Snackpoint

DUO M / L

Online English Version
Issued April 2009 Revision 1

Technical Manual

Westomatic
The ultimate coffee house experience

DICHIARAZIONE DI CONFORMITÀ - DECLARATION OF CONFORMITY
DECLARATION DE CONFORMITE - DECLARACION DE CONFORMIDAD
KONFORMITÄTSERKLÄRUNG - DECLARAÇÃO DE CONFORMIDADE
DEKLARATION OM STANDARDDISRING

FAS INTERNATIONAL S.p.A.

Dichiariamo sotto la nostra responsabilità che il prodotto :
Declare under our responsibility that the product :
Déclare sous sa propre responsabilité que le produit :
Declara bajo propia responsabilidad que el producto :
erklären unter eigener Verantwortung, daß das Produkt,
Declara sob sua responsabilidade que o produto :
Bekendtgør på vort ansvar at nendennævnte produkt :

al quale questa dichiarazione si riferisce è conforme alle seguenti norme :
to which this declaration relates is in conformity with the following standards :
auquel cette déclaration se réfère est conforme aux normes suivantes :
objeto de esta declaración es conforme a los siguientes estandardes :
auf das sich diese Erklärung bezieht, folgenden Normen entspricht :
objecto desta declaração está conforme as seguintes normas :
auf das sich diese Erklärung bezieht, folgenden Normen entspricht :

EN 60335-1 - EN 60335-2-75
EN 55014-1 - EN55014-2 - EN 61000-3-2 - EN 61000-3-3

in base a quanto previsto dalle Direttive :
following the provisions of the Directives :
suivant les clauses des Directives :
seguiendo las clausolas de las Normas :
gemäß den Bestimmungen der Weisungen :
obedecendo ao clausulado das Normas :
Ifølge retningslinjer nedfældet i Direktiver :

2006/95 EEC Directive (Low Voltage Directive) and subsequent amendments
2004/108 EEC Directive (EMC Directive) and subsequent amendments

Schio, 01 ottobre 2008

ADRIANI LUCA
AMMINISTRATORE DELEGATO

REGOLAMENTO (CE) N. 852/2004 sull'igiene dei prodotti alimentari

Fas International dichiara che i modelli citati in calce alla presente, se utilizzati con procedure corrette come descritto nei relativi manuali d'uso, rispettano i requisiti generali e specifici di igiene del Regolamento (CE) N. 852/2004 DEL PARLAMENTO EUROPEO E DEL CONSIGLIO del 29 aprile del 2004, Capitolo III , paragrafi 1 e 2g.

REGULATION (EC) No. 852/2004 on the hygiene of foodstuffs

Fas International declares that the models listed below, if used in line with the correct procedures as described in the corresponding user manuals, comply with the general and specific hygiene requirements of the Regulation No. 852/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 29 April 2004, Chapter III , paragraphs 1 and 2g.

RÈGLEMENT (CE) N. 852/2004 sur l'hygiène des produits alimentaires

Fas International déclare que les modèles indiqués au bas de la présente, à condition qu'ils soient utilisés conformément aux procédures décrites dans les modes d'emploi correspondants, répondent aux exigences générales et spécifiques d'hygiène du Règlement (CE) N. 852/2004 DU PARLEMENT EUROPÉEN ET DU CONSEIL du 29 avril 2004, Chapitre III, paragraphes 1 et 2g.

REGLAMENTO (CE) Nº 852/2004 sobre la higiene de productos alimenticios

Fas International declara que los modelos indicados a pie de página, de ser utilizados correctamente tal como se señala en los relativos manuales de uso, cumplen los requisitos generales y específicos de higiene del Reglamento (CE) Nº 852/2004 DEL PARLAMENTO EUROPEO Y DEL CONSEJO del 29 abril de 2004, Capítulo III, párrafos 1 y 2g.

VERORDNUNG (EG) NR. 852/2004 zur Hygiene von Lebensmittelprodukten

Fas International erklärt, dass die nachstehend angeführten Modelle, wenn sie korrekt nach den Verfahrensanweisungen in den jeweiligen Handbüchern benutzt werden, den allgemeinen und spezifischen Hygieneanforderungen der EG-Verordnung Nr. 852/2004 DES EUROPÄISCHEN PARLAMENTS UND DES RATES vom 29. April 2004, Kapitel III , Abschnitte 1 und 2g entsprechen.

FASTER

Schio, lì 24/01/2007

Luca Adriani
Amministratore Delegato
Managing Director

INDEX

E
N
G
L
I
S
H

1   FOREWORD

👉	This manual has been prepared for the most complete model: consequently there may be descriptions or explanations which do not apply to your machine.

This documentation is an integral part of the machine and must therefore accompany every transfer of property or of the company.
Before proceeding to the installation and the use of the distributor, it is necessary to carefully read and understand the content of this booklet as it gives important information concerning safety of installation, rules for the use and operations for the maintenance.
This manual serves to provide all the information necessary for ensuring safe working conditions for machine operators and maintenance personnel.
Furthermore, we recommend contacting the Manufacturer for information regarding spare parts and accessories; it is forbidden to perform any operation without being aware of its exact working procedure.
The manual or a copy thereof must always be kept close to the machine for consultation by the operator; it should be kept away from heat, damp and corrosive agents (oil, lubricants, corrosive products).
When consulting the manual, ensure that it is not damaged; do not remove the pages, replace or delete the information or modify its contents in any way.
Any revisions and pages illustrating the accessories form an integral part of this manual and should therefore be added to it.

1.1   TO IDENTIFY THE MACHINE

The immediately subsequent pages of this booklet show the user how to identify the product VENDING MACHINE; this information is very important in time in order to guarantee the builder the possibility to give the user quickly and safely technical information of whichever type or to faciliate the management of the spare parts.

👉	It is therefore **advised** not to damage or remove the means which are necessary for the identification of the product.

The identification means are the plasticized plate on which you can find all data you should mention to the builter in case of need.
This plate is the only one recognized by the builder as a means of identification of the product.

1.2   LOCATION OF THE STICKERS
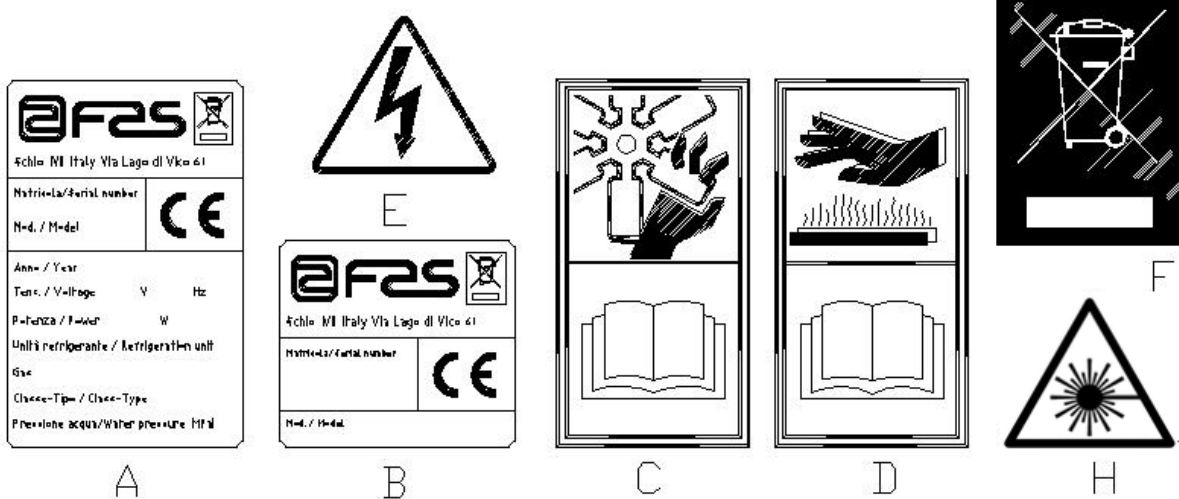
A	Complete identification plate
B	Identification plate
C	Safety sticker indicating danger from rotating parts
D	Safety sticker indicating surfaces at high temperatures
E	Safety sticker indicating voltage supplied
F	Disposal in compliance with EU 2002/96/CE standards, according to the implementation of the Directive into the national law.
H	(LED LIGHTING) LASER RADIATION - DO NOT STARE INTO BEAM - CLASS 2 LASER PRODUCT

The complete identification plate "A", which states all the machine data, is located inside the cabinet (see diagram below). If there are any engraved details on the side of the cabinet, plate "B" is affixed to the rear of the cabinet, in the top right corner.

Furthermore, the serial number is also printed on the most important element of the machine (fans, compressor cards, etc…).

