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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.

1.3 Responsibility

The responsibility of the manufacturer is limited to the correct usage of the vendor. “**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: **98/37/CE** (EC markings).

“**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 20 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 24 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 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
- Should this manual be lost or damaged, you may ask for a copy from the manufacturer, enclose the serial number of your vending machine with your request



CAUTION: FAILURE TO ABIDE BY THE INSTRUCTIONS CONTAINED IN THIS MANUAL MAY INVOLVE DAMAGES TO THE VENDOR AND/OR PERSONNEL

1.8 Symbols

In the manual and/or on the vendor, warning areas have been indicated with signs, plates, symbols or icons showing danger or obligations in each case

The symbols used in the manual and on the vendor are the following:

SIMBOL	MEANING	COMMENT
	Compulsory	Compulsory for personnel involved
	Compulsory	Compulsory for personnel involved to wear protective gloves during maintenance on the vendor
	Compulsory	Compulsory for personnel involved to wear protective clothes during maintenance
i	Extra information	Additional information is given
	Manual	Before doing indicated operation, refer to the instructions in the Manual
	Maintenance operations	In case of a particular function and/or irregularity, a mechanical adjustment and/or electric setting could be required.
	Warning	Indicates a warning, failure to comply may involve damages to the vending machine
	Danger	Extreme care must be given when operating the vend mechanism
	Danger	Extreme care must be given when using electric cables
	Danger	Indicates information concerning personnel safety and machine's integrity
	Danger/Forbidden	Indicates a danger of electric shock and mechanical risk. It is forbidden to remove this safety guard. Only SandenVendo Europe technicians or authorized personnel can open this safety guard
	Clearance	Clear in conformity with the recycling procedures
	Recycling	The recycling of this product helps to reduce the need of new material and piling up of waste.

2 MACHINE FEATURES

2.1 Technical Features

MOD. GF6-DR6

Dimensions Standard (Flat) Door

Height (A)	1830mm
Width (C)	950mm
Depth (B)	860mm – 845mm
Weight	290Kg

Electric features

Nominal tension	230V
Nominal frequency	50Hz
Installed electric power	850W
Working noise	

Cooling unit

Compressor (12.11CC) cm³
 Refr. Power 1058W
 Expansion direct with capillary
 Cooling forced circulation by means 3 fans
 Working range 18 ÷ 32°C 65% R.H.
 Settable temperature range 1°C ÷ 25°C
 Refrigerant R404A
 Load 0,360 Kg

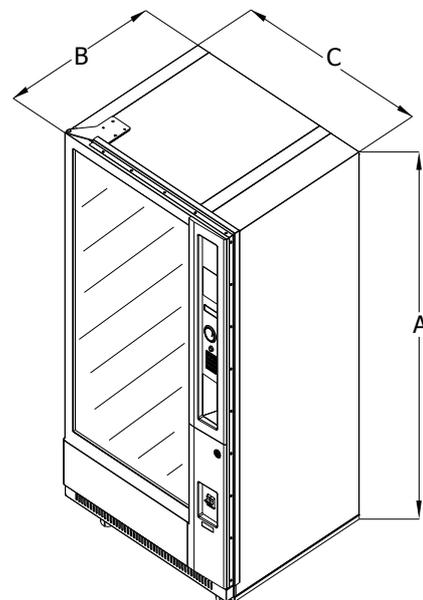


FIG. 2.1

MOD. GF9-DR9

Dimensions Standard (Flat) Door

Height (A)	1830mm
Width (C)	1220mm
Depth (B)	860mm – 845mm
Weight	340Kg

Electric features

Nominal tension	230V
Nominal frequency	50Hz
Installed electric power	850W
Working noise	

Cooling unit

Compressor (12.11CC) cm³
 Refr. Power 1058W
 Expansion direct with capillary
 Cooling forced circulation by means 3 fans
 Working range 18 ÷ 32°C 65% R.H.
 Settable temperature range 1°C ÷ 25°C
 Refrigerant R404A
 Load 0,360 Kg

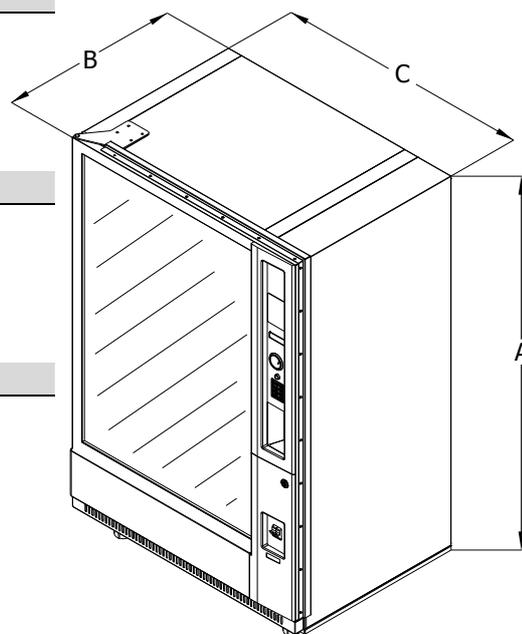


FIG. 2.2

2.2 Description of Components

- 1 CBV PLUG COVER
- 2 DISPLAY
- 3 COIN INTRODUCTION
- 4 PUSH BUTTONS
- 5 PRODUCT EYELET
- 6 DOOR LOCK
- 7 COIN RETURN
- 8 PRODUCTS WINDOW
- 9 LOWER DOOR PANEL
- 10 DOOR UPPER DECOR
- 11 DOOR LOWER DECOR

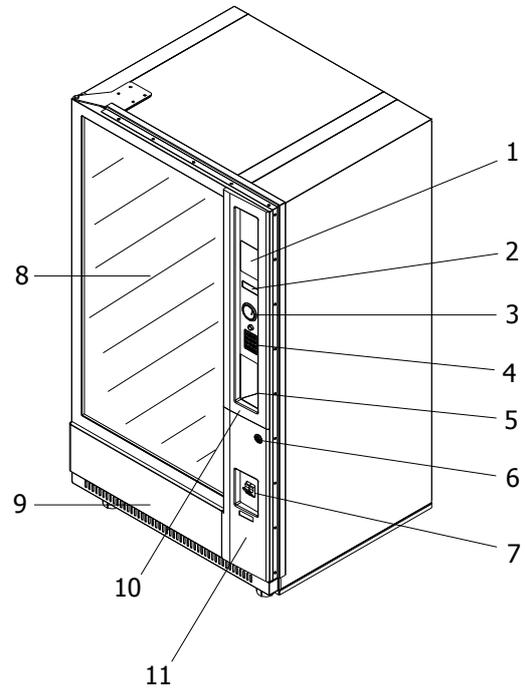


FIG. 2.3

- 1 SHELVES
- 2 LED
- 3 DOOR LIFT WHEEL
- 4 LEVELLING SCREW
- 5 COOLING UNIT
- 6 CONTROL PANEL

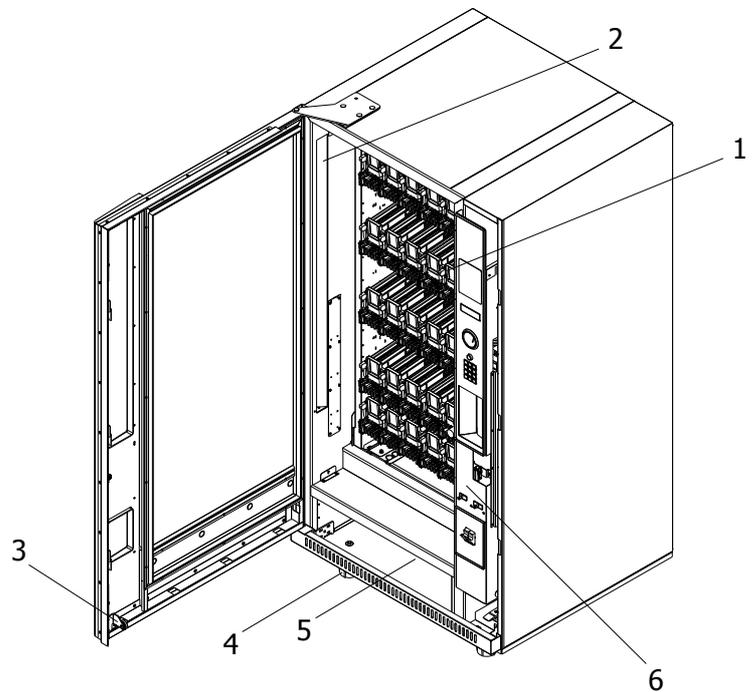


FIG. 2.4

3 INSTALLATION

3.1 Transport and Positioning

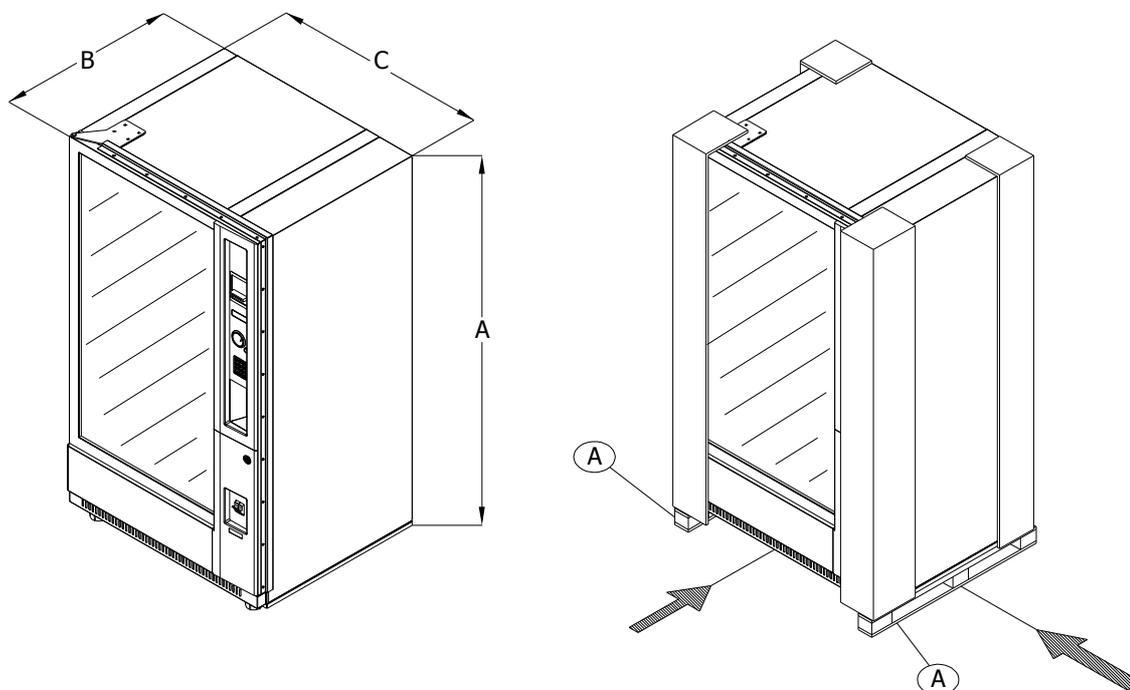


FIG. 3.1

MODEL	A (mm)	B (mm)	C (mm)	WEIGHT (Kg)
GF6-DR6 Std – (Flat) Door	1830	860 (845)	950	290
GF9-DR9 Std – (Flat) Door	1830	860 (845)	1220	340
GF6-DR6 packed	1830	880	960	295
GF9-DR9 packed	1830	880	1230	345



For transport and HANDLING of the vendor follow carefully the below instructions:

- Use a transpallet/forklift having a minimum loading capacity of 400 kg., the wooden base (A) permits to fork the vendor on 4 sides (fig. 3.1).
- If installation is not immediate position the vendor vertically in a dry and covered area.
- CAUTION: it is absolutely forbidden to transport and/or position the vendor in a horizontal position.
- If the machine is **mistakenly placed in a horizontal position**, re-position it again in working position (vertical) and **wait at least 12 hours** before starting it, otherwise it would be possible to cause damages or anomalies to the cooling unit.
- Place the vendor in the installation area, work with caution, avoid jumps and bumps.
- Free the machine from its packing, extract, from the back protection grill, the power cable and carefully place it in the final position.

3.2 Characteristics of Installation Area



CAUTION: THE MACHINE IS NOT SUITABLE FOR OUTDOOR INSTALLATION

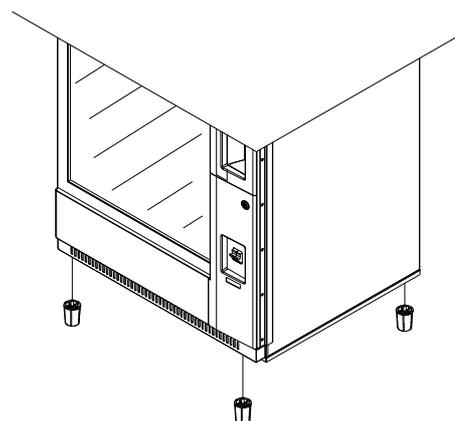
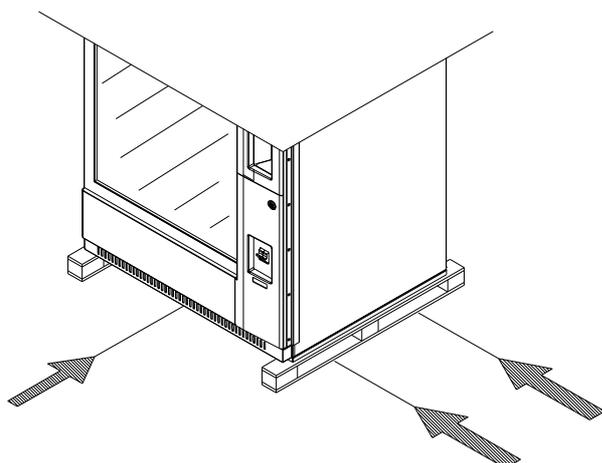


CAUTION: DO NOT USE JETS OF WATER TO CLEAN VENDOR, DO NOT PLACE THE VENDOR IN AREAS WHERE JETS OF WATER ARE USED

Environmental conditions for installing vendor

- “Mod. GF6-GF9-DR6-DR9” vendors must be installed in an area/room where temperature does not exceed 32 °C or fall below 10 °C, otherwise the electric parts (compressor) could overheat or malfunction.
- The air circulation is very important for the cooling unit, check that there is a 10 cm gap between the rear of the vendor and the obstacle (wall).
- Check that the surface where the vendor is placed supports the weight of the machine.

3.3 Removing of Wooden Bases



To remove wooden bases, work as follows:

- With a transpallet lift the machine from the floor (holding it from the Front)
- With an adjustable wrench unscrew the screws that fasten the wooden base to the machine: 2 screws on the right hand side and 2 screws on the left hand side
- Assemble the 4 feet on the base of the machine
- Place the machine on the floor

3.4 Levelling

In order to have the best working conditions place the vendor on a perfectly levelled surface. Any irregularities on the floor can be compensated by adjusting the screw-on feet on the vending machine to obtain a perfect levelling and guarantee stability.



THE BEST PERFORMANCE IS GUARANTEED IF THE VENDOR IS PLACED ON A HORIZONTAL SURFACE

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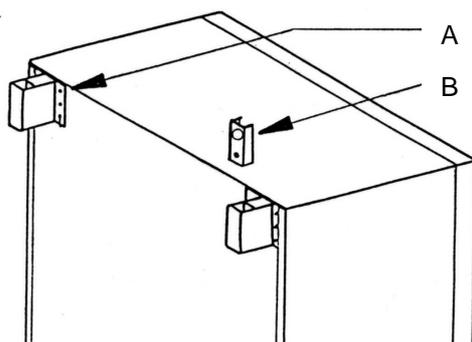
3.5 Stability

The stability of the SandenVendo vending machine is granted whether the vending machine empty or full and / or with the door open.

The overturning of vending machine without external influences is quite impossible.

Against the vandalism, such as possibility of tilting the Vending machine, the following optional kits are applicable to meet your needs.

3.5.1 Wall fixing kit P/N 135078/2



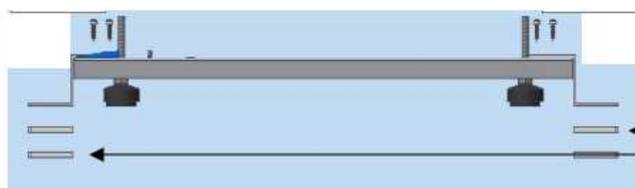
Components provided:

- 2 x Welded rear bracket A P/N 130461/1
- 2 x Bracket B P/N 386460
- 2 x Plugs with screw P/N 391598
- 12 x Screw P/N 390139

3.5.2 Ground anchor kit P/N 139218

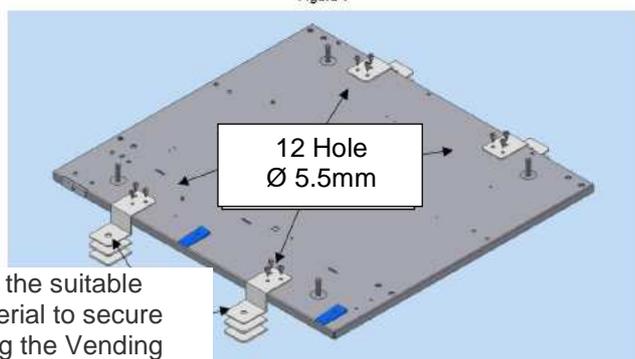
Components provided:

- 4 x Bracket fixed to the ground P/N 402852
- 16 x Thick metals P/N 402854
- 12 x Screw 6,3 x 19 P/N 800876



For adjust differences in level, use the thick metals provided.

Figura 1



12 Hole
Ø 5.5mm

Use the suitable material to secure fixing the Vending machine to the floor.

Figura 2

After making 12 holes Ø5mm tighten the 4 brackets provided on the cabinet base keeping an appropriate distance from each other.

ATTENTION:	SandenVendo does not assume responsibility for any damage caused by the lack of consultation of the instructions. All the operations must be done by authorized personnel.
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3.6 Connection to Power Mains

SERVICE CORD INSTALLATION



- 1) Unscrew the 2 screws in FIG.1
- 2) Pull out the service cord until the fastening plate appears as in FIG.2
- 3) Fasten the plate with the 2 screws as in FIG.3



CAUTION: BEFORE DOING ELECTRICAL CONNECTION CHECK THE FOLLOWING :



Assure that the characteristics of the power supply (voltage and frequency) correspond to those indicated on the plate with technical details of the machine: this vendor must be connected to a 230 V, 50 Hz. power main, voltage under 207 V or over 253 V could cause failures

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

Assure that the vendor is positioned in a way that the plug for connection to the power main is accessible after installation

Assure that the neutral wire is blue, otherwise invert the poles



CAUTION: if defects or damages are found on the supply cable it must be replaced. To protect personnel and prevent any risks of damages to the machine do not try to substitute the cable, contact the manufacturer or technical assistance service.



CAUTION: DO NOT ABSOLUTELY USE EXTENSION CORDS

3.7 Coin Mechanism Installation

Hook the coin box on the 3 screws (E) located on the coin box door (F).

Check that the coin slot on the coin box is in line with the outlet of the coin channel (G) and that the distance between the two parts is approx. 10 mm max.

The distance is adjustable loosening the 4 fastening screws (H) of the door and sliding it up or down. Once finished remember to tighten the screws again.

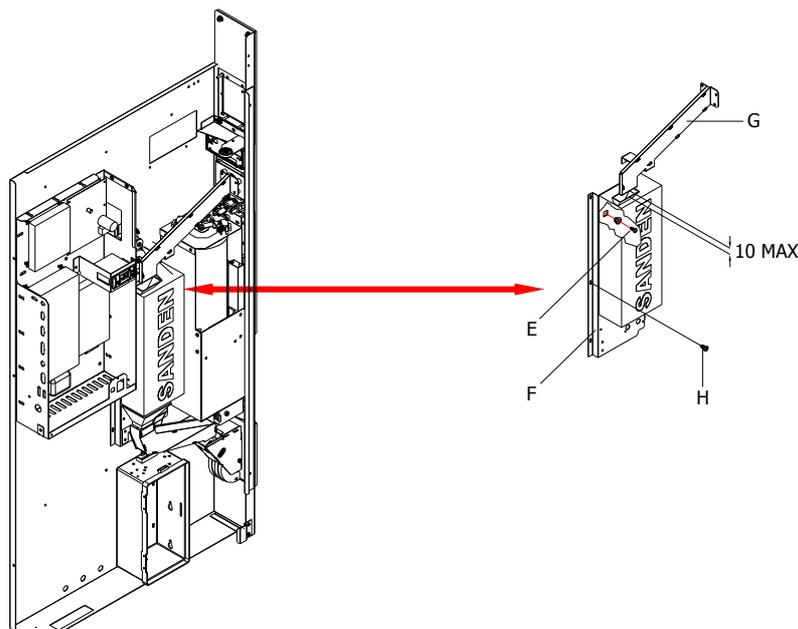


FIG 3.4

You can move it at a right angle by placing spacers (washer 1) between the coin box door and the back of the coin box support .

When it is perfectly centered, remove the selector and tighten the 3 supporting screws (E).

Caution: these operations are not necessary using the coin mechanism recommended by **SandenVendo Europe S.p.A.**

Press the coin return button and check that the mechanism works smoothly. It is important that the selector opens as much as possible. If this doesn't happen adjust again the height of the coin return motor.

Connect the coin mechanism to the MDB connector that is inserted on a support near the coin box.



THE COIN MECHANISMS WITH EXECUTIVE PROTOCOL HAVE 2 CONNECTORS; A POWER SUPPLY CONNECTOR THAT COMES DIRECTLY FROM THE TRANSFORMER BOX, AND A COMMUNICATION ONE FROM THE MAIN BOARD

3.8 Control Settings

All the control and operation settings of the machine are 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 vendor.

i REFER TO THE SF01 PROGRAMMING MANUAL

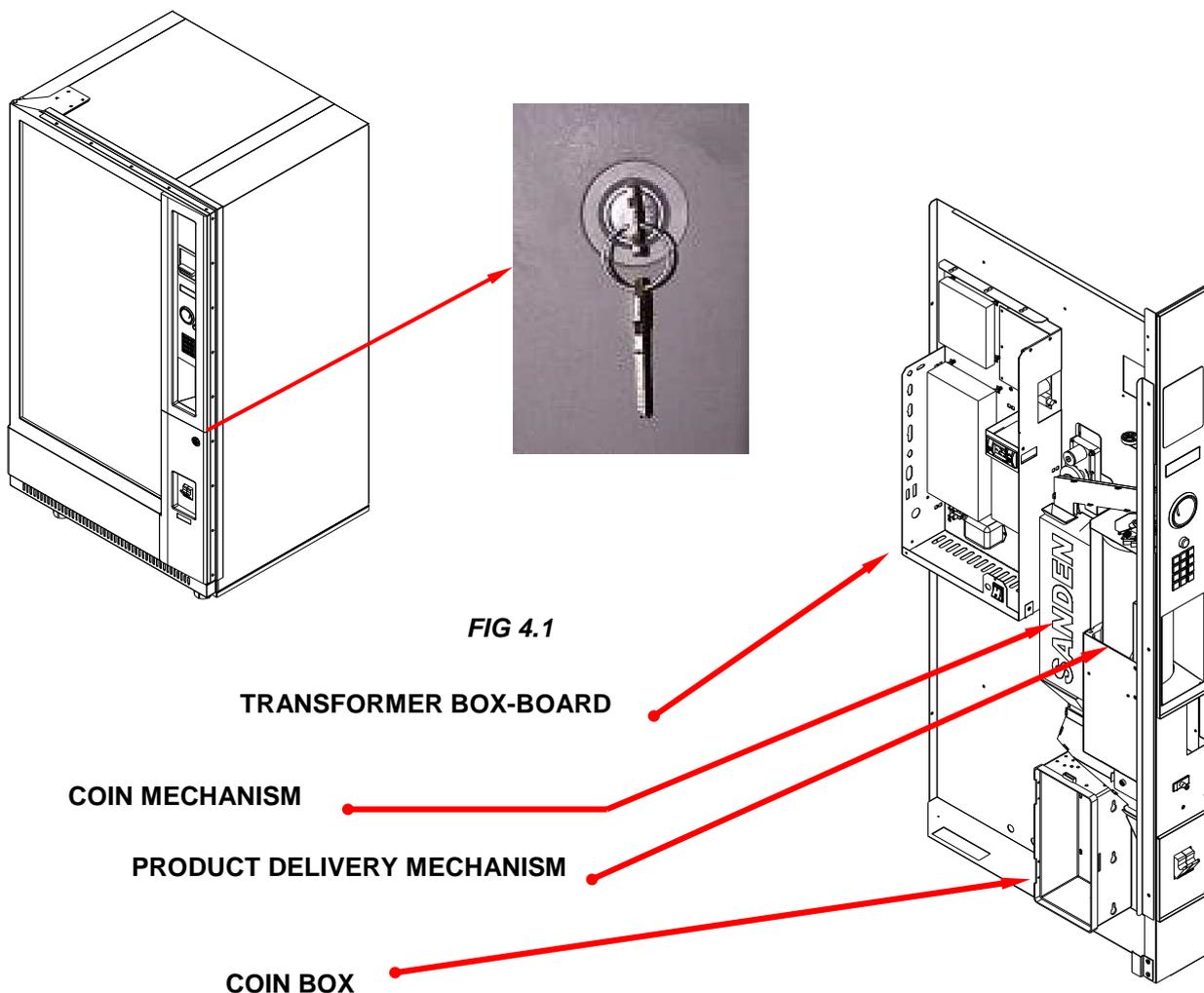
4 ACCESS TO INTERNAL PARTS

Access inside the machine (**maintenance area**) is possible using the specially provided key supplied with the vendor (rif. Fig. 4.1).

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

Hereunder is a list of the service areas of the vending machine :

- LED (lighting area)
- Refrigerant Unit
- Transformer box-board



5 USING THE VENDING MACHINE

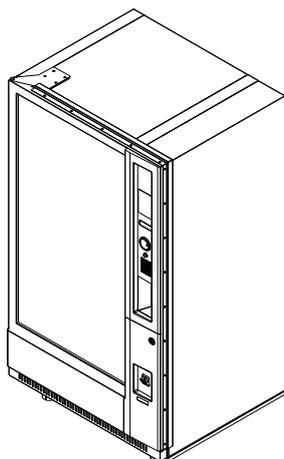
VENDING MACHINE	CE	Rev. 05
Model: G-DRINK ~ G-DRINK DR		Page 12 of 39

5.1 Warnings

- **CAUTION: DO NOT LOAD THE VENDOR WITH PRODUCTS DIFFERENT FROM THE ONES RECOMMENDED BY THE MANUFACTURER (REFER TO CHAPTER PROPER USE)**

5.2 Proper Use

“Mod. GF6-GF9-DR6-DR9” vendors have been designed and built for vending and distributing the following products:

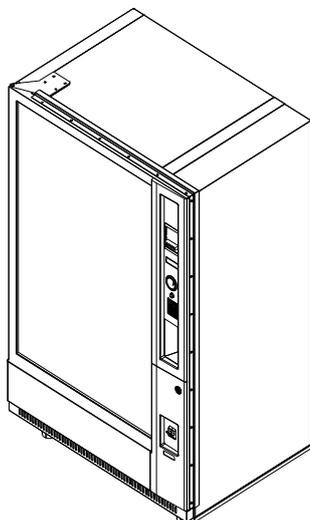


GF6

Can capacity 0.33 (h.116): 336
Can 0.33 (h.146): 288
Bottle capacity 0.50 PET (h.210):240
Bottles 0.50 Coca Cola (h.235): 192
Selling cycle time: Max. 13 sec.
No. shelves: from a minimum of 4 to a maximum of 7
Selections: standard 30/max.42

DR6

Can capacity 0.33 (h.116): 384
Can 0.33 (h.146): 336
Bottle capacity 0.50 PET (h.210):240
Bottles 0.50 Coca Cola (h.235): 240
Selling cycle time: Max. 13 sec.
No. shelves: from a minimum of 4 to a maximum of 7
Selections: standard 30/max.42



GF9

Can capacity 0.33 (h.116): 504
Can 0.33 (h.146): 432
Bottle capacity 0.50 PET (h.210):360
Bottles 0.50 Coca Cola (h.235): 288
Selling cycle time: Max. 13 sec.
No. shelves: from a minimum of 4 to a maximum of 7
Selections: standard 45/max.63

DR9

Can capacity 0.33 (h.116): 576
Can 0.33 (h.146): 504
Bottle capacity 0.50 PET (h.210):360
Bottles 0.50 Coca Cola (h.235): 360
Selling cycle time: Max. 13 sec.
No. shelves: from a minimum of 4 to a maximum of 7
Selections: standard 45/max.63

PRODUCTS SIZE:

PET bottles, Glass bottles, Cans

Diameter: min. 43,5mm – max. 71,5mm
 Height: min. 88mm – max. 266mm
 Weight: min. 185g – max. 653g

Carton packs (brick)

Width: min. 52mm – max. 67mm
 Depth: min. 40mm – max.47mm
 Height: min. 85mm – max. 134mm
 Weight: min. 213g – max. 400g

Attention:

Some products although within the above dimensions could be difficult to load due to their shape.

5.3 Loading Products

The products that can be delivered are loaded in each shelf inside the machine.

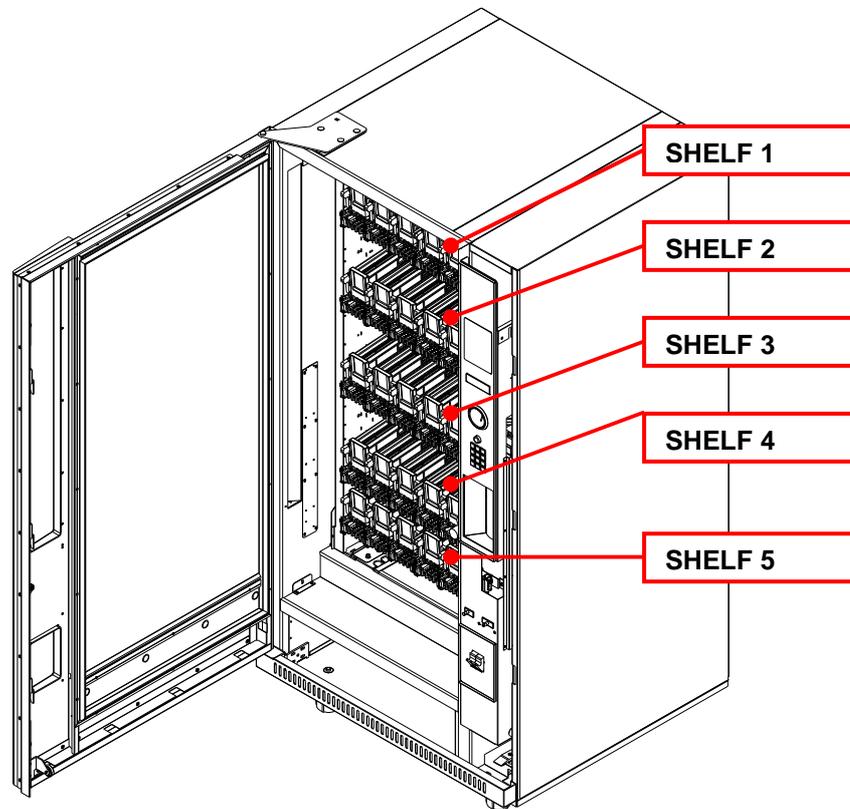


FIG. 5.1 – VENDING SYSTEM

For loading products inside the machine follow the instructions below:

- open the vending machine door (ref. 6.1 ACCESS TO THE MAINTENANCE AREA);
- pull out the shelf until it reaches the blocking point
- push back the pusher until it hooks the back bar of the shelf
- place the products in the selection in front of the pusher, until completely loaded
- push the shelf back to its working position, the pusher unhooks automatically
- Re-close the door of the vendor and wait for the reset check of the parameters configuration



Caution: when the shelf is pushed back to its working position, the pusher unhooks automatically and presses against the product.

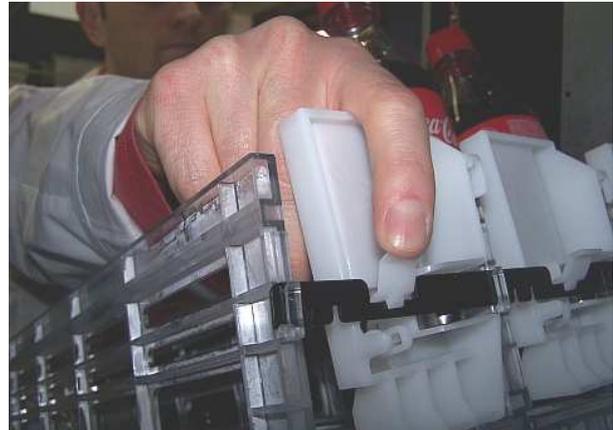
If a selection is not loaded the pusher returns to the starting position in a “violent” way because of the spring.

In order to avoid this condition unhook manually e accompany the pusher before returning the shelf in its working position.

- Follow the below photos for loading products



ALWAYS HOLD THE PUSHER OF AN EMPTY SELECTION AFTER UNHOOKING IT



5.4 Loading Operation



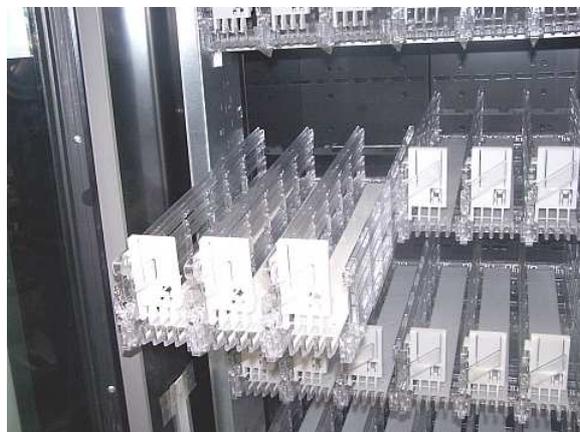
It is absolutely forbidden to step on the lift during loading



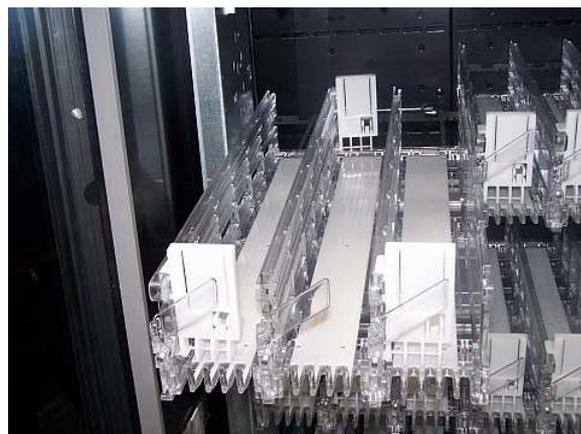
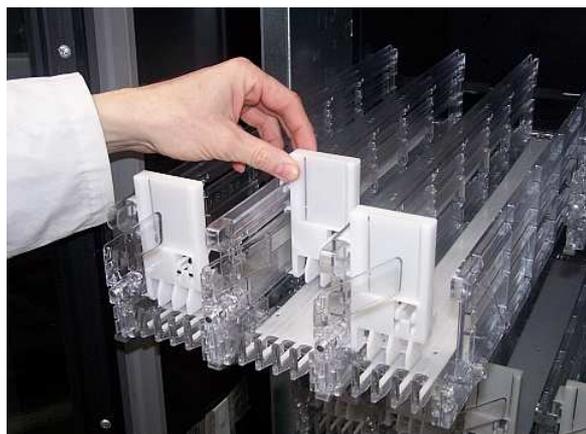
It is absolutely forbidden to use the shelf as support



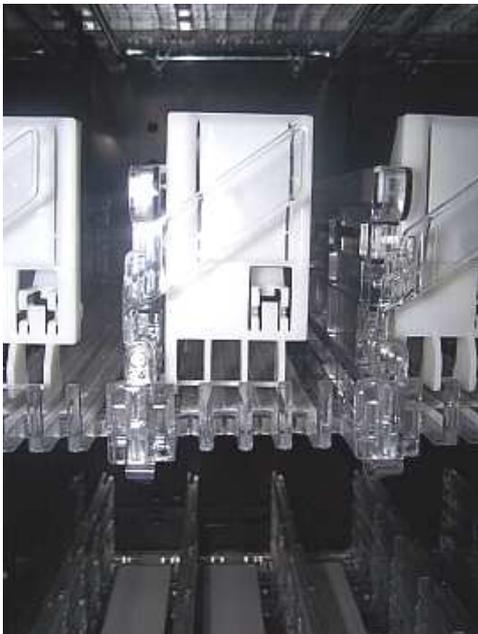
- Pull out the shelf until it reaches the blocking point



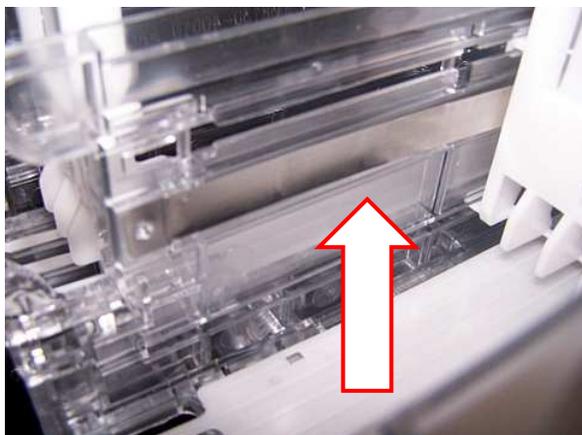
- Push the pusher back until it is hooked to the back bar of the shelf



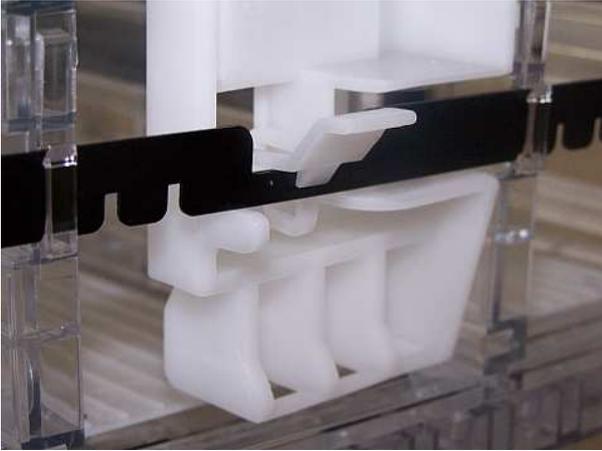
- Load products in the space in front of the pusher and replace the shelf in its working position



PRODUCT PUSHER



PUSHER SPRING

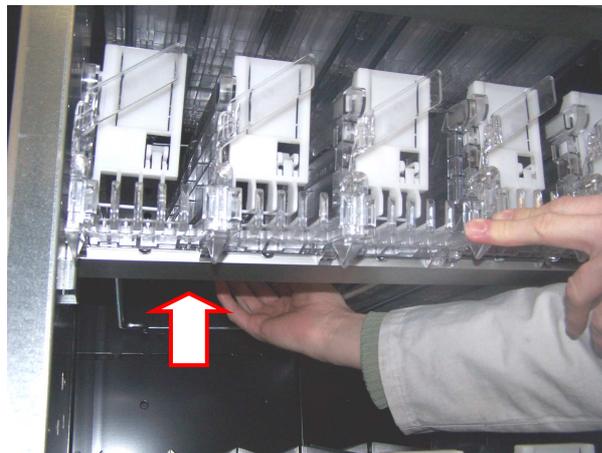


PUSHER HOOKED TO SHELF'S BACK BAR

EXTRACTION OF SHELVES

to extract shelves do the following:

- Place the palm of your hand under the shelf and lift it slightly to allow unhooking



SHELF BRACKET

- Follow below procedures for extracting only the first shelf on the bottom left side :

- 1) Manually open the vend door
- 2) The product bucket moves from left to right allowing extraction of the shelf
- 3) Extract the shelf lifting it slightly
- 4) The procedure for product loading is the same as the other shelves

When closing the door, the bucket returns to starting position



VEND DOOR



BUCKET MOVING FROM LEFT TO RIGHT



PRODUCT CATCHING BUCKET



LIFT SHELF FOR EXTRACTING



**WHEN CLOSING THE DOOR THE
PRODUCT RETURNS TO STARTING
POSITION**

5.6 Final Check

- 1- Load the shelves completely
- 2- Do several selections, check product delivery

It is possible to send your products to the factory, tests will done for correct adjustment.



USUAL PRODUCTS ARE NORMALLY TESTED IN THE FACTORY, ASK FOR THE SETTING NUMBER OF THE PRODUCT THAT YOU WISH TO SELL AND REFER TO THIS NUMBER WHEN ORDERING. WE WILL PRODUCE THE VENDOR ACCORDING TO YOUR SPECIFICATIONS.

5.7 Control Setting

All the machine's control 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



REFER TO SF01 PROGRAMMING MANUAL

5.8 Start-up

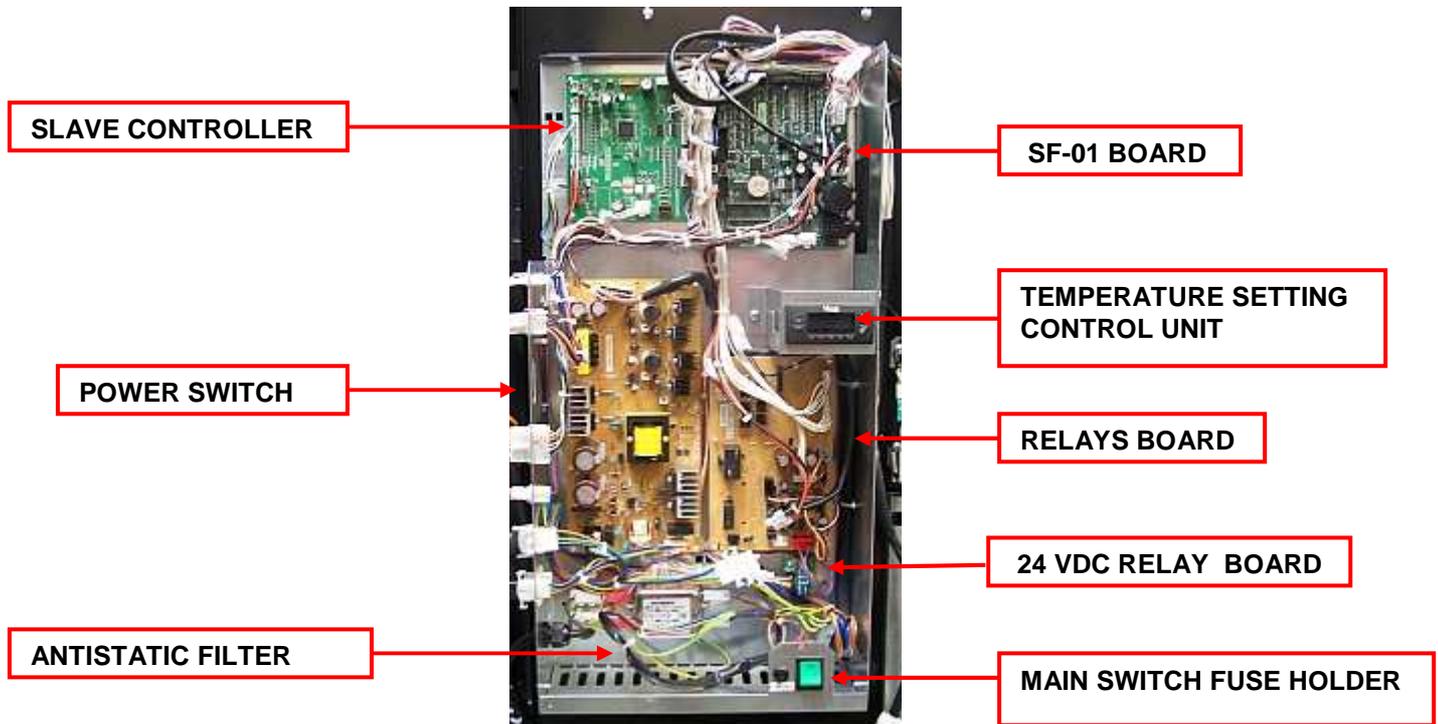
To start-up the Vending machine, work as follows:

- Assure that the plug is connected to the supply mains.
- Give power to the Vendor: press the luminous green button **MAIN SWITCH situated on the transformer box inside of the machine** (on the sliding panel next to the cell).
- The led tubes switch on through the MAIN SWITCH placed on the front part of the transformer box.
- Execute the programming routine: refer to **SF01** Programming Manual
- Load the vendor with the desired products
- Close the vendor door and wait for the general machine check
- The vendor is now ready for vending.



CAUTIONS: IN CASE OF FAILURE AND/OR BAD PERFORMANCE OF THE MACHINE, CONTACT ONLY THE QUALIFIED PERSONNEL AT OUR SERVICE CENTER

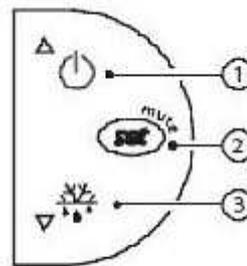
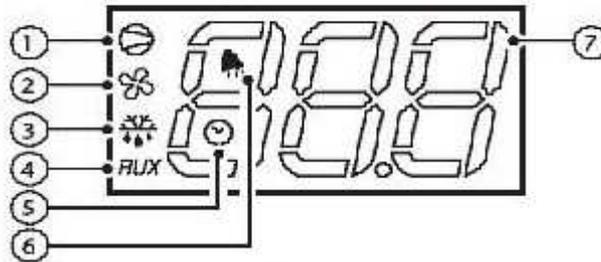
Mod. GLASS FRONT VENDOR BOARD BOX FEATURES



6. DESCRIPTION AND FUNCTION OF CONTROL UNIT

6.1 Display

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



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

6.2 To check and modify the set point:

- push for more than 1 second SET, to visualize the temperature of the set point;
- increase or decrease the value with UP or DOWN;
- push SET to confirm the new value.

6.3 Description of the main signals and alarms

LED flashing: inserting a function there is a delay in timing

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:

- 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:

- 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 flashing

The last defrosting finishes when exceeding the maximum time.

The indication disappears if the next defrost is finished correctly.

dF flashing

defrosting in course:

- it is not an alarm signal but an indication that the instrument is doing a defrosting.

Display flashing

The control unit display and all the leds are flashing:

- 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

6.4 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 general maintenance and cleaning of the vendor.

7.1 Access to Maintenance Area

Access to the internal part of the vendor (*maintenance area*) is possible using the specially provided key supplied with the Vending machine.



FIG. 6.1 – ACCESS KEY

7.2 Preventive Maintenance

In order to guarantee a good performance of the Vendor the following maintenance operations are recommended:

- Check the vending machine and its surroundings area, check for signs of rust on the cabinet and obstructions of air vents
- Open the door and check the absence of water accumulation, signs of rust, and moisture around the edges of the door
- Check the evaporator drain for obstructions (water in the evaporator area must drain towards the condenser pan)
- Periodically check the door seals. If damaged replace immediately
- Periodically check that the condenser is clean
- Check that the evaporator fans and the cooling unit run normally (the blades must be free from any obstruction)
- Check that the compressor and the condenser fans run normally (the blades must be free from any obstruction)
- Check that all the selections are correctly delivered.

7.3 Removing and Installing the Bucket



BEFORE STARTING THE VENDING MACHINE DISCONNECT FROM THE POWER SUPPLY



1. Move the bucket to the middle with caution.
2. Remove the two screws.



3. Put your finger under the bucket and unhook the hook and lift it up.



4. Remove the harness on the left side of the bucket

To re-install, please follow the previous instructions backwards

1. Connect the harness on the left side of the bucket
2. Place the bucket on the moving part and push until it locks into place.
3. Fix with the screws which are removed before.



Check the position



7.4 Led Tube Replacement

To replace a LED tube, work as follow:

- Open the door.
- Turn off the machine pressing the main switch.
- Take out the LED-tube from the fastening clips.
- Disconnect the LED-tube from is wiring.
- Wire up the new LED-tube and fasten it with the clip.

After replacement, work as follows:

- Turn on the machine pressing the main switch.
- Close the door.

NOTE: with the door open, the LED's turn off automatically!



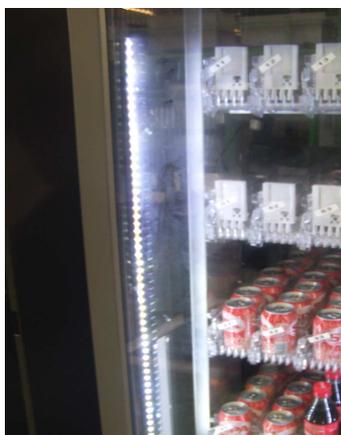
**Q.TY 1 LED TUBE 981mm
LH SIDE INSIDE CELL**



**Q.TY 2 LED TUBE 501mm
RH SIDE INSIDE CELL**



**WITH THE VENDOR DOOR OPEN ,
THE LEDS CLOSE AUTOMATICALLY**

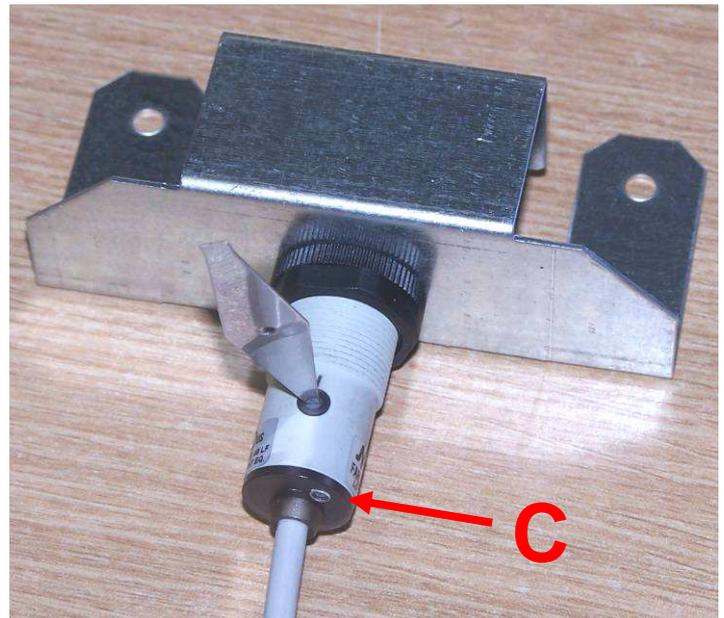
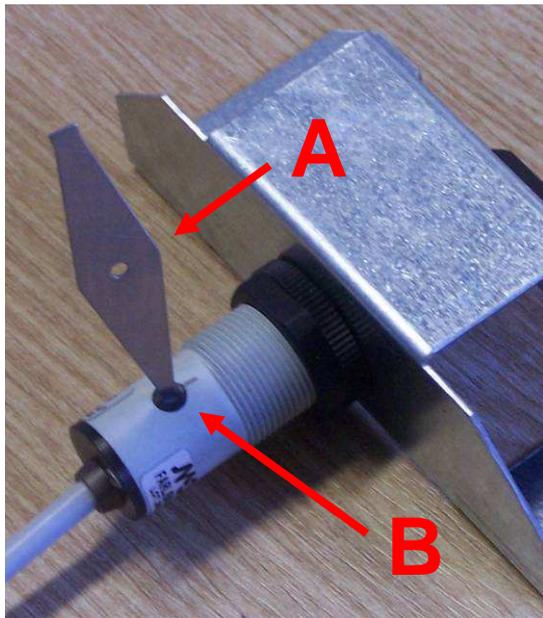


7.5 Drum Photocell Adjustment

The identification of the product is performed as follows:

The bucket brings the product up to flap of the drum then let the product slide inside the drum through the flap.

If the product is detected by passing in front of the sensor, the drum slide opens and you will find the product inside to take out.



How to adjust the sensitivity of the photocell:

1. Insert the appropriate regulation key "A", provided whit photocells, into the cut of the fornt "B"
2. Turn the regulation key in one direction until the led lights on "C" underneath the photocell.
3. Turn it to the opposite direction until the led turns off.
4. Turn it to the opposite direction and stop immediately after the led turns on.
5. **Check** the function by passing an object between the photocell and reflector, and check if the status of the led changes from on (product is not present) to off (product is present).

7.6 Cleaning of the Vending Machine

The general cleaning of the vendor must be done to maintain the efficiency of the vendor. The following is recommended:

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



CAUTION: DO NOT USE WATER CLEANERS AND WATER JETS

7.7 Warnings

Before doing any cleaning operations on the machine pay particular attention to the following indications:

- Cut off power supply to the machine
- Do not use blades or other sharp tools to scratch parts or components of the vendor
- Do not clean the vending machine in areas under the sun or with high temperature
- Disconnect power supply to the machine before cleaning electric parts and/or protected by cover
- Do not use cleaning products other than those recommended
- When cleaning with liquid products disconnect the machine from the power main



ATTENTION: REMOVE THE DUST IN FRONT OF THE CONDENSER EVERY THREE MONTHS



7.8 General Cleaning Operation

To have perfect working conditions it is important that the machine is cleaned and kept well. Please follow the below indications

Cleaning of painted areas and removal of small scratches	<p>Clean the Vendor with water and soap. The exterior may be waxed with any good automobile wax</p> <p>Small internal signs of corrosion can be removed using sand paper and covering the surface with nitrocellulose lacquer</p> <p>Paint splashes and grease or glazing compounds can be removed using solvent</p>
Cooling area	The condenser and the evaporator must be kept clean for efficient operation. Be sure that all vanes and tubings are clean and there are no obstructions of air passage.
Product delivery exit	Keep the product exit clean and without deposits
Cleaning of drainage tube	Check that there are no obstructions in the drainage tube
Crown box	Empty periodically the crown box (when used)
General precautions	<p>Never use:</p> <ul style="list-style-type: none"> • Cleaning products that are abrasive or chemically aggressive • Cleaning products that are strong (alkaline) or acids • Benzene • Leaded petrol • Acetone • Never clean with blades or pointed objects • Never clean at high temperatures • Never clean if the surface of the Vendor has been heated by strong sun • Do not wash with water jets • Be careful when cleaning parts under power; turn off power supply • Do not use water or other liquid detergents • If using liquid detergent, turn off the power supply

7.9 Recommended Cleaning Products

For cleaning the mmachine we recommend the following type of products:

- Neutral detergent
- Compressed air (max 2 bar)



CAUTION: In order to avoid any oxidation, corrosion, and removal of paint or other damages to the machine NEVER USE under any circumstances the following products:

- Abrasive detergent
- Alcaline or acid detergent
- benzene
- petrol
- acetone

7.10 Safety device for cleaning

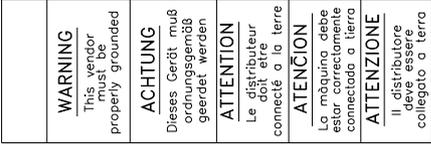
For each cleaning operation wear gloves and/or protection clothes.



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 below are some examples:

<p>1) CAUTION: The vendor must have a ground connection</p>	
<p>2) Type of gas in cooling unit</p>	<p style="text-align: center; border: 1px solid black; padding: 5px;">CFC FREE R404a</p>
<p>3) Fuse type and state indicator</p>	<p style="text-align: center; border: 1px solid black; padding: 5px;">F10A/250V</p>
<p>4) CAUTION: Mains voltage on</p>	
<p>5) Ground connection indicator</p>	
<p>6) Alternate current indicator</p>	
<p>7) Fuse symbol</p>	
<p>8) Lamp indicator</p>	
<p>9) Equipment suitable for inside use</p>	
<p>10) ON</p>	<p style="text-align: center;"> </p>
<p>11) OFF</p>	<p style="text-align: center;">○</p>

<p>12) Identification of the Vendor and main technical details</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 20px auto;"> Production details: Month/Year </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 ⊗ .x MAX W ⊗ .x MAX W ⊗ .x MAX W</p> <hr/> <p>REFRIGERANT kg MAX. PRESSURE bar IP CLASS . °C % C.F.C. FREE Made in Italy</p> </div>										
<p>13) CAUTION: Be very careful when handling delivery mechanisms</p>	<div style="display: flex; justify-content: space-around;"> </div>										
<p>14) Final inspection certificate</p>	<div style="border: 1px solid black; padding: 5px;"> <p>WHEN ORDERING REPLACEMENT PARTS GIVE THE FOLLOWING INFORMATION</p> <p>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"/>
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MACHINE CLEAN <input type="checkbox"/>	FINAL ACCEPTANCE <input type="checkbox"/>										

9 TROUBLESHOOTING GUIDE

The following section provides self-diagnostics to aid you in the troubleshooting process. Here below is a list of possible causes together with the recommended solutions to eliminate the problems



CAUTION: IN CASE OF FAILURE OR MALFUNCTIONING CONTACT ONLY QUALIFIED PERSONNEL AT OUR SERVICE CENTRE



PLS REMEMBER THAT OUR AFTER SALES ASSISTANCE IS COMPLETELY AVAILABLE FOR ANY TECHNICAL INFORMATION YOU MAY NEED

ERROR	POSSIBLE CAUSE	RECOMMENDED SOLUTIONS
All coin returned	No power arrives to the vendor	Check the socket
	No power arrives to the coin mechanism	Check that the connecting harness is not defective and that the fuse is not blown
	The coin mechanism is out of order or the coin return lever doesn't close	Check the coin mechanism or replace the lever
	Coin acceptor is dirty	Clean the coin mechanism with an approved detergent . Dry thoroughly.
	Vendor is in sold out	All columns are empty or those that are not empty have signalled a product jam to the board. Check that the full columns work properly with manual test after which reset the errors (ref. Programming manual).
Coin accepted but no product delivered	Prices are set too high	Reset prices (ref. Programming manual) .
	Communication error coin mechanism - board.	Check the cord connecting the coin mechanism to the board. If necessary, replace coin mechanism or board
	Motors are jammed.	Check that the motor is powered by 24V when the selection is made (always cancel the errors on the board).
Vends are not counted	The door switch is not activated when door is closed.	Adjust door. And do a vend with the door closed
The display shows the vend counter	The "door closure" sensor is not installed correctly	Adjust the position of the "door closure" sensor
The cooling unit is not working.	No power arrives to the vendor.	Check power supply. Check the connection of the power cord and eventually fuses.
	Communication failure between the power board and the vendor.	Check that communication cable is intact
The compressor is not working, the condenser fan	Overload protector and relay are not working	Check overload protector or compressor relay.

ERROR	POSSIBLE CAUSE	RECOMMENDED SOLUTIONS
turns, the compressor is cold	The relay board is defective	Check that the compressor winding has the right electrical resistance Check that the guide relay has control wiring.
The compressor works but the temperature is not ideal	The condenser fan is not working.	Check the circuit. Replace the motor. Check if the fan is blocked. Check the relay guide board.
	Dirty condenser.	Check if the fans of the condenser are dirty or blocked.
	The evaporator fan is not working.	Check the circuit. Replace the motor and check that the fans is not blocked. Check the relay guide board.
	No gas in system.	Check if there are leaks or reload only with the quantity and type of gas recommended by the manufacturer.
	The temperature setting is not correct.	Set the desired temperature (ref. Programming manual).
	EMS badly programmed.	Check if the energy saving program is correct and change if necessary (ref. Programming manual).
The compressor works continuously.	Defective relay board.	Check the relay board and wiring.
	Wrong temperature setting	Check setting.
	Gas leak	Reload the cooling unit after repairing the leak.
Evaporator covered with ice.	Evaporator fan not working.	Check the evaporator fan (see previous instructions).
	The cooling compartment is badly sealed.	Change the sealing and adjust the internal door closure. Check that the product door is not blocked.



OPERATIONS THAT REQUIRE THE OPENING OF THE LOWER PROTECTION OF THE MACHINE CAN ONLY BE DONE BY SANDENVENDO EUROPE TECHNICIANS OR AUTHORIZED PERSONNEL, BECAUSE OF POSSIBLE RISKS DUE TO ELECTRIC SHOCKS AND MOVING MECHANICAL PARTS.

10. TECHNICIANS ALLOWED TO OPERATE ON 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..

11 STORAGE AND CLEARANCE

11.1 Storage

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

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 control and special checks that cannot be described in this context, ask the manufacturer for instructions.

11.2 Clearance (disposal)

Information for protecting the environment



Dispose 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 2002/95/CE, and Directive WEEE 2002/96/CE, 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 centres, please visit our websites:

www.sandenvendo.com

11.3 Person in Charge of Disposal

Directive **WEEE** 2002/96/CE enforces the obligation **NOT** to dispose **WEEE** (Waste Electrical and Electronic Equipment) as household waste and to select this waste fro separate collection.



By law, the person in charge of disposal must, upon receiving an appliance showing this symbol  **before disposing of it selecta the WEEE waste and make it available for collection.**

- 1 Led
- 2 Cooling unit
- 3 Transformer box,
Coin return motor,
Display

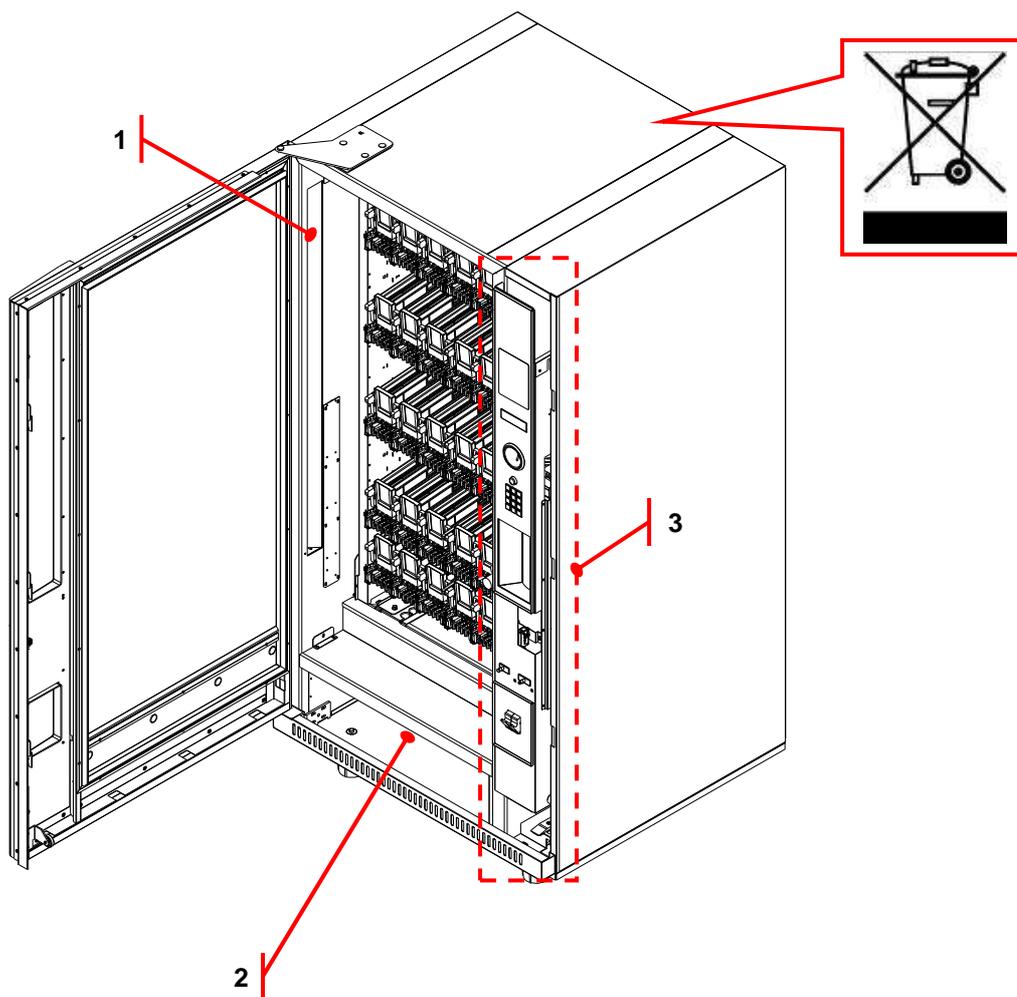


FIG. 9.1 – G-DRINK VENDING MACHINE

11.4 Sanctions

The sanctions in case of the illegal DISPOSAL of WEEE waste are indicated in the national decrees related to the Directive ROHS 2002/95/CE, Directive WEEE 202/96/CE3.

VENDING MACHINE	CE	Rev. 05
Model: G-DRINK ~ G-DRINK DR		Page 37 of 39

SandenVendo Europe S.p.A.
Regione Cavallino,2
15030 CONIOLO (AL)
ITALY

dichiara sotto la propria responsabilità che la seguente macchina:
declares under its responsibility that the following vending machine:

Distributore automatico Modello	SVE GF6-GF9-DR6-DR9
Vending machine Model	SVE GF6-GF6-DR6-DR9

E' conforme alle seguenti Direttive:
Is in conformity with the following Directives:

- Direttiva 2006/42/CE (Direttiva Macchine)
Directive 2006/42/EC (Machinery)
- Direttiva 2006/95/CE (Bassa Tensione)
Directive 2006/95/EC (Electrical Equipment)
- Direttiva 2004/108/CE (Direttiva Compatibilità Elettromagnetica)
Directive 2004/108/EC (Electromagnetic Compatibility)

E' conforme alle disposizioni delle seguenti norme:
Is in conformity with the following standards and normative documents:

- UNI EN 12100 Sicurezza del macchinario – Principi generali di progettazione – Valutazione del rischio e riduzione del rischio
UNI EN 12100 Safety of machinery – General principles for design – Risk assessment and risk reduction
- UNI EN 60204 (Equipaggiamento elettrico delle macchine)
EN 60204 (Electrical Equipment of Machines)

Il fabbricante vieta un utilizzo della macchina o di una sua parte in maniera non conforme a quanto indicato sul Manuale d'Uso e Manutenzione fornito a corredo.
The manufacturer forbids the use of the machine/equipment described in this declaration in any different way from the one indicated into the Use and maintenance Manual attached to the machine.

La persona autorizzata a costituire il fascicolo tecnico è il Sig. Murota
The person empowered to draw up the Technical Construction File is Mr. Murota

SandenVendo Europe S.p.A.

CEO



Hiroyuki Murota

Coniolo, 04/04/11

(Luogo e data di emissione)
(Place and Date of release)

Revision	Data	Changes
00		
01		
02		
03		
04		
05		
06	16/03/2012	Add pages 9, 26 and 28