- 2) press the delivery door switch located on the motor cover (rif. fig. 5.2 – 5.3) and wait that the motor opens it;
- 3) by hand open the wicket completely lifting it upward and fixing it through the special supporting bar (rif. fig. 5.4);
- 4) pull toward you the 4 ejector of each column (rif. Fig. 5.4) until you hear the click of the spring, the ejectors have to stay in that position;
- 5) lift the loading table to support product box and start loading. (rif. Fig. 5.5);

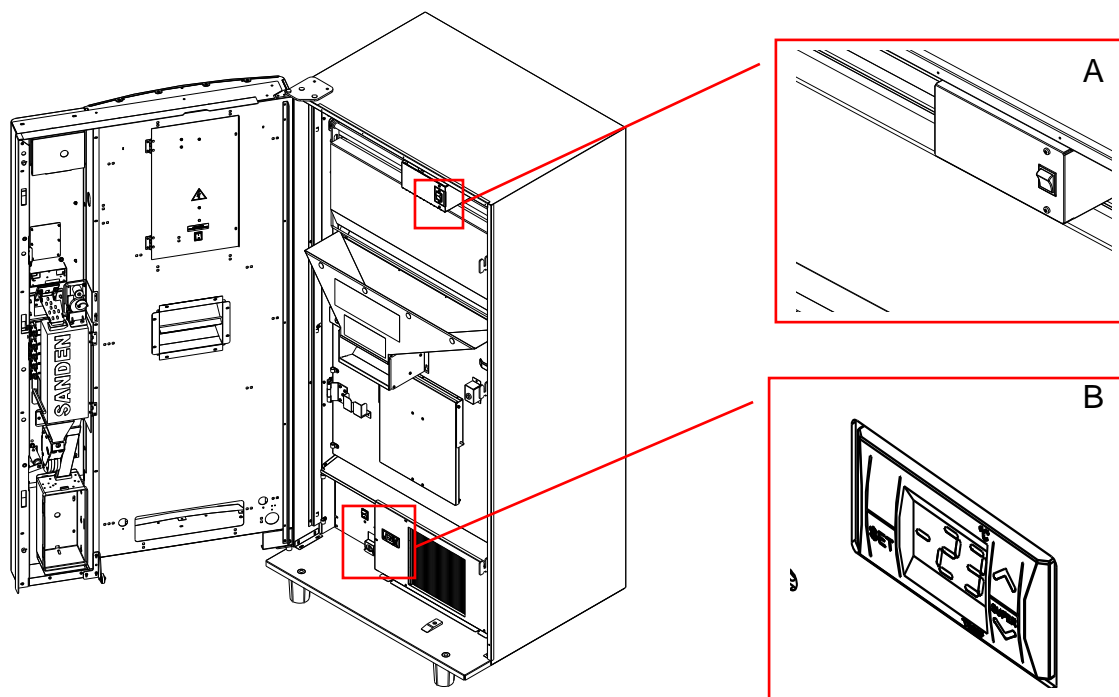


FIG. 5.2 - A) LOADING WICKET SWITCH

B) THERMOMETER



FIG. 5.3 - OPENING THE WICKET TO LOAD THE PRODUCTS



FIG. 5.4 – OPENING THE EJECTORS



FIG. 5.5 – RAISING THE TABLE FOR PRODUCTS

5.4 Loading operations

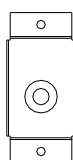
The loading hole in the inner door (rif. Fig. 5.4) permits you to work only on a part of the mechanism columns.

Begin to load the products in the four columns up and down until the bottom of the loading window (rif. Fig.5.8). When the containers, which are visible through the loading door, are all full you have to move the chain of each column to completely fill up them.

5.4.1 Drive the columns

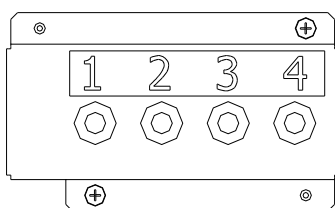
To move the columns, use the following drives:

1



Main push button: press it to be able to drive one of the four columns.

2



Control panel: press one of the four push buttons together with the Main push button (1) to move the corresponding column. See below the correspondence:

- PUSH BUTTON 1 → COLUMN 1
- PUSH BUTTON 2 → COLUMN 2
- PUSH BUTTON 3 → COLUMN 3
- PUSH BUTTON 4 → COLUMN 4

(refer to Fig. 5.1 for the identification of the columns)

3



Pedal switch: press it to move a column after pressing push button (1) plus push button (2).

5.4.2 Moving columns

When the containers which are visible through the loading door (refer to fig. 5.3 – 5.4) are all full, work as follows:

- a) with the right hand press the push button **(2)** and with the left one press one of the four push buttons of the control panel **(1)** (refer to fig. 5.6) corresponding to the column you're loading;
- b) keep them (push button **1** + push button **2**) pressed, with a foot press the pedal switch **(3)**: the column chain starts moving and the empty containers appear from time to time near to the bottom of the loading window.

Now continue to keep the pedal switch pressed **(3)** and, at the same time, stop pressing the push buttons **(1)** and **(2)**: in this condition the column chain continues to move.

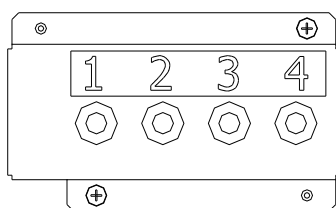
To stop a chain press push button **(2)** again plus the push button of the chain to be stopped; in this way the motor will stop in standby position.

Go on to load the products in the empty containers until you see the products already loaded earlier on the lower side of the door.

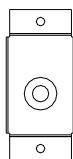
Stop pressing the pedal switch **(3)** and do not move the chain anymore, push back the ejector and press it towards the inside of the machine, complete the loading making sure that the products are behind the sold out lever.



PAY ATTENTION: AT ANY TIME IT IS POSSIBLE TO STOP THE CHAIN BY STOPPING TO PRESS THE PEDAL SWITCH. TO START AGAIN THE CHAIN FOLLOW THE INSTRUCTIONS DESCRIBED AT POINT A) – B).



1



2

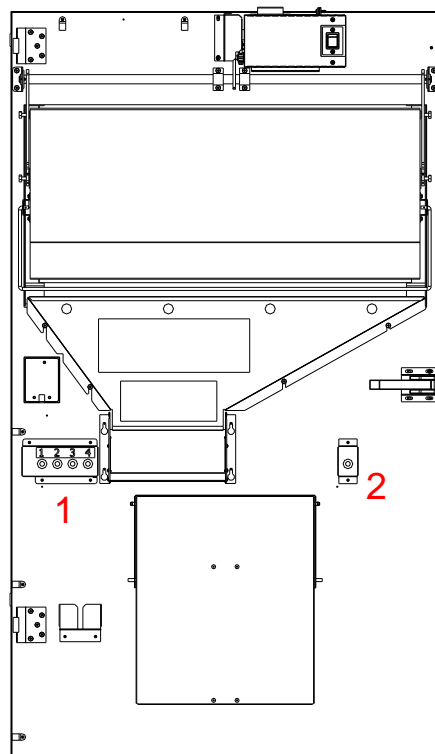


FIG. 5.6 – DRIVES TO MOVE THE COLUMNS

5.4.3 How to load cones and similare products

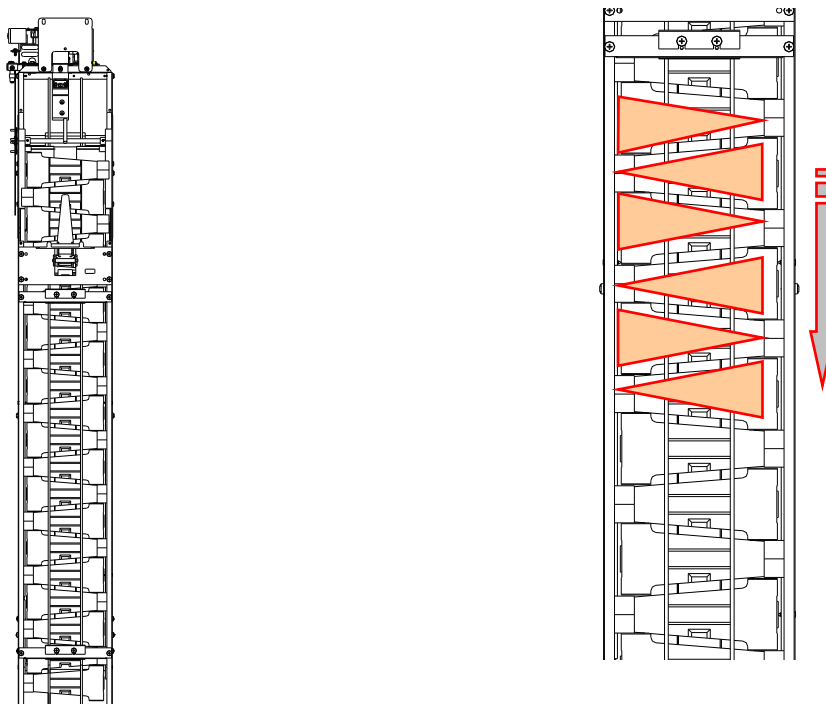


FIG. 5.7 – HOW TO LOAD CONES AND SIMILAR PRODUCTS

PAY ATTENTION: cones and similar products must be loaded alternately with vertex once to the right once to the left as described in fig. 5.7

PAY ATTENTION: to avoid vending cycles without products delivery, DO NOT leave empty containers between the filled ones. Proceed in the same way with all the sold-out lever conveyors.

When loading is finished disengage loading door support bar from its bracket. Lower the door until its side pins engage into the actuating arms and press the wicket motor switch. The wicket goes automatically to its closed position.

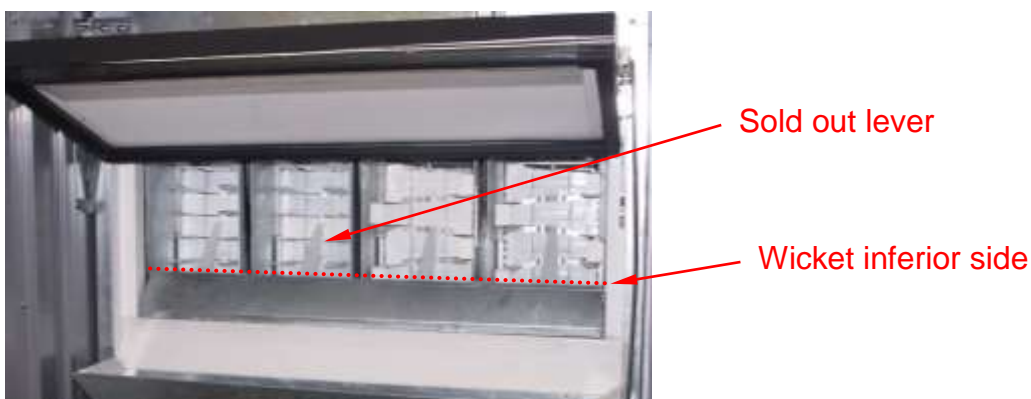


FIG. 5.8 –LOADING PRODUCTS HOLE

5.5 Start up

To start up the **ICV** Vending Machine work as follows:

- Make sure the plug is connected to the supply mains;
- Power the Vending Machine: press the green **POWER SWITCH** pushbutton (rif. Fig. 5.5) situated on the transformer box inside the machine (lower left hand side);
- Switch on the neon lamps: press the luminous green **LAMP SWITCH** situated in the inner part of the door (rif. Fig. 5.6):
- Execute the programming routine: refer to the **SF01** Programming Manual
- Load the vending machine with the desired products
- Close the vending machine door and wait for the general machine check
- The vending machine is now ready for use.

 **PAY ATTENTION IN CASE OF FAILURE AND/OR POOR MACHINE OPERATION, ONLY CONTACT THE SKILLED PERSONNEL AT OUR SERVICE CENTRES**



FIG. 5.5

**Main
switch**

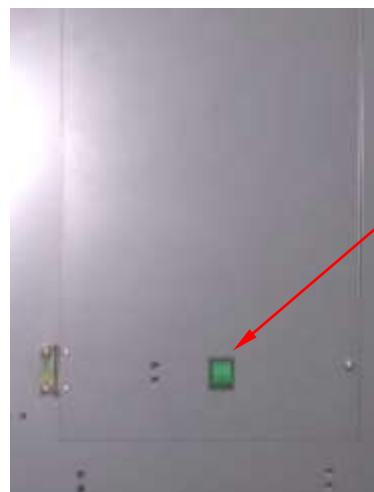


FIG. 5.6

**Neon lamps
switch**

5.6 Description of cooling cycle

The ice cream vendor model **ICV** is projected and manufactured to keep products at the right storage temperature inside an insulated cell. The **ICV** has an electronic temperature control that blocks the machine (inhibits the vend) when the temperature of the cell exceeds the set safety level. This avoids selling ice creams at the wrong temperature. The cooling system maintains the temperature of the cell between -25 and -22°C . During the defrosting cycle, necessary for the correct function of the system, the internal temperature could increase to -10°C for a few minutes (temperature shown on the display of the machine), but the product temperature will not exceed -15°C . This behaviour is normal and doesn't influence the correct storage of the product.

The most delicate operation, that could influence the storage of the products, is the loading, because the loading/vend door is opened for many minutes. For this reason loading must be done by skilled personnel and in the shortest possible time.

At the end of this operation the temperature could increase up to -10°C , when in a high ambient temperature ($30-35^{\circ}\text{C}$), without compromising the product storage. The control system acts when the temperature exceeds -10°C for over 30 min. In this case the ICV is blocked and no vend is possible. The products inside the machine are no longer vendible as they do not guarantee a correct preservation. Therefore the machine must be emptied and then loaded again with new products. At the end of this operation the machine must be reset to eliminate the warning conditions in the memory.

Opening the loading door restarts the product vend. After loading if the temperature remains over -10°C for 30 min. the vend will be inhibited again.

6 DESCRIPTION AND FUNCTION OF CONTROL UNIT

6.1 Control Unit EASY CAREL

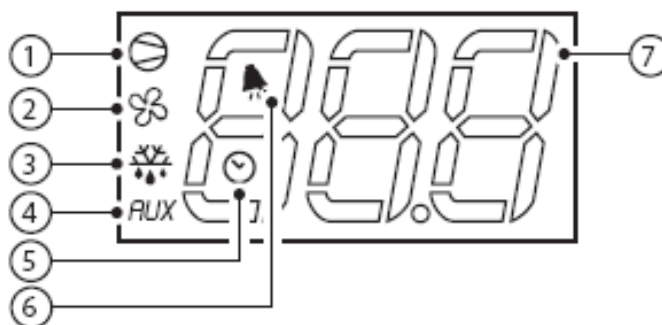
The electronic control unit EASY CAREL regulates and controls the refrigerant system and all its components: The compressor, the fans, the defrosting, and is independent of the control of the board SF-01, which control the electronics of the distributor.



On the front of the control unit are: 3 digits, 6 LED indicators that show the operating conditions and 3 buttons.

6.1.1 Display

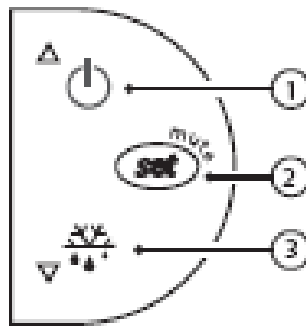
1. Compressor LED
2. Fan LED
3. Defrost LED
4. Auxiliary exit
5. Watch
6. Alarm
7. Numbers



The LED light on the display show the operation of the cooling system.

- 1 Compressor LED: indicates the status of the compressor.
 - LED is lit, the compressor is ON
 - LED blinks, the compressor is waiting before starting (check ES)
 - LED OFF, the compressor is OFF.
- 2 Fan LED: indicate the status of the evaporator.
 - LED is lit, the fans are running
 - LED blinks, the fans are waiting before starting
 - LED OFF, The fans are turned off
- 3 Defrost LED: indicate the status of the defrost.
 - LED is lit, The defrost mode is ON
 - LED blinks, is in drip mode after defrost
 - LED OFF, defrost is OFF.
- 4 Auxiliary exit: not used in this vendor.

6.1.2 Key board



Key 1 "UP", in normal function if pushed for more than 1 second, it visualizes the temperature of probe 2 (evaporator). If pushed during the visualization of the set point it increases the set value.

Key 2 "SET", pushed more than 1 second allows the visualization and setting of the set point

Key 3 "DOWN", pushed for more than 3 seconds starts or stops the defrost, and if it is pushed during the visualization of the set point it decreases the set value.

6.1.3 Set the temperature

The setting of the internal temperature is performed via the control unit in the following manner:

Press for more than 1 second the button 2 "SET", the display show the set point temperature setting.

To increase or decrease the value press button 1 "UP" or 3 "DOWN".

Press button 2 "SET" to confirm the new value.

6.1.4 Quick defrost

You can start a defrost without changing the interval set on the controller.

If the gasket is damaged or the delivery door remains open too long (for example is blocked by an object) the hot air enters into the cold store thus creating ice above the evaporator which blocks the passage of air.

To solve the problem you need to initiate an additional defrost action that may be performed in a few steps:

To start the defrost press and hold for 3 seconds the button 3 "DOWN". To stop the process, press again the button 3 "DOWN".

6.1.5 Description of the main signals and alarms

The error codes are displayed on the display alternating with the temperature gauge.

ERROR	DESCRIPTION
ES	The compressor has a timing delay when starting, therefore the LED of the compressor on the display starts to flash.
E0	Still or flashing means an adjusting probe error: <ul style="list-style-type: none"> • probe not working, the probe signal is interrupted or in short circuit; • probe is not compatible with the instrument; The E0 alarm signal is stable if it is the only alarm present (the temperature value is no longer shown), it flashes if there are other alarms or if the second probe is shown
E1	Flashes evaporator probe error: <ul style="list-style-type: none"> • probe not working, the probe signal is interrupted or in short circuit; • probe is not compatible with the instrument;
EE	Visualized during functioning or activation Error in reading of the machine parameters. See memorised data errors.
EF	Visualized during functioning or activation Error in reading of the working parameters. See memorised data errors.
ED	The last defrosting finishes when exceeding the maximum time. The indication disappears if the next defrost is finished correctly.
DF	Defrosting in course: <ul style="list-style-type: none"> • it is not an alarm signal but an indication that the instrument is doing a defrosting.
DISPLAY BLINKS	The control unit display and all the LED's are flashing: <ul style="list-style-type: none"> • indicates that the door is open, or that the door switch is not working correctly • it is activated when the door remains open for more than one hours

6.1.6 Function

When switching on the control unit for the first times there will be a delay of three minutes in the compressor and evaporator fan starting .

During normal working, the compressor will stop only after reaching the set point temperature and the evaporator fans will work always.

When opening the door (if there is a door switch) both the compressor (if working) and fans will stop.

When closing the door, the fans will start immediately, while the compressor will have a delay of three minutes from the last switching off, even if the door is closed before.

The cooling unit is controlled by various parameters inserted in the software of the control unit and unchangeable by the User, this avoids possible and unwanted modifications to the same parameters, that could cause a malfunctioning of the cooling unit. In any case, for any particular needs it is possible to contact the technical assistance service that will assist you in various problems.

7 MAINTENANCE



The following section is a basic guide for the general maintenance and cleaning of the vending machine. Maintenance on the cooling unit may only be performed by trained specialist staff. While working, always wear protective goggles and gloves. Maintenance personnel must be made aware of the potential danger in touching hot metal parts. Even with the power off all the components of the cooling machine may still be very hot, especially touching the evaporator heater may cause burns.

7.1 Access to maintenance area

You can only access to the internal parts of the machine (***maintenance area***) using the specially provided key supplied with the vending machine.



FIG. 7.1 – ACCESS KEY

7.2 Preventive maintenance

To guarantee the machine operates perfectly, we recommend that you periodically carry out the following maintenance operations:

- Check the vending machine and the surrounding area, check for signs of rust on the outer cabinet and obstructions in the air vents.
- Open the door and check there is no accumulation of water, signs of rust, and humidity around the corners.
- Check that the evaporator outlet is not blocked (the condensed water in the evaporator must drain out towards the condenser pan).
- Periodically check the door seals. Should they be damaged, replace the seals immediately.
- Periodically check that the condenser is clean.
- Check that the evaporator fan and heating system work normally (the fan blades must be free from any foreign matter)
- Check that the compressor and condenser fan work normally (the fan blades must be free from any foreign matter)
- Check that all the selections are correctly delivered.

7.3 Replacing neon lamp

To replace a neon lamp work as follows:

- Open the vending machine using the special provided access key (rif. Fig. 6.1);
- Press the luminous green LAMP SWITCH pushbutton to disconnect power to neon lamps, switch from position “1” to position “0”



CAUTION: AT THIS STAGE ONLY THE POWER CIRCUIT OF THE LAMP IS CUT OFF, THE MACHINE IS STILL POWERED

- Open the neon cable cover (rif. Fig. 6.2) using a screwdriver to unscrew the fastening screw;
- By means of the inspection hole take out the neon lamp to be replaced by the two fastening clips;
- Disconnect the neon lamp from its wiring;
- Wire up the new neon lamp and fasten it with the clip;
- Reclose the neon wire cover and screw down the screw.

Once you have replaced the neon lamp, work as follows:

- Press the green LAMP SWITCH to switch on the neon lamp, turn from position “0” to position “1”.
- Re-close the vending machine door and make sure you lock it using the access key supplied.



FIG. 7.2

7.4 Cleaning the vending machine

The vending machine should be generally cleaned in order to keep it in perfect working order. In general, we advise that you:

- Check the vending machine and surrounding area, check for rust on the outer cabinet and obstructions in the air vents.
- Open the door and check for accumulation of water, signs of rust, and humidity around the corners.



CAUTION: NEVER USE PRESSURISED WATER CLEANERS AND WATER JETS.

7.5 Warnings

Before carrying out any cleaning operation on the machine, pay careful attention to the following directions:

- Cut off the power supply to the machine
- Do not use blades or other sharp tools to scrape parts or components in the vending machine.
- Do not clean the machine in direct sunlight or in high temperatures.
- Cut off the power supply to the machine before cleaning the electrical parts and/or parts protected by covers.
- The power plug must be positioned so that the operator can see and control it from any position
- Do not use cleaning materials other than those recommended.
- All types of cleaning that require the use of liquids should only be carried out after disconnecting the machine from the power mains.

7.6 General cleaning operations

In order to have the machine in perfect working condition, it is important that it is cleaned and well kept. Please follow the instructions below:

<p>Cleaning painted areas and removing small scratches</p>	<p>Clean the vending machine with soap and water. Any good car wax can be applied to the exterior surfaces of the vending machine.</p> <p>Small signs of corrosion can be removed using fine sand paper and covering the surfaces with a nitrocellulose lacquer.</p> <p>Paint splashes and grease or glue marks can be removed using solvent.</p>
<p>Cleaning the neon advertising board</p>	<p>The neon advertising panel is made of transparent polycarbonate (lexan) and should be cleaned with care. It is advisable to follow these instructions:</p> <ul style="list-style-type: none"> • Wash with neutral soaps or detergents in warm water • Use soft cloths or sponges • Do not rub harshly • Rinse with warm water • Dry with cotton rags or synthetic skin cloths • CAUTION: almost all organic solvents, fuel oils, kerosene or alcohol will corrode the polycarbonate. If used, the panel will be permanently damaged.
<p>Cooling area</p>	<p>The condenser and evaporator should be kept clean and in working order. You must check that all the openings and pipes are clean and there is nothing obstructing the passage of air.</p>
<p>Product delivery chute</p>	<p>Check that the product delivery chute is clean and without any deposits.</p>
<p>Cleaning the drainage tube</p>	<p>Check that there are no obstructions in the drainage tube.</p>
<p>Crown box</p>	<p>Periodically empty the crown box (when used)</p>
<p>General precautions</p>	<p>Never use:</p> <ul style="list-style-type: none"> • Cleaning products that are abrasive or harsh from a chemical point of view • Strong based (alkaline) cleaning products or strong acids • Benzene • Leaded petrol • Acetone • Never clean with blades or other sharp objects • Never clean in high temperatures • Never clean the machine when the surfaces are boiling hot from the sun • Never clean using water jets • Pay attention when cleaning parts that may be powered: disconnect the power supply first • Never use water or other liquid detergents • If using liquid detergents, disconnect the power supply from the machine

Only technicians from SandenVendo Europe or authorised personnel may carry out the operations that require the machine's lower protection to be opened, because of possible risks due to electric shocks and moving mechanical parts.



PERICOLO!
DANGER!
ACHTUNG!
PELIGRO!



**PERICOLO DI SHOCK ELETTRICO
RISCHIO MECCANICO**
VIETATO RIMUOVERE QUESTA PROTEZIONE DI SICUREZZA
L'APERTURA DI QUESTA PROTEZIONE È PERMESSA SOLO A TECNICI
SANDEN VENDO EUROPE O PERSONALE AUTORIZZATO

**DANGER OF ELECTRIC SHOCK
DANGER OF MECHANICAL RISK**
DON NOT REMOVE THIS SAFETY PROTECTION
ONLY SANDEN VENDO EUROPE TECHNICIANS OR AUTHORIZED
TECHNICIANS ARE ALLOWED TO OPEN THIS SAFETY PROTECTION

**RISQUE D'ELECTROCUTION
ATTENTION AUX RISQUES MECANISMES**
NE PAS ENLEVER LES ORGANES DE PROTECTION ET DE SECURITE
SEULS LES TECHNICIENS DE SANDEN VENDO EUROPE OU LES TECHNICIENS
ABILITES SONT AUTORISES A ENLEVER LES ORGANES DE PROTECTION ET
DE SECURITE

**TEILE HINTER DIESER ABDECKUNG FÜHREN SPANNUNG
VERLETZUNGSGEFAHR BEI ARBEITEN AN DER
MECHANIK**
DIE WARN UND HINWEISSCHILDER DÜRFEN NICHT ENTFERNT WERDEN
DIE ABDECKUNG DARF NUR VON SANDEN VENDO TECHNIKER ODER VON
EINEM HIERZU AUSGEBILDETEN FACHMANN ERFOLGEN

**PELIGRO DE ELECTRO SHOCK
PELIGRO DE RIESGO MECANICO**
NO SACAR ESTA PROTECCION DE SEGURIDAD
ESTA PERMITIDO ABRIR ESTA PROTECCION DE SEGURIDAD A TECNICOS DE
SANDEN VENDO EUROPA O PERSONAL AUTORIZADO

PN 404657

7.7 Recommended cleaning products

We recommend cleaning the machine using only the following types of products and materials:

- Neutral detergent
- Compressed air (2 bar max.)



CAUTION: in order to avoid any oxidisation, corrosion, brittling, peeling of paint and other damages to the machine **NEVER USE** under any circumstance the following products:

- Abrasive detergents
- Very alkaline or acidic detergents
- benzene
- petrol
- acetone

7.8 Cleaning safety devices

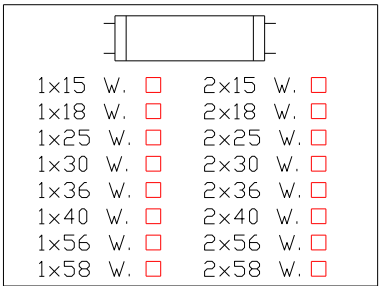
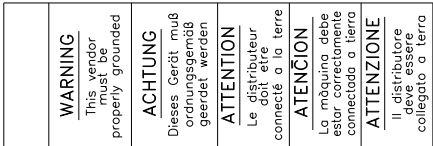

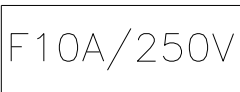



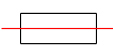




For each cleaning operation, it is advisable to wear protective gloves and/or clothing.



8 INFORMATION – DANGER SIGNS

A series of warning messages are written inside all SandenVendo Europe vending machines, this is to make the user aware of the dangers that exist whilst working on the machine.

Here follows some examples:

<p>1) Watt indicator of the neon advertising panel</p>	 <p>1x15 W. <input type="checkbox"/> 2x15 W. <input type="checkbox"/> 1x18 W. <input type="checkbox"/> 2x18 W. <input type="checkbox"/> 1x25 W. <input type="checkbox"/> 2x25 W. <input type="checkbox"/> 1x30 W. <input type="checkbox"/> 2x30 W. <input type="checkbox"/> 1x36 W. <input type="checkbox"/> 2x36 W. <input type="checkbox"/> 1x40 W. <input type="checkbox"/> 2x40 W. <input type="checkbox"/> 1x56 W. <input type="checkbox"/> 2x56 W. <input type="checkbox"/> 1x58 W. <input type="checkbox"/> 2x58 W. <input type="checkbox"/></p>
<p>2) CAUTION: the vending machine must be fitted with a grounding system.</p>	 <p>WARNING This vendor must be properly grounded</p> <p>ACHTUNG Dieses Gerät muß ordnungsgemäß geerdet werden</p> <p>ATTENTION Le distributeur doit être connecté a la terre</p> <p>ATTENZIONE La macchina deve essere correttamente collegata a terra</p>
<p>3) Type of gas in the cooling system.</p>	 <p>CFC FREE R404a</p>
<p>4) Fuse type and state indicator</p>	 <p>F10A/250V</p>
<p>5) CAUTION: Mains voltage ON</p>	
<p>6) Ground connection indicator</p>	
<p>7) Alternate current indicator</p>	
<p>8) Fuse symbol</p>	
<p>9) Lamp indicator</p>	
<p>10) Equipment suitable for internal use indicator</p>	
<p>11) ON</p>	
<p>12) OFF</p>	

<p>13)Vending machine identification and main technical data</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>Manufacture date: Month/Year</p> </div>	<div style="border: 1px solid black; padding: 5px;"> <p>COSTRUITO DALLA Vendo Sanden Europe S.p.A. CONIOLO (ALESSANDRIA)—ITALY</p> <hr/> <p>MOD. SERIAL N</p> <hr/> <p>ALIMENTATION Hz NOMINAL POWER . W A ⊗ .x MAX W ⊗ y MAX W ⊗ .x MAX W ⊗ y MAX W</p> <p>REFRIGERANT kg MAX. PRESSURE bar IP CLASS . °C % C.F.C. FREE Made in Italy</p> </div>										
<p>14)CAUTION: pay extreme care whilst operating the delivery mechanisms</p>	<div style="display: flex; justify-content: space-around;"> </div>										
<p>15)CAUTION DANGER AND PROHIBITION: danger of electric shocks and mechanical risks</p>	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>PERICOLO! DANGER! ACHTUNG! PELIGRO!</p> </div> <div style="border: 1px solid black; padding: 5px; width: 100%;"> <p style="text-align: center; background-color: red; color: white; font-weight: bold;">PERICOLO DI SHOCK ELETTRICO RISCHIO MECCANICO</p> <p style="font-size: 8px; text-align: center;">METATO RIMOVIERE QUESTA PROTEZIONE DI SICUREZZA L'APERTURA DI QUESTA PROTEZIONE E PERMESSA SOLO A TECNICI SANDEN VENDO EUROPE O PERSONALE AUTORIZZATO</p> <p style="text-align: center; background-color: red; color: white; font-weight: bold;">DANGER OF ELECTRIC SHOCK DANGER OF MECHANICAL RISK</p> <p style="font-size: 8px; text-align: center;">DO NOT REMOVE THIS SAFETY PROTECTION ONLY SANDEN VENDO EUROPE TECHNICIANS OR AUTHORIZED TECHNICIANS ARE ALLOWED TO OPEN THIS SAFETY PROTECTION</p> <p style="text-align: center; background-color: red; color: white; font-weight: bold;">RISQUE D'ELECTROCUTION ATTENTION AUX RISQUES MECANISMES</p> <p style="font-size: 8px; text-align: center;">NE PAS ENLEVER LES ORGANES DE PROTECTION ET DE SECURITE SEULS LES TECHNICIENS DE SANDEN VENDO EUROPE OU LES TECHNICIENS ABILITES SONT AUTORISES A ENLEVER LES ORGANES DE PROTECTION ET DE SECURITE</p> <p style="text-align: center; background-color: red; color: white; font-weight: bold;">TEILE HINTER DIESER ABDECKUNG FÜHREN SPANNUNG VERLETZUNGSGEFÄHR SEI ARBEITEN AN DER MECHANIK</p> <p style="font-size: 8px; text-align: center;">DIE WARH UND HINWESSCHLÖDER DÜRFEN NICHT ENTFERNT WERDEN DIE ABDECKUNG DARF NUR VON SANDEN VENDO TECHNICERN ODER VON EINER HIERZU AUSGEBILDETEN FACHMANN ENFOLGEN</p> <p style="text-align: center; background-color: red; color: white; font-weight: bold;">PELIGRO DE ELECTRO SHOCK PELIGRO DE RIESGO MECANICO</p> <p style="font-size: 8px; text-align: center;">NO SACAR ESTA PROTECCION DE SEGURIDAD ESTA PERMITIDO ANHE ESTE PROTECCION DE SEGURIDAD A TECNICOS DE SANDEN VENDO EUROPA O PERSONAL AUTORIZADO</p> <p style="font-size: 8px; text-align: left;">PR 40657</p> </div> </div>										
<p>16)Final inspection certificate.</p>	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">WHEN ORDERING REPLACEMENT PARTS GIVE THE FOLLOWING INFORMATION</p> <p style="text-align: center;">MODEL _____ SERIAL NO. _____</p> <hr/> <p style="text-align: center;">FINAL INSPECTION CHECK</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">INSULATION TESTED <input type="checkbox"/></td> <td style="width: 50%;">HI.POT. TESTED <input type="checkbox"/></td> </tr> <tr> <td>COOLING UNIT TESTED <input type="checkbox"/></td> <td>MAIN BOARD SET-UP AND TESTED <input type="checkbox"/></td> </tr> <tr> <td>VEND MECHANISM TESTED <input type="checkbox"/></td> <td>LIGHTS WORKING <input type="checkbox"/></td> </tr> <tr> <td>SAFETY CUT-OUT SWITCH TESTED <input type="checkbox"/></td> <td>ALL DOORS CHECKED FOR PROPER CLOSING <input type="checkbox"/></td> </tr> <tr> <td>MACHINE CLEAN <input type="checkbox"/></td> <td>FINAL ACCEPTANCE <input type="checkbox"/></td> </tr> </table> </div>	INSULATION TESTED <input type="checkbox"/>	HI.POT. TESTED <input type="checkbox"/>	COOLING UNIT TESTED <input type="checkbox"/>	MAIN BOARD SET-UP AND TESTED <input type="checkbox"/>	VEND MECHANISM TESTED <input type="checkbox"/>	LIGHTS WORKING <input type="checkbox"/>	SAFETY CUT-OUT SWITCH TESTED <input type="checkbox"/>	ALL DOORS CHECKED FOR PROPER CLOSING <input type="checkbox"/>	MACHINE CLEAN <input type="checkbox"/>	FINAL ACCEPTANCE <input type="checkbox"/>
INSULATION TESTED <input type="checkbox"/>	HI.POT. TESTED <input type="checkbox"/>										
COOLING UNIT TESTED <input type="checkbox"/>	MAIN BOARD SET-UP AND TESTED <input type="checkbox"/>										
VEND MECHANISM TESTED <input type="checkbox"/>	LIGHTS WORKING <input type="checkbox"/>										
SAFETY CUT-OUT SWITCH TESTED <input type="checkbox"/>	ALL DOORS CHECKED FOR PROPER CLOSING <input type="checkbox"/>										
MACHINE CLEAN <input type="checkbox"/>	FINAL ACCEPTANCE <input type="checkbox"/>										

9 TROUBLESHOOTING

The following table lists the problems that may occur on our vending machines. We have listed the possible causes together with the recommended solutions to eliminate the problems.



CAUTION: IN CASE OF FAILURE AND/OR POOR OPERATION ONLY CONTACT THE SKILLED PERSONNEL AT OUR SERVICE CENTRE



MAY WE REMIND YOU THAT OUR AFTER SALES SERVICE CENTRE IS AT YOUR COMPLETE DISPOSAL FOR ANY TECHNICAL INFORMATION YOU MAY NEED.

PROBLEM	POSSIBLE CAUSES	RECOMMENDED SOLUTIONS
All coins returned.	The vending machine is not powered.	Check the electrical plug.
	The coin box is not powered.	Check that the connection wiring is not faulty and that the fuse has not blown.
	The coin box is out of use or the money return handle does not close.	Check the coin box or replace the levers.
	Dirty money channel.	Clean the coin box with an approved detergent. Dry completely.
	Machine has sold out.	Either all the columns are empty or the full columns have signalled a product blockage to the board. Check that the full columns work properly with the manual test after which reset the errors (ref. Programming Manual).
Coins accepted no product delivered.	Prices are set too high.	Set the prices (ref. Programming Manual).
	Communication error coin box – board.	Check the connection wire between the coin box and the board. If necessary, try replacing the coin box or board.
	The motors are jammed.	Make sure the motor is powered by 24V when the selection is made (always cancel the errors on the board).
The delivery motor runs until two or three products are sold, after which the column signals sold-out.	The motor has a dirty micro switch.	Clean or replace it.
The sales made are not counted.	The door switch does not activate when the door is closed.	Adjust the door square and try a sale with the door closed.
The display shows the sales counter.	The “door closed” sensor is not installed correctly.	Adjust the position of the “door closed” sensor
The column signals sold-out even when it is full.	The products are over the sold out sensor.	Check that the column arrangement is correct. Check if the sold -out micro switch works.

PROBLEM	POSSIBLE CAUSES	RECOMMENDED SOLUTIONS
The compressor does not work, the condenser fan works, the compressor is cold.	The overload protection and relay do not work.	Check the overload protection or the compressor relay.
	The relay board is faulty.	Check that the compressor windings have the right electrical resistance. Check that the guide relay has control wiring.
The compressor works, but the temperature is not ideal.	The condenser fan does not work.	Check the circuit. Replace the motor. Check if the fan is blocked. Check the guide relay board.
	The condenser is dirty.	Check if the condenser fins are dirty or obstructed.
	The evaporator fan does not work.	Check the circuit. Replace the motor and check that the fan is not blocked. Check the guide relay board.
	No gas in system.	Check for any leaks and only reload with the quantity and type of gas recommended by the manufacturer.
	The temperature setting is not exact.	Set the desired temperature (ref. Programming Manual).
	EMS programmed badly.	Check if the energy saving program is correct and change if necessary (ref. Programming Manual).
The compressor works continuously.	Faulty relay board.	Check the relay board and wiring.
	Incorrect temperature setting.	Check the setting.
	Gas leak.	Reload the cooling system after repairing the leak.
Evaporator covered in ice.	Evaporator fan does not work.	Check the evaporator fan (see previous instructions).
	The cooling compartment is badly sealed.	Change the sealing and/or adjust the internal door closure. Check that the product door is not blocked.



ONLY TECHNICIANS FROM SANDENVENDO EUROPE OR AUTHORISED PERSONNEL MAY CARRY OUT OPERATIONS THAT REQUIRE THE MACHINE'S LOWER PROTECTION TO BE OPENED, BECAUSE OF POSSIBLE RISK OF ELECTRIC SHOCKS AND MOVING MECHANICAL PARTS.

10 STORAGE AND DISPOSAL

10.1 Storage

Should the vending machine not be used immediately or is stowed for long periods, check that it is correctly packed and positioned vertically.

This means it should be stored in a closed, but well ventilated room and which does not have particular characteristics hazardous to the machine's components, in particular the electronic ones.

Protect unpainted parts against corrosion with greases or special sprays, if necessary stow them with dehydrating salts.

In any case, after lengthy periods of inactivity, the machine requires controls and special checks that cannot be described in this context, ask the manufacturer for instructions.

10.2 Disposal

Information about protecting the environment



Dispose of the packing in conformity with the recycling procedures.

In this way, you contribute towards reducing the need for virgin wood, using material that would otherwise accumulate at landfills.



Recycling the vending machine. Do not dispose the vending machine with other domestic waste. This vending machine contains electrical and electronic material, which, as indicated by **Directive ROHS UE 2015/863**, and **Directive WEEE 2012/19/UE**, if treated correctly, can be salvaged and recycled at the end of its working life. Recycling this product contributes towards reducing the need for new materials and reducing the accumulation of waste.



CAUTION: THE MANUFACTURER IS NOT RESPONSIBLE FOR DAMAGES TO THE ENVIRONMENT CAUSED BY ILLEGAL WASTE.




To obtain updated information on treatment and recycling WEEE centers, please visit our website:
www.sandenvendo.com

10.3 Person in charge of disposal

Directive **WEEE** 2012/19/UE enforces the obligation **NOT** to dispose **WEEE** (Waste Electrical and Electronic Equipment) as household waste and to select this waste for separate collection.

By law, the person in charge of disposal must, upon receiving an appliance showing this



symbol , before disposing of it select the **WEEE** waste and make it available for collection.

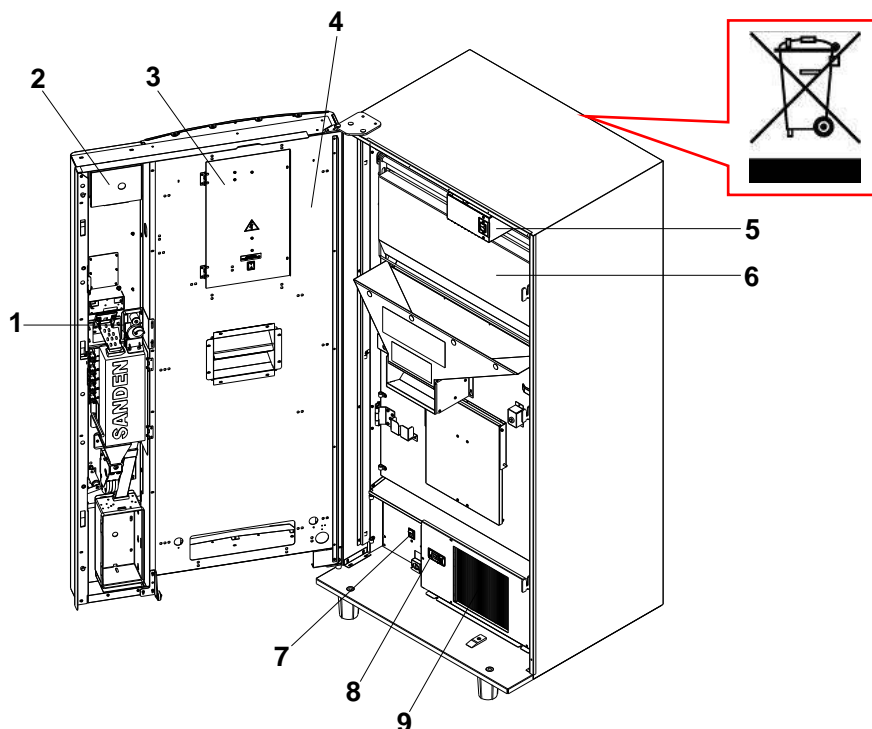


FIG. 10.1 – ICV VENDING MACHINE

- 1 Motor
- 2 Programming board
- 3 Ballast
- 4 Neon lamp
- 5 Wicket motor
- 6 Vending mechanism motors
- 7 Trasformer
- 8 Termometer
- 9 Refrigerator

10.4 Sanctions

The sanctions in case of the illegal **DISPOSAL** of **WEEE** waste are indicated in the national decrees related to the Directive **ROHS** UE 2015/863, Directive **WEEE** 2012/19/UE