E
N
G
L
I
S
H

1.3   SAFETY

⚠	This appliance is not intended for use by person (includine children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

⚠	The use of accessories or components that are not original, endangers the safety of the machine. Fas declines all responsibilities because of the use of parts or accessories that are not original and is not accountable for whatever damages, direct or in direct, should result from such improper use. The variety of similar products that may be made available on the market, prevents FAS from a possible check on these components. Warning: the use of components and spare parts that are not original, may void the entire warranty on the machine.

⚠	**The vending machine construction and analysis relevant to safety issues refer to the requirements in force.** **The installation and maintenance procedures, including replacing the power supply cable, must be carried out by competent personnel.** **Any interventions other than routine maintenance procedures must be carried out with the plug of the power supply disconnected.** It is obligatory to wear suitable clothing as stipulated in this manual and by the ruling in force in the country in which the machine is used; avoid wearing baggy or loose clothing, belts, rings and chains; long hair must be kept under a suitable cap. It is strictly prohibited to operate the machine with the fixed and/or mobile protections disassembled or with the safety devices switched off. It is strictly prohibited to remove or tamper with the safety devices. Do not perform machine maintenance operations or adjustments of any kind without first having read and familiarised yourself with the contents of this manual. Adjustment carried out with reduced safety protections or with some switched off must be performed by one person only: During the adjustments, access to the machine by non-authorised personnel must be prohibited. If possible keep only one protection open at a time. After having performed adjustments or maintenance operations with reduced safety protections, the machine must be restored as soon as possible to its original conditions with all the protections active. Comply rigidly with the periodical maintenance operations described in this manual to ensure safe working conditions and to maintain machine efficiency. Keep the safety labels in good condition and learn their significance: these are necessary for preventing accidents; if the labels are damaged, lost or belong to replaced parts, they must be replaced with other original labels which can be requested from the Manufacturer. Position new labels in the exact positions indicated in this manual. **Remember that an alert operator in good mental-physical conditions is the best assurance against accidents.**

1.4   EMERGENCY SITUATIONS

⚠	**In the event of fire, do not direct jets of water against the machine as this could cause short-circuiting and result in accidents, even fatal, for persons nearby.**

1.5 CONSULTATION GUIDE

SYMBOL	MEANING	COMMENT
	DANGER	Indicates a danger, even mortal, for the User.
	WARNING	Indicates a warning or notes on key functions or useful information. Pay careful attention to those parts of the text indicated by this symbol. The maintenance personnel are requested to take a measurement value, check a signal, check the correct position of any machine element, etc. prior to performing a determined command or operation.
	ROUTINE MAINTENANCE	*By routine maintenance,* it is intended: the reloading operations, setting the control parameters, emptying out the coins, and the cleaning operations in the areas in contact with the food products.
	EXTRAORDINARY MAINTENANCE	*By extraordinary maintenance*, it is intended: the more complex maintenance operations (mechanical, electrical, etc.) in particular situations, or those agreed with the user which are not considered ordinary maintenance.
	RECYCLING	Obligation to dispose of the materials respecting the environment.

E
N
G
L
I
S
H

Pay particular attention to those parts of the text which are written in bold type, with larger letters or underlined as these are used to highlight particularly important operations or information.

The enclosed wiring diagrams are intended for use exclusively by specialised technical personnel authorised by the manufacturer to carry out extraordinary maintenance operations and checks.

	It is strictly prohibited to use the wiring diagrams to modify the machine.

Throughout the manual, when referring to the machine, the terms "at the front" or "front" indicate the door side while the terms "at the back" or "rear" indicate the other side; the terms "right" and "left" refer to the operator facing the front of the machine.

For each operation to be carried out on the machine, a level of expertise (see below) is given to indicate the persons qualified to perform the operation concerned.

Final user	Person without specific expertise able to perform the operations of purchasing and retrieving the product only by using the controls displayed on the machine or by following the instructions given on the display.
Ordinary maintenance operator	Person capable of carrying out the operations in the above point and, in addition, of operating on the machine following the instructions in this manual marked with the symbol .
Extraordinary maintenance operator	Person capable of carrying out the operations in the above points and, in addition, of operating on the machine following the instructions in this manual marked with the symbols . In each case, the specialised technicians must also be capable of operating with the protections disabled and therefore in reduced safety conditions. Any operations to be carried out with the parts of the machine in movement and/or on live equipment must only be performed in exceptional cases and once the impossibility of operating in suitable safety conditions has been established. Access to these areas should be permitted only to persons with a practical knowledge and experience of the machine, particularly in matters of safety and hygiene.

The operations described in this manual relative to each phase of the life cycle of the machine have been carefully analysed by the manufacturer. The number of operators and the level of expertise requested are therefore the most suitable for best performing each specific operation.

⚠️	Failure to respect the number of personnel or the level of expertise specified can endanger the safety of the persons involved or those found in the vicinity of the machine.

2   USE OF THE VENDING MACHINE FOR THE SALE OF FOOD PRODUCTS

☞	**WARNING:** **To determine and to set the conservation temperatures of the food products, comply with the instructions provided by the producer and by the relative laws in force.** **These operations must be assigned to adequately qualified personnel as defined by the responsible of the equipment.**

The vending machine can be used for the sale of food products.

⚠️	Food products must be dispensed by the vending machine in hermetically sealed packages. Comply rigidly with the producer's instructions regarding the expiry date of each product and the conservation temperature. The vending machine should be considered equipment suitable for maintaining the temperature of the products and **NOT** for cooling them. For fresh and/or perishable food products and, nevertheless, in all cases provided for by the ruling laws, it is necessary: to set the internal temperature of the vending machine in accordance with the laws in force; during transportation to the vending machine, to maintain the products at the temperatures provided for by the laws in force.

⚠️	This vending machine is equipped with a "refrigeration safety device" in accordance with the standards relevant to the preservation of fresh food in force in various countries which permits these products to be maintained in the conditions specified in the manual as long as these products are introduced at the correct temperature for their preservation as set forth in these standards. The non-observance of this regulation could activate the "refrigeration safety device".

The vendable foods are :
- sweets, hazelnuts, chewing gum and similar sweets
- cookies, crackers and similar oven-baked products
- foods with pH level of 4.6 or less or with a water activity value (Aw) at 25°C of 0.85 or less
- foodstuffs maintained at a temperature of 5°C or lower for a period of time specified by the producer, but not more than 5 days
- foodstuffs packaged in hermetically sealed containers
- foodstuffs that have been treated to prevent deterioration

3   TECHNICAL DATA
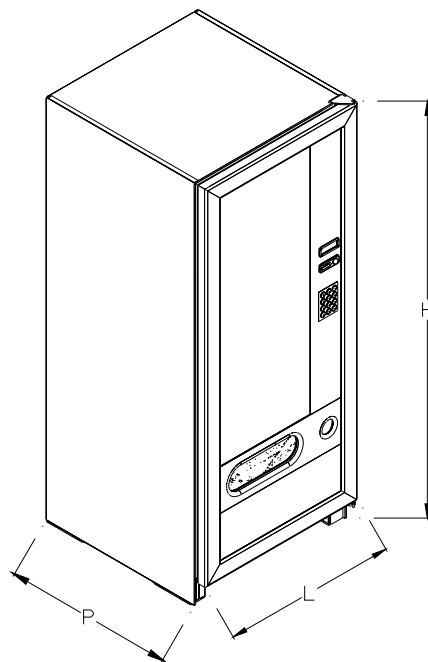
Height	H = 1830 mm	
Width	L = 910 mm (FASTER 900 SA) L = 1060 mm (FASTER 1050 SA)	
Depth	P = 790 mm	
Weight	270 kg (FASTER 900 SA) 340 kg (FASTER 1050 SA)	without packing
Rated Voltage	see identification plate	
Rated power	see identification plate	
Ambient working conditions (limit)	Max environmental temperature 32°C Min environmental temperature 3°C Relative humidity 65% max	
Refrigeration system	Compression - class N Ventilated evaporator - Cyclic defrosting	
Vending system	FIFO	
Delivery door	1	
Max. weight per tray	15 Kg Evenly distributed 30 Kg Evenly distributed (reinforced guides)	
Weighted sound pressure level "A"	less than 70 dB	
Refrigeration unit rated pressure at 32°C	15 bar	

SPIRALI FASTER 1T
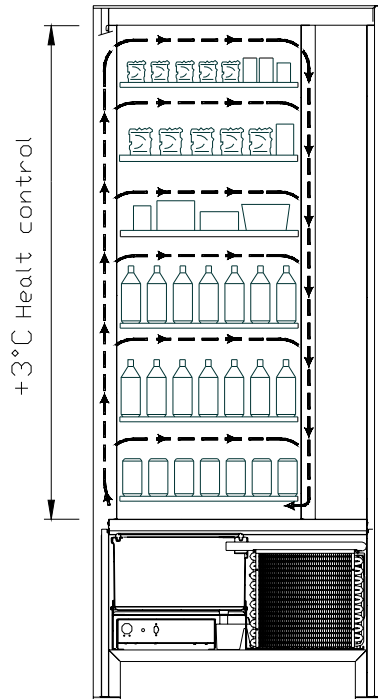
- All the drawers can be set at a temperature of +3°C to ensure good preservation of foodstuffs which are perishable at higher temperatures. In this area, in accordance with the "HACCP" (hazard analysis and critical control points) standard, a control device, called " refrigeration unit safety device", prevents the sale of products if the temperature which can deteriorate the product is exceeded.

SPIRALI FASTER 2T with an electronic system make it possible to have two areas with different temperatures, specifically:

Sect. A-A
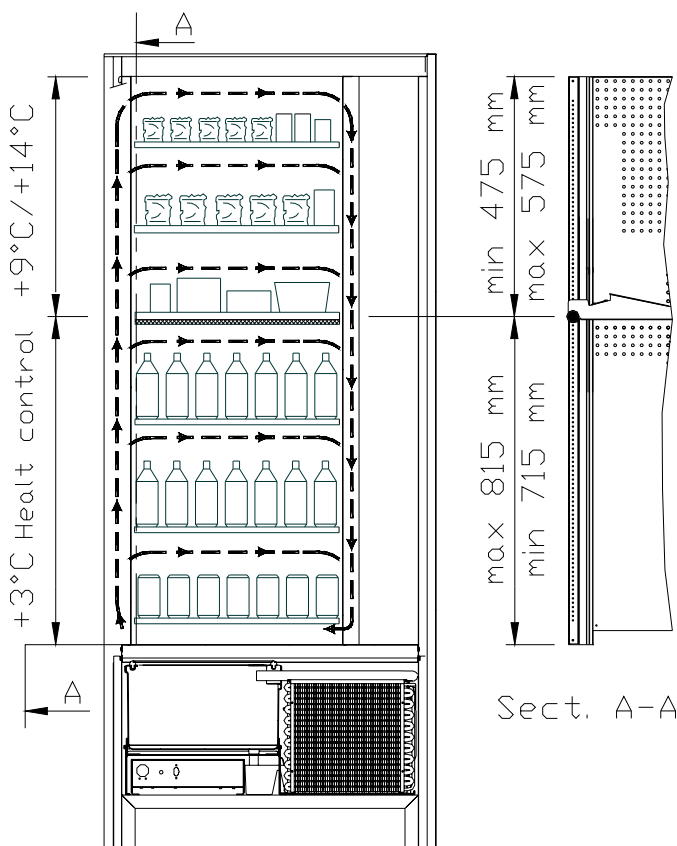
- **top tray area** where the temperature is stratified from +9°C to +14°C; ideal for shelf-stable products.

- **bottom tray area** where the temperature can be set at +3°C for a good preservation of perishable food substances which would not otherwise resist higher temperatures. To comply with "HACCP" principles (Hazard Analysis and Critical Control Points), a control, called the "refrigeration safety device", is provided in this area to prohibit the sale of the product if the temperature exceeds the temperature which could cause the product to perish.

The two areas are isolated from each other by an insulating panel.

SPIRALI FASTER 3T (each product stored at the optimal temperature).

SPIRALI FASTER 3T with an electronic system make it possible to have three areas with different temperatures, specifically:

top tray area where the temperature is approx. +10°C which is ideal for shelf-stable products.

middle tray area where the temperature can be set at +3°C for a good preservation of perishable food substances which would not otherwise resist higher temperatures. To comply with "HACCP" principles (Hazard Analysis and Critical Control Points), a control, called the "refrigeration safety device", is provided in this area to prohibit the sale of the product if the temperature exceeds the temperature which could cause the product to perish.

bottom tray area where the temperature is approx. +6°C which is ideal for beverages and/or shelf-stable products.

Sect. A-A
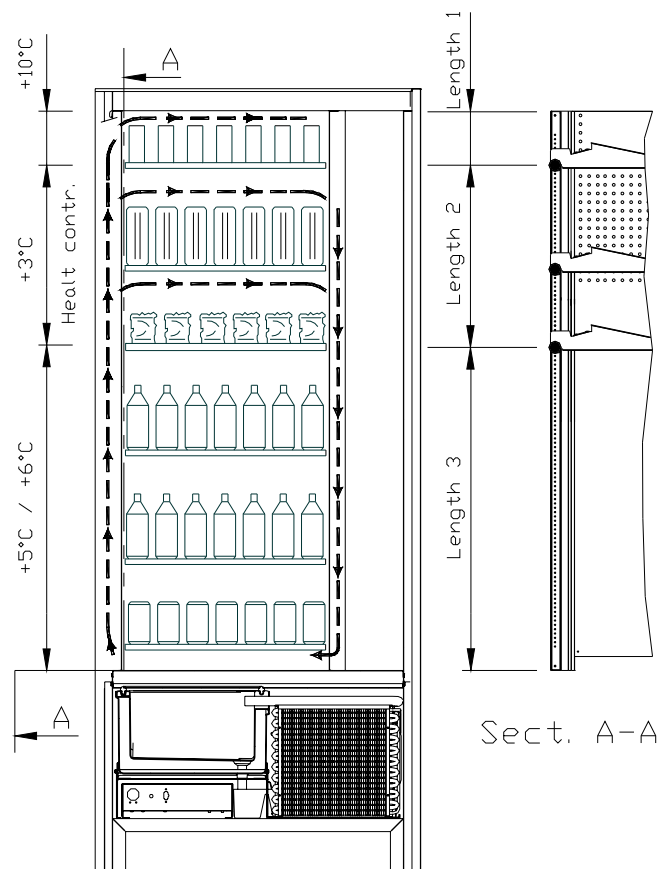
⚠	To guarantee the correct operation of the vending machine do not change the drawers from their original positions.

4   DOOR PARTS

1   **Display**: The total of the coins inserted in the slot, the selection reference, the price of the selection and all the operating messages appear on the display. If there is a problem with the vending machine the number of the current alarm appears on the display.
2   **Coin return button**: this push button is used to release any coins jammed in the coin mechanism and return them to the coin return cup.
3   **Coin slot**: the customer inserts the credit required to purchase the product in this slot.
4   **Selection Panel**: the panel consists of a set of switches identified with letters and numbers. Simply enter the number corresponding to the desired product.
5   **Delivery door**: is used by the customer to collect the purchased product.
6   **Coin return cup**: is located on the lower part of the machine; the customer collects change from this cup.
7   **Door lock.**
8   **Leg cover**
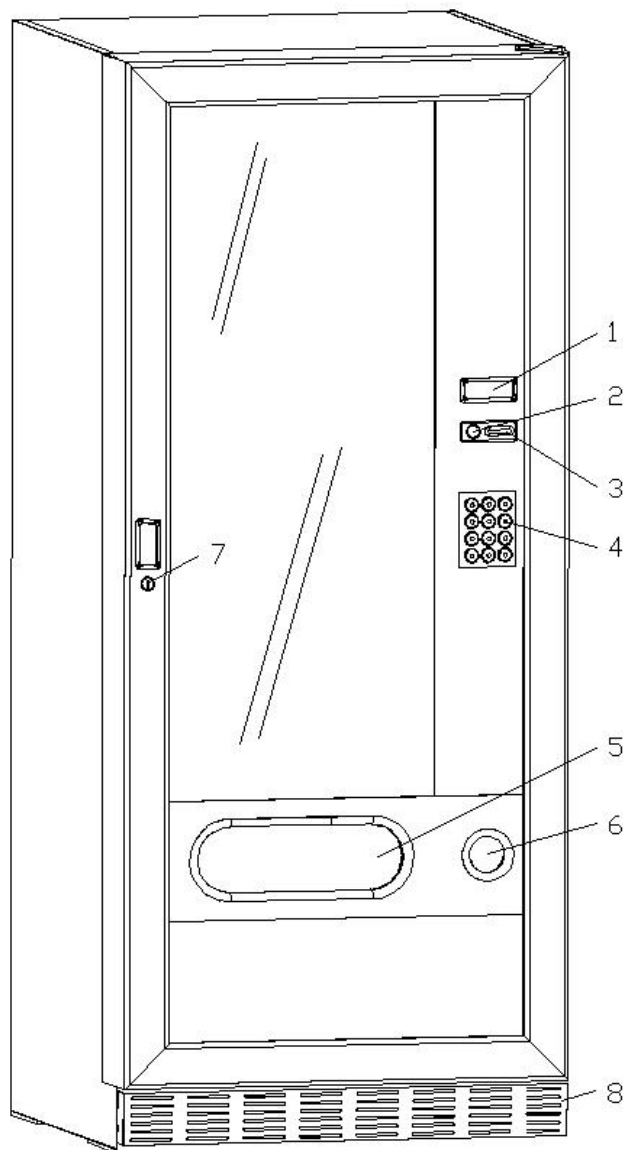
fig. 1

5   INTERNAL PARTS

1   **Main board**: is situated inside the coin mechanism box and manages the various functions of the vending machine.

2   **Refrigeration unit**: is installed at the bottom of the cabinet, behind the collection pocket; it keeps the internal temperature of the vending machine at the set value.

3   **Electric panel**: All the electrical connections, the power boards and the fuses are housed in the electric panel which is located in the lower part of the cabinet, behind the collection pocket. It is fitted with a safety switch which cuts out the voltage to the machine's electrical system when the special red key is removed from the slot.

4   **Door micro**: sends a "door open" signal to the board.

5   **Coin box**

E
N
G
L
I
S
H
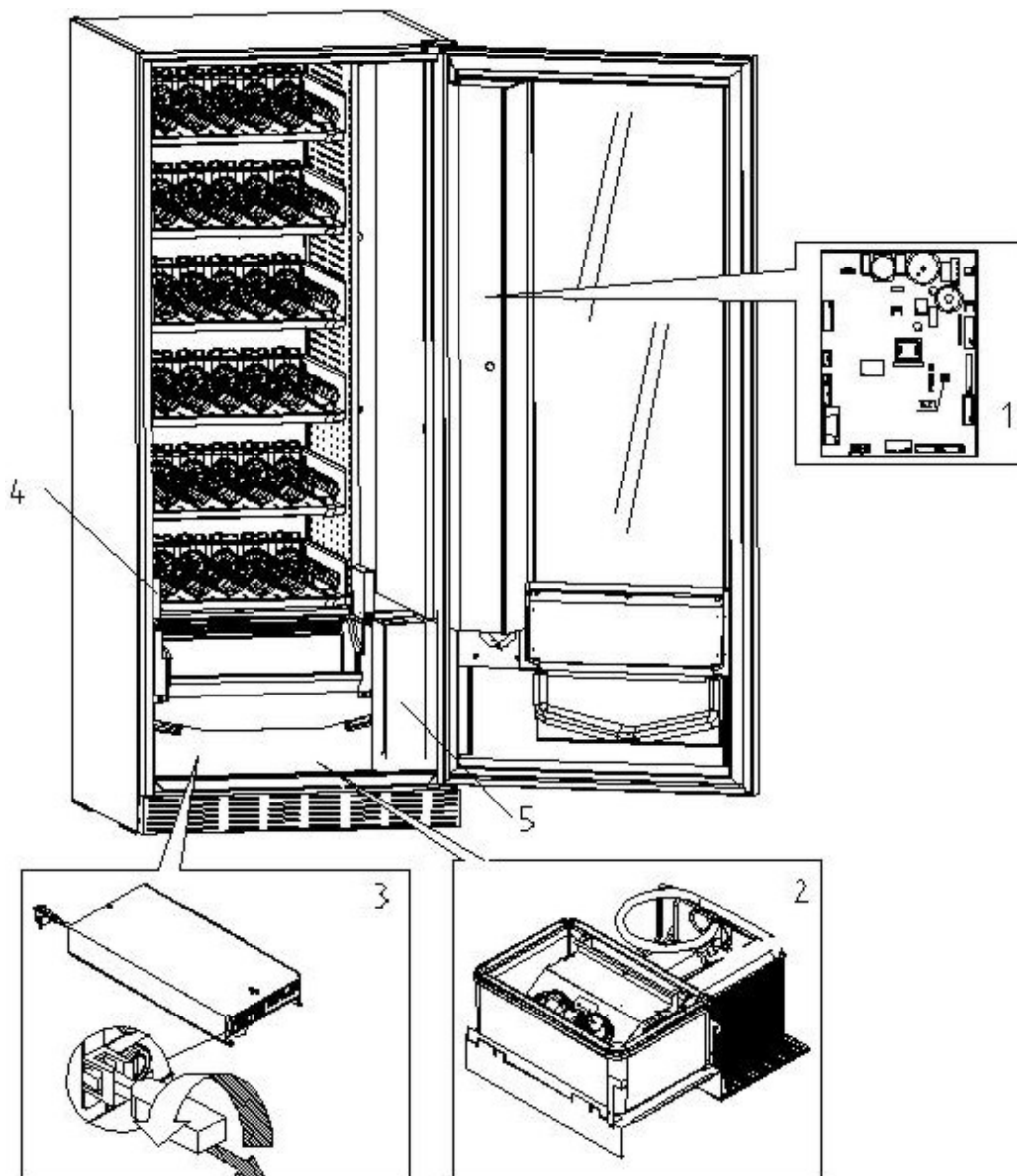
fig. 2

6   TRANSPORT, STORAGE, UNPACKING PROCEDURE

☞	**Examine the machine both inside and outside and notify the carrier immediately of any damage.**

6.1   TRANSPORT AND STORAGE 🔍⚠️

In order not to cause damages to the distributor, the loading and unloading manoeuvring have to be performed with particular care. The loading/unloading manoeuvres must be carried out by lifting the machine with a lifting truck, either motor-driven or manual, and by positioning the forks in the area under the pallet. To move the machine over short distances, for example inside a premises or office, the pallet need not be used. Proceed however with maximum caution to prevent damaging the machine. It is always **prohibited**:

- To lie the machine down;
- To turn the distributor upside down;
- To drag the distributor with ropes or similar;
- To lift the distributor from the side;
- To lift the distributor with whatever sling or rope;
- To shake the distributor and its packaging.

☞	**It is highly recommended not to lie the machine down as the oil contained in the compressor could enter the valves and cause irreparable damage when the compressor is switched on.** **In the event that the vending machine is laid flat, place it in an environment with a temperature no less than 18°C and wait at least 2 hours before setting the machine at work.**

As to the storage of the machines, it is appropriate that the environment of conservation is very dry with temperatures between 0° ÷ 40° C. Cover the machine after having positioned it in a protected environment and anchor it to prevent it from moving and to avoid accidental knocks.

It **is important** not to put one packed machine on the other and to maintain the vertical position shown by the arrows on the packaging itself.

6.2   UNPACKING PROCEDURE 🔍⚠️

The packing material must be removed carefully to avoid damaging the machine. Inspect inside and outside the cabinet for any damage. Do not destroy the packing material until the manufacturer's representative has examined it.

☞	**Remember to remove packing materials or equipment inside the vending machine which could affect the correct function of the machine.**

To remove the machine from the pallet, simply loosen the 4 hexagonal-head screws (2 at the back of the distributor and 2 at the front) which secure the machine base to the pallet and which are reached by opening the door.

To ensure correct circulation of air in the refrigeration unit, re-install the rear brackets which secure the vending machine to the pallet, upside down.

♻	**The packing materials must be disposed of respecting the environment and the laws in force.**

☞	**When lifting the vending machine, ensure that the supporting feet are removed from the pallet.**

6.3   INSTALLATION 🔍⚠️

The vending machine must be installed on a surface (floor, intermediate floor) of suitable bearing capacity.

👉	The appliance is not suitable for external installation as it must not be exposed to direct sunlight or be installed where water jets may be used. The appliance is suitable for installation in locations where the ambient temperature ranges between 3°C and 32°C.

Check that the capacity of the plant is suitable for the vending machine's maximum power specified on the data plate. If in doubt contact professionally qualified personnel. Such personnel should also verify that the section of the plant cables are suitable for the power absorbed by the vending machine.

⚠️	The appliance must be connected to a power supply mains featuring earthing which complies with current legislation. The manufacturer recommends providing an electric power supply mains for the vending machine which is equipped with a disconnecting device having a contact opening of at least 3 mm. Ensure that the plug is accessible after installation. It is strictly forbidden to use extension cords, adaptors or multiple jacks.

👉	**The following instructions are valid only to the United Kingdom** The wires in the cable are coloured coded as follows: *GREEN AND YELLOW - EARTH ---- BLUE - NEUTRAL ---- BROWN - LIVE* *As the colour of the wires in the cable of this equipment may not correspond to the colour marking in the terminals of your socket, proceed as follows:-* *The GREEN and YELLOW wire must be connected to the socket terminal marked with the letter E or with the GREEN or GREEN and YELLOW earth symbol. The BLUE wire must be connected to the socket terminal market with the letter N or coloured BLACK or BLUE. The BROWN wire must be connected to the socket terminal marked with the letter L or coloured RED or BROWN.*

👉	***The manufacturer cannot be held responsible for damages caused by the failure to observe the precautions given above.***

- Once connections have been made, the vending machine must be placed near to a wall so that its back has a minimum distance of 7 cm from the wall in order to allow a regular ventilation.
- After having positioned the machine, adjust the four adjustable feet so that the machine is perfectly horizontal; all the feet must be in contact with the floor.
- Mount the front leg cover.
- Check both the front leg cover and the mesh screens behind and under the refrigeration unit to ensure that they are always clean and not blocked in any way.

E
N
G
L
I
S
H
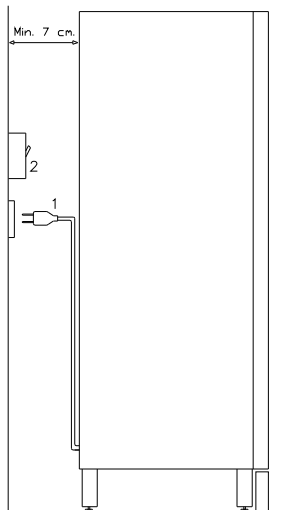
Description of connections
1 Plug
2 Differential magnetothermal switch
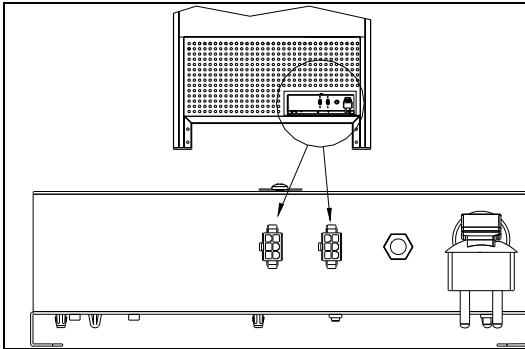
MASTER / SLAVE CONNECTION

Up to two SLAVE machines (FAST FULLVIEW or FASTER FULLVIEW) can be connected to the MASTER machine. A serial cable is used for each connection, and the connectors are accessible from the rear of the machine. Either one of the connectors indicated by the arrows can be used for the MASTER/SLAVE connection.
It is also be possible to connect a Stand-Alone in Slave mode, see command 58.

- To switch on the machine, follow the instructions below. To connect the wiring cable. If the message "MEMORY CLEARED" appears on the display, press the button on the main board inside the box of the coin dispensing mechanism to initialize the memory. The message "DOOR OPEN" appears on the display. The vending machine will automatically start a self-test. If no errors are identified, the machine is ready to use.
- Program the machine (see Chap. "PROGRAMMING"), set the REFRIGERATION PARAMETERS (see relevant paragraph) in accordance with the food products loaded into the automatic vending machine and set the prices.
- If the machine is supplied with change-giving mechanism, insert the corresponding coins in the change-giving tubes.
- Load the machine with products (see paragraph Loading the products).

6.4   WARNINGS FOR THE INSTALLATION

The machine is sold without payment system. Therefore whatever default to the machine or damages to person or things due to an incorrect installation, use or similar caused by the payment system will be only and exlusively charged to those who have carried out the installation of the machine.

6.5   PAYMENT SYSTEM CONNECTION 🔧⚠️

The coin mechanism must be connected and disconnected with the machine switched off.

The connectors required to connect the coin mechanism are located next to the main board. The vending machine is set up for payment systems with EXECUTIVE, MDB and BDV protocols.

- Fasten the coin mechanism on the support between the two pins.
- Connect the coin mechanism connectors to the machine.
- Adjust the coin chute on the coin mechanism opening
Adjust the coin return button leverage
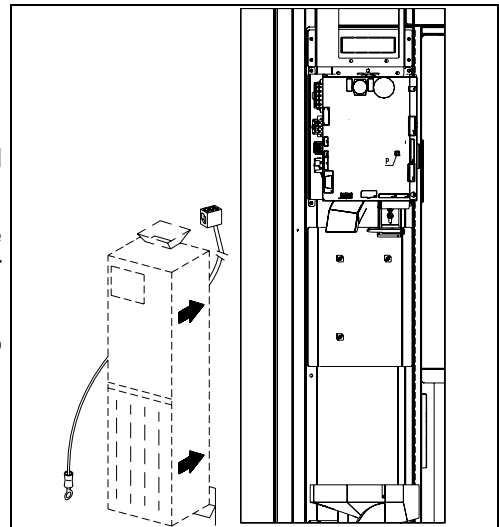
7   WARNINGS FOR THE DEMOLITION OF THE MACHINE

If the machine is disassembled in order to be definitively demolished, it is obligatory to follow the rules in force regarding the protection of the environment.
All ferrous, plastic or similar materials should be taken to the authorized depots.
Particular care should be given to:

Whichever type of **gases** (see identification plate) present in the refrigeration unit should be recovered with suitable equpment by specialized firms.
Insulation materials should be recovered by specialized firms.
Disposal in compliance with EU 2002/96/EC standards, according to the implementation of the Directive into the national law.
This equipment complies with Directive 2002/95/EC (RoHS).

Should you have any queries, you are recommended to contact competent local refuse disposal authorities.

8   OPERATION ON THE MACHINE

8.1   PRODUCT LOADING PROCEDURE FOOD ZONE

Once the installation procedure and the programming of the machine have been done, proceed as follows:

1) Open the machine door.
2) Pull-out one tray at a time, by holding it on the bottom and pulling outwards until you reach the stop point. The tray will tilt downwards to facilitate loading it.
3) Start the loading from front to rear and make sure that all spaces are loaded. The bottom of the product should be placed on the base of the division right above the spiral, with label turned to the window so that it is recognizable by the customer. All products have to be easily placed in the spirals; do not introduce bigger objects. Spirals can have different pitches and therefore you should choose the spiral suitable for the product you want to vend or vice-versa choose the product according to the spirals you have.
4) After having loaded all trays, make sure that they turn to position "STANBY". They must be pushed to the inner side of the cabinet.
Each spiral can be turned each time of 45°. Most of the products can be sold without troubles when the spiral end is positioned at hour 6. For brik products adjust the end 90° in advance.

NOTE: Products in bags or boxes must be correctly placed. The sealed edge of the bag can slip under the spiral wire not allowing the fall of the bag. It is recommended to fold the edge forward and upward before inserting the bag in the space of the spiral.
Products like cakes, biscuits, "handle with care" objects, etc., should be placed in the lower trays so that they will not be damaged falling.

8.1.1   GUIDELINES FOR LOADING PRODUCTS

Check the TECHNICAL CHARACTERISTICS chapter to identify which configuration your automatic vending machine corresponds to, in order to identify the exact area controlled by the "refrigeration unit safety device". When the machine is switched on for the first time, wait approximately 12 hours for the machine to reach the operating temperature. In any case, check that the internal part of the machine has dropped below 4°C before placing the refrigerated products *(see Command 66 and Command 67)*.
If the "refrigeration unit safety device" is tripped, the products in the selections that are out of order must be eliminated; also in this case, when the machine is switched back on again, wait for the machine to reach the operating temperature before placing the new refrigerated products inside it.
To remain within the safety limits for the refrigerated products the total door-open time must be no more than 15 minutes. Consequently, all operations must be carried out in as short a time as possible.

E
N
G
L
I
S
H
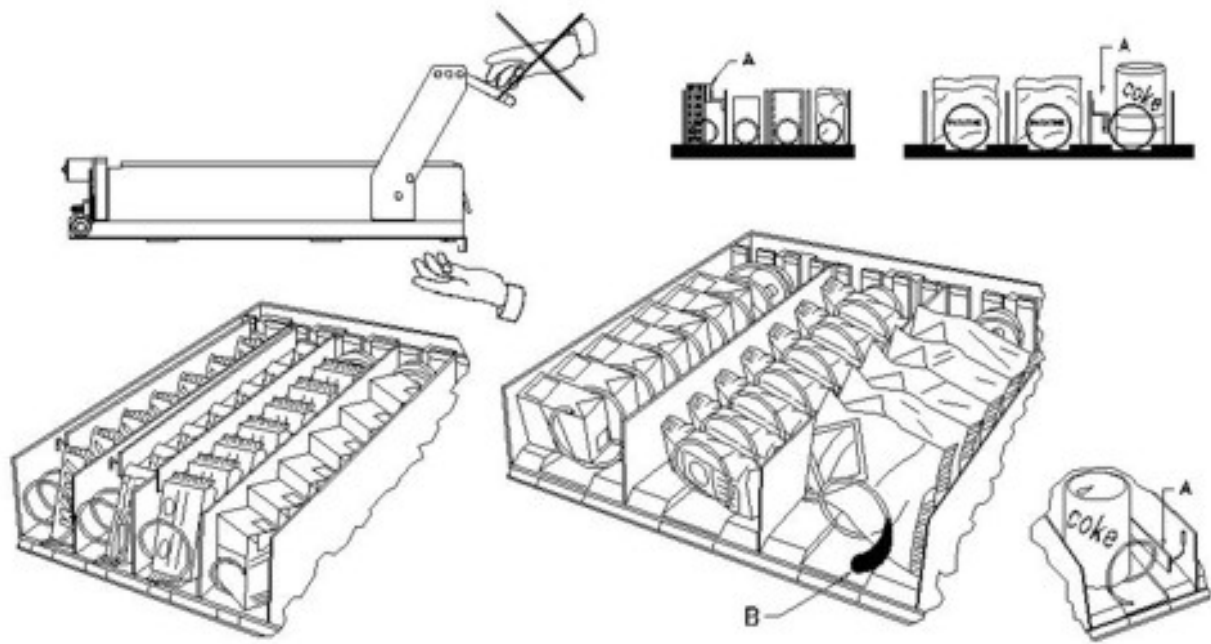
fig. 3

8.2   SPACER FOR PRODUCTS ON FOOD ZONE   (fig. 3)

Spacers -A- should be used when "narrow" products are loaded.
Place them so that they push the product freely against the right side of the division and the product stands straight. To settle the spacer, pull forwards to narrow the space, pull backwards to widen the space. Leave 3 mm between spacer and product.

8.3   PRODUCT EXPELLER   (fig. 3)

The expeller -B- can be used when there are products in sacks like chips or others. The expeller will help them coming out of the spiral. It is hooked up at the end of the spiral and acts as an additional part of the product to vend pushing it out of the tray.

8.4   VENDING A PRODUCT

After loading the machine, setting the selling prices for each product, positioning the price labels, checking that the trays have been turned in selling position, the machine is ready to vend.
1)   Insert enough money to buy the product.
2)   Dial on the panel the combination corresponding to the chosen product.
3)   Take the product from the delivery door.

9   FUNCTION/PROGRAMMING KEYBOARD 🔑⚠️

Above the coin mechanism door, there are two push buttons having the following functions:
1   Programming Button
2   Test Vend Button
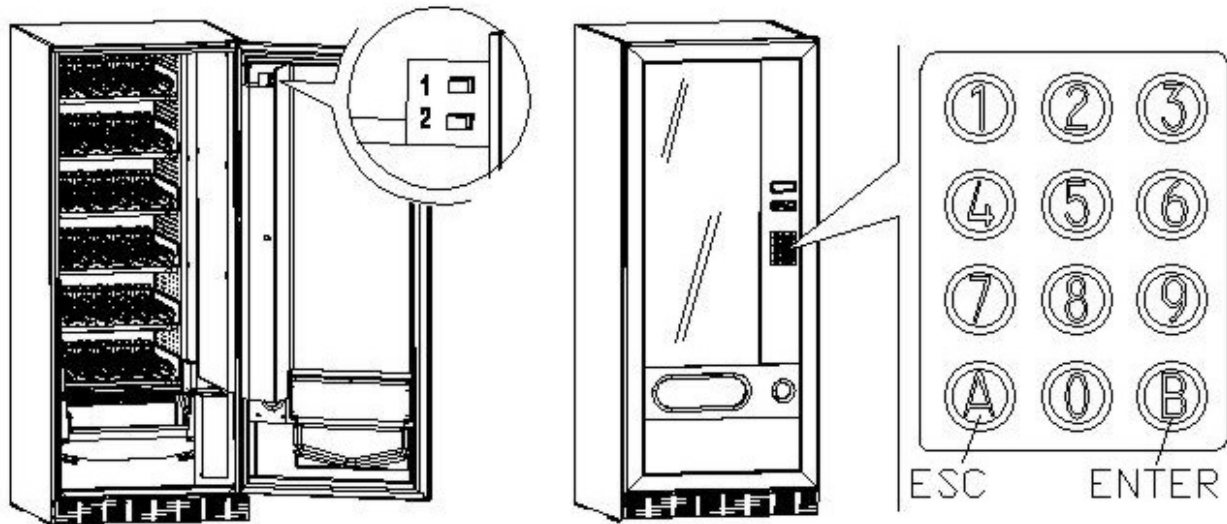
Programming Button: once programming is accessed, **Command 00** appears on the display**.** Direct access is possible from this main menu to several data or other submenus. Enter the command on **Direct selection keypad** and press *key* **B (ENTER)** to confirm the selection.
Key **B** is also used to confirm and memorise data inserted through the keyboard; in this case the text message **"OK"** appears on the display for a few seconds. To exit the programming or to go from a submenu to a main menu simply press *key* **A (ESC)**.

Every time the door opens, the selections, if present, that are out of service or not in "home position" (having executed a quarter turn) will appear on the display (see Command 76). The selections can be reset (by rotating them) by pressing button "B". If the door is closed again without having reset all the selections, the event is recorded as an error displayed in Command 99 with code number 91.
ATTENTION: Rotating the selection to reset it with the door open could cause the product to fall to the ground.
N.B.: With SPIRALI SLAVE connection enabled **(see command 49)**, *after the MASTER machine display, access is gained to the display of the same data relevant to the SLAVE machine by simply pressing the A (ESC) button.*

Test Vend Button: simply press this button to test the functionality of the vending machine. All the selections can be tested during this phase. At the end of the test, simply press the same button a second time to return to normal operation. As an alternative an indication (ex. 12, 14...) could appear to indicate that an irregularity has taken place during the functioning and the spirals indicated are out of service. Carry out the selection shown on the display to reset. If a working mistake happens during the test, the tag of the spiral or module will stay on the display; otherwise the test will go on to the next out-of-work spiral. If during the test or the reset there should happen some errors, it means that the anomaly is not occasional but could result from the breakage of some parts and a technical intervention is required.

9.1   LIST OF PROGRAMME COMMANDS

ACCESS TO SUBMENUS

Command	**01**	Machine test
Command	**02**	Calls submenu for setting the clock & daily timers
Command	**03**	Recall of price setting submenu
Command	**04**	Calls submenu for setting discounted prices
Command	**05**	Recall the price reference setting submenu
Command	**06**	Setting the product code
Command	**07**	Display of sales for full price selection
Command	**08**	Displays sales for selection discounted price
Command	**09**	Displays totals cashed not clearable
Command	**10**	Displays totals clearable
Command	**11**	Setting the selection sequences

COMMANDS 27÷39

Mode EXECUTIVE	*see paragraph: USING THE EXECUTIVE STD/EXECUTIVE PRICE HOLDING PAYMENT SYSTEMS.*
Mode BDV	*see paragraph BDV.*
Mode MDB	*see paragraph MDB.*

TO SET REFRIGERATION PARAMETERS

Command	**40**	Select refrigeration unit type on SLAVE N/a
Command	**41**	Sets cabinet temperature
Command	**43**	End defrosting temperature setting
Command	**44**	Sets defrost cycle frequency
Command	**45**	Setting the cut-out duration for the refrigeration safety device
Command	**46**	Setting the trigger temperature for the refrigeration safety device
Command	**48**	Setting trays with refrigeration safety device

TO SET MACHINE PARAMETERS

Command	**49**	Enable/disable slave spirals
Command	**50**	Enter machine code
Command	**58**	Enabling the Slave mode from Stand-Alone
Command	**59**	Stroke counter
Command	**60**	Erases the memory
Command	**61**	Reset security/access code
Command	**62**	Enable discount
Command	**63**	Set the mono/multivend
Command	**64**	Sets the message display language
Command	**66-67**	Internal temperature and evaporator temperature display
Command	**68**	Setting displayed currency description
Command	**69**	Chooses functioning mode of the coin mechanism
Command	**70**	Buzzer operation option
Command	**73**	Enabling the photoelectric cells - Secure vend
Command	**74**	Photocell test - Secure vend
Command	**75**	Setting the operating parameters of the photocell barrier - Secure vend
Command	**76**	System's operating options ("FTC Options ") - Secure vend
Command	**80**	Cloning
Command	**81**	Fetch vend data
Command	**85**	Display of checksum and main and power board software version.
Command	**90**	Select AUDIT protocol
Command	**91**	Enter machine identification data
Command	**92**	Clear sales data
Command	**93**	Displays the temperature status over the last 24 hours
Command	**94**	Displays the last 10 power-offs
Command	**95**	Enter user message 1 (max 63 characters)
Command	**96**	Enter user message 2 (max 63 characters)
Command	**99**	View error events

SUBMENU FOR SETTING THE CLOCK & DAILY EVENT TIMERS (SEE COMMAND 02)

Alarm set	**01**	Sets the year/month/day
Alarm set	**02**	Sets the hour and minute
Alarm set	**03**	Setting the days of the week
Alarm set	**10**	Lighting control setting
Alarm set	**11**	Lights on/off
Alarm set	**21**	Setting the discount time slots
Alarm set	**31**	Selections disabled for daily time periods
Alarm set	**36**	Setting the selections with timed disabling
Alarm set	**41**	Product expiry time setting
Alarm set	**46**	Product expiry time selection setting
Alarm set	**51**	Weekly control of daily disabling of sales point

9.1.1   ACCESS TO THE SUBMENUS

Command 01 Machine test:
This is used to perform the test relative to the various selections. By keying in 01 followed by key B, the message "Selection nr.   00" appears. Set the number of the selections present in the machine (number of motors) and press B. The machine will check the selections that are effectively present (Test 12). If the number found does not correspond to the value set, the message " CONFIG ERROR" appears on the display. This indicates that one or more of the selections is not connected electrically. In this case, check the wiring. If however the number of the selections found corresponds to the value set, 3 vending cycles for each selection are performed. If during this phase, an anomaly in the function of a selection is encountered, the test is blocked and the corresponding selection code remains visualised on the display. If the test is performed successfully, the machine returns to the main programming menu (command 00).

Command 02 Calls submenu for setting the clock & daily timers:
Key in 02 and press the ENTER pushbutton to enter the submenu for setting the clock and daily timers. Alarm 00 will appear on the display. Follow the method described in the specific section to display and alter the parameters.

Command 03 Recall of price setting submenu (you see also Command 69):
Enter 03 and press **ENTER** to recall the submenu for price setting of each selection , and **'Selection number 0'** appears on the display.
Enter the number of the selection for which you wish to display or edit the price and press **ENTER**. The text **'Price......'** appears on the display, then enter the new price value and press **ENTER** once again to memorise it, or press the **ESC** key to return to the main menu without saving the changes.
To set the price of selection 6 at € 1.20 proceed as follows:
• Programming mode, Command 0 appears on the display.
• Type 03 and press ENTER, Selection number 0 appears on the display
• Type 6 and press ENTER, the current price of Price No. appears on the display.
• Set the value 120 and press ENTER.

Alternatively, prices can be programmed by drawer: selection 91 implies that all the selections in the first drawer from the top have the same set price. Selection 92 = 2nd drawer; 93 = 3rd drawer; 94 = 4th drawer; 95 = 5th drawer; 96 = 6th drawer; 97 = 7th drawer. If you program a price in selection 99, the prices for all the selections in the vending machine will be converted to the same set price.

Programming the value of the full prices changes the value of the corresponding discounted prices by making them the same. Consequently, when selling with different prices, that is with a discount, firstly program the full price then the discounted prices and never vice versa or only one of the two.

*N.B.: With SPIRALI SLAVE connection enabled **(see command 49)**, once the settings for the MASTER machine have been completed, access is gained to the setting mode for the same parameters relevant to the SLAVE machine by simply pressing the A (ESC) button.*

Command 04 Calls submenu for setting discounted prices:
This command has the same functions as command 03, but it shows the discounted prices.
In the MDB mode, these prices refer to key or credit card purchases or purchases made within a certain time band, or both (see description Command 61). Furthermore, if the MDB cashless system allows the product to be selected from two different price tables, this command is used to set the prices relative to table 2. The prices relative to table 1 are set at Command 03.
N.B.: With SPIRALI SLAVE connection enabled **(see command 49)**, *once the settings for the MASTER machine have been completed, access is gained to the setting mode for the same parameters relevant to the SLAVE machine by simply pressing the A (ESC) button.*

Command 05 Recall the price reference setting submenu:
This command is used exclusively to set the prices in the coin mechanism.
Type 05 and press ENTER to access the price reference setting menu and '**Selection Number 0**' appears on the display. This submenu makes it possible to allocate a price number to each selection. Type the selection identification code and press ENTER; the ***number*** of the price allocated to the chosen selection appears, type the ***number*** of the new price to be allocated to the selection and press ENTER to memorise it or press ESC to return to the submenu without saving the changes. Repeat the procedure for another selection or return to the main menu by pressing the ESC key.
If, for example, you want to allocate price number 8 to selection 6 simply carry out the following procedure :
- Programming mode, ... Command 0 appears on the display
- Type 05 and press ENTER, Select. number 0 appears on the display
- Type 6 and press ENTER, the current price num. parameter appears on the display
- Type 8 and press ENTER.

Command 06 Setting the product code:
This command makes it possible to allocate a 4-digit product code to each selection. This code will then be sent to the RS232 output together with the sales statistics.

N.B.: With SPIRALI SLAVE connection enabled **(see command 49)**, *once the settings for the MASTER machine have been completed, access is gained to the setting mode for the same parameters relevant to the SLAVE machine by simply pressing the A (ESC) button.*

Command 07 Display of sales for full price selection:
Use this command to access the submenu which displays the number of sales for each selection; '**Selection number 0**' appears on the screen. Type the identification code for the selection for which you are interested in viewing the sales data.
Press the ENTER key and the desired value appears on the display . Press the ESC key to return to the submenu which displays the number of sales for each selection by repeating the above procedure or return to the main menu by pressing the ESC key a second time.

N.B.: With SPIRALI SLAVE connection enabled **(see command 49)**, *after the MASTER machine display, access is gained to the display of the same data relevant to the SLAVE machine by simply pressing the A (ESC) button.*

Command 08 Displays sales for selection discounted price:
Use this command to enter the submenu to display the number of sales per selection with full price. The display shows '**Selection number 00**'. Key in the code identifying the selection of which you want to know the data of sales and press ENTER to display the requested value. Press the pushbutton ESC to return to the submenu from which it is possible to display the number of sales regarding another selection by repeating the above said procedure. Press pushbutton ENTER a second time to return to the main menu.

N.B.: With SPIRALI SLAVE connection enabled **(see command 49)**, *after the MASTER machine display, access is gained to the display of the same data relevant to the SLAVE machine by simply pressing the A (ESC) button.*

Command 09 Displays totals cashed not clearable:
Use this command to display the totals regarding the transactions carried out from the initialization of the machine. The available data are the following:
Total sold, tot. in counter, tot. in tubes, tot. banknotes, tot. given back, tot. given out manually by the tubes, tot. cashed overprice, tot. discounted sales, tot. sales with system cash less, tot. sold with exact amount, tot. cashed without sales, number of sales carried out, total value of the free vends, total number of the free vends.

Command 10 Displays totals clearable:
This command has the same functions as command 09, but it can be cleared through command 92.

Command 11 Setting the selection sequences :
The function of this command is to set the dispensing of the same type of product in order to obtain a uniform and progressive emptying of the tray, irrespective of the customer's choice.
Initially the command asks the operator to enable (option 1) or disable (option 0) the function.
If the option is active (1) the system asks the operator to enter the first selection that forms the sequence, then asks the operator to assign a product code and price. Confirm each time by pressing ENTER. Add the remaining selections that are part of the same sequence . Press ESC to conclude and confirm the first sequence. At this point, another sequence may be entered, or exit the command by pressing ESC a second time.

9.1.2   SETTING THE TEMPERATURE PARAMETERS

Command 40 Select refrigeration unit type on SLAVE:
The command, which is only accessible when a slave machine is enabled (see **Command 49**), allows you to set the model of the connected slave machine.
If FAST SLAVE = 0
If FASTER SLAVE = 1
If the value is set at = 0 (FAST SLAVE), the values of **Command 41** (internal temperature setting) are the following: predefined +8°C, and can vary between +6 ÷ +25°C. **Commands 45, 46 and 48** are also disabled**.** Whereas if the value is set at = 1 (FASTER SLAVE), the same parameters apply as those for commands 41 to 48 of this manual.

☞	The command setting MUST BE consistent with the machine model otherwise the machine will not function correctly.

Command 41 Sets cabinet temperature:
This command sets the lower internal cabinet temperature of the machine, i.e. the temperature below which the compressor is turned off. The preset value is +3°C. This value can be varied between +2 ÷ +25°C.

N.B.: with the SPIRAL SLAVE connection enabled (see Command 49), after setting the MASTER machine, the same parameters for the SLAVE machine can be set.
FAST SLAVE: The preset value is +8°C. This value can be varied between +6÷+25°C.
FASTER SLAVE: The preset value is +3°C. This value can be varied between +2 ÷ +25°C.

Command 43 End defrosting temperature setting:
Every time the compressor pauses, the temperature of the evaporator is controlled by the evaporator feeler. This command allows the evaporator temperature to be set, above which, after dripping, the compressor can restart operating; this is to ensure complete defrosting of the evaporator itself. The command is preset at 3°C and can vary between 3°C and 12°C.

N.B.: with the SPIRAL SLAVE connection enabled (see Command 49), after setting the MASTER machine, the same parameters for the SLAVE machine can be set.

Command 44 Sets defrost cycle frequency:
This command sets the interval between defrost cycles expressed in hours. This value can be varied from 1h and 8h and is preset at 4h.

N.B.: with the SPIRAL SLAVE connection enabled (see Command 49), after setting the MASTER machine, the same parameters for the SLAVE machine can be set.

Command 45 Setting the cut-out duration for the refrigeration safety device:
This command sets the amount of time that the refrigeration safety device is to remain disabled. This period of time prevents the vending machine from shutting down following an operation that involves having the door open with the subsequent increase in the internal temperature. The delay in activating the refrigeration unit safety device gives the machine time to return to its normal operating temperature. The value of this command is preset at 60 min. but can be varied from 30 to 360 min.

N.B.: with the SPIRAL SLAVE connection enabled (see Command 49), after setting the MASTER machine, the same parameters for the SLAVE machine can be set.
This option is only available on FASTER SLAVE vending machines

Command 46 Setting the trigger temperature for the refrigeration safety device:
This command sets the trigger temperature for the safety device, that is the temperature above which it prevents the machine from vending the selected product (see Command 48). A warning message appears on the display when the user attempts to make one of these selections. This control is disabled when the machine is switched on and after the door is shut for a period of time set on command 45. The preset value is +7°C but it can be changed to between +7°C and +35°C. When the safety device is triggered, the relevant selections remain out of service until the next time the door is opened/closed.

☞	The products must be introduced at the correct temperature for preservation as specified by the regulations in force. The non-observance of this regulation could activate the "refrigeration safety device". **For detailed descriptions on the** reloading modes, see paragraph "GUIDELINES FOR LOADING PRODUCTS"

N.B.: with the SPIRAL SLAVE connection enabled (see Command 49), after setting the MASTER machine, the same parameters for the SLAVE machine can be set.
This option is only available on FASTER SLAVE vending machines

Command 48 Setting trays with refrigeration safety device:
This command allows you to select which trays are subject to the refrigeration safety device. The command requires a setting for each tray: enable safety device = 1, or disable safety device = 0. Tray 1 refers to the top tray. By default, all the trays are set at 1.

☞	For the machine to function correctly the drawers to be set with the refrigeration unit safety device must be located inside the 3°C area (see paragr. TECHNICAL CHARACTERISTICS).

N.B.: with the SPIRAL SLAVE connection enabled (see Command 49), after setting the MASTER machine, the same parameters for the SLAVE machine can be set.
This option is only available on FASTER SLAVE vending machines

9.1.3   TO SET MACHINE PARAMETERS

Command 49 Enabling/Disabling spirali slave:
This command enables the master/slave connection. It is possible to connect up to two slave snack machines. **Command 40** must be set after the connected slave machines have been enabled.

Command 50 Enter machine code:
The user is asked to enter a numeric code with max. 8 digits, which is used as the identification code when the programming of the parameters is carried out using the key system.

Command 58 Enabling the Slave mode from Stand-Alone:

☞	To set **the** following option ONLY, you must press the "Programming Button" twice consecutively, signalled by the sound of the buzzer, to access the second menu level. The display shows "Command 00". To exit programming mode, press the button "A".

This is used to run a Stand-Alone as a Slave. If the command is set at 1, the following operations must be carried out.
Switch off the machine by means of the main switch and pull out the power plug.
disconnect the connector JP9 connected to the main card.
make the Master/Slave connection by means of the serial cable, fitting the connectors to the sockets on the rear.
nominate the machine as "SLAVE A" or "SLAVE B" by means of the dip-switch on the electrical panel, positioning the notch in the respective position as in the figure below. To access the electrical panel, see the paragraph: ACCESS TO THE ELECTRICAL PANEL AND COOLING UNIT.
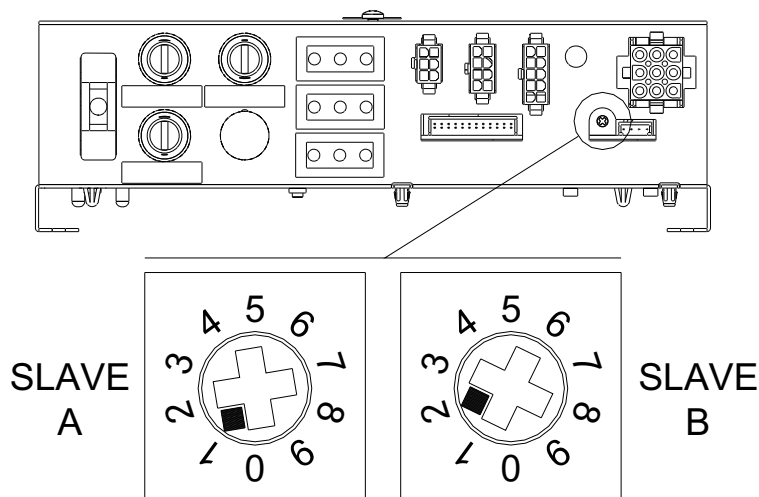
turn on again, and carry out the programming of the Master machine.

Command 59 Stroke counter :
If the command is set at 1, the stroke counter appears every time the door is opened.

Command 60 Erases the memory:

☞	**Activation of this command cancels all the data programmed by the user and the new default parameters determined by the manufacturer are automatically set.**

In response to this command the screen displays **Code 0000**. Enter the figure 6203 then press the ENTER key to cancel al the data stored in the vending machine's memory. The procedure to cancel the data from the memory is as follows:

- Programming mode, ... Command 0 appears on the display
- Type 60 and press ENTER, ... Code 0000 appears on the display
- Type 6203 and press ENTER, ...'memory cleared' appears on the display

Note: To exit from the command press the button on the VMC board once.

Command 61 Reset security/access code:
This command makes it possible to reset the access code used in the EVA_DTS protocol.

Command 62 Enable discount:
The following discount types can be enabled depending on the value set in this parameter:

0 = no type of discount.

1 = discount for different time slots.

2 = discount for purchases with key /credit card (only possible in MDB mode).

3 = discount for time slots and for purchases with key /credit card (only possible in MDB mode).

N.B. Enter the values of the desired time slots in daily timer 2 in order to enable the application of the discount.

For machines with the cashless system this command makes it possible to apply different price tables. The selection of the table to be applied at the time of sale occurs automatically through the communication protocol between machine and reader (only possible for MDB cashless systems which are provided with this option).

Command 63 Set the mono/multivend:
If the command is set at 0, the default value, the vending machine operates in monovend mode, and in cash mode the surplus credit is returned. If this is not possible the sum is added to the amount totalled due to overpricing. Vice versa, if the command is set at 1, the vending machine operates in multivend mode, and the amount which exceeds the cost, after the sale, is displayed once again and can be recovered by simply pressing the coin return button or used for a new selection.

Next you have the option of selecting whether or not to keep the overpay at the user's disposal for an indefinite period of time. 1= function enabled , 0 = function disabled.

Command 64 Sets the message display language:
This command controls the language in which the messages are displayed. Value **0** corresponds to Italian, value **1** to English, value **2** to French, value **3** to German, value **4** to Dutch, value **5** to Swedish, value **6** to Finnish and value **7** to Spanish **8** to Portuguese **9** to Danish **10** to Norwegian.

Commands 66-67 Internal temperature and evaporator temperature display:
The value set at these commands determines the information shown on the second line of the display (see table). As default, the clock is displayed.

Command 66	Command 67	Displayed value
0	0	Displays clock
1	0	Displays internal temperature *
0	1	Displays internal temperature + evaporator temperature
1	1	Displays clock + internal temperature

* Command 66 displays the internal temperature of any SLAVE machines connected to the master machine. In this case the temperature of the master is indicated by TM, whereas the temperature of the slaves is indicated by TA and TB respectively.

Furthermore, only during the programming phase, command 67 displays the internal temperature and the evaporator temperature of any SLAVE machines connected to this machine.

Command 68 Setting displayed currency description :
The command allows the operator to set the desired currency. 4 characters are available and they are entered using the same method as described for **Command 95**.

Command 69 Chooses functioning mode of the coin mechanism:
This command chooses the type and mode of functioning of the coin mechanism. The parameter can assume the following values:
0   System EXECUTIVE with prices controlled in the machine (see relevant paragraph).
1   System EXECUTIVE in PRICE HOLDING mode (i.e. prices programmed in the coin mechanism). In this case, the prices programmed at command 03 and those programmed in the coin mechanism must be the same (see relevant paragraph). Alternatively you can set the "Price-Display" parameter. If enabled, the vending machine will utilize exclusively the information on the price value deriving from the payment system, that is, it will not be necessary to fill in the price tables (Commands 03 and 04); simply set only Command 05 (see relevant paragraph).
4   System BDV 001 (see paragraph using the coin mechanism BDV)
5   Payment system MDB (see paragraph on using the MDB payment system).

Command 70 Buzzer operation option:
By setting this command at zero the buzzer is disconnected during machine operation.

Command 73 Enabling the photoelectric cells:
This command should be set at 1 only if the photoelectric cell system is installed. Its function is to enable=1/disable=0 this device. *Note: This setting is valid for both machines (MASTER and SLAVE).*
Set the command at 1 (photocells enabled), to automatically access the menu which allows this function to be disabled if necessary for the desired selections (delivery without photocell control). To disable the option corresponding to one or more selections, simply key in the selection number and then set the value at zero.

*N.B.: with the SPIRAL SLAVE connection enabled **(see Command 49)**, after setting the MASTER machine, the same parameters for the SLAVE machine can be set.*

Command 74 Photocell test:
This command is used to test that the photocells are functioning correctly. A test procedure is started automatically, then at the end of the procedure, if there are no problems a single value appears which corresponds to the magnitude of the incoming signal. If there is a problem with the functioning, a second value appears on the display which refers to the problem. See the table for Command 99 for this second value.

Command 75 Setting the operating parameters of the photocell barrier :
This command allows the operator to view and change the operating parameter of the photocell barrier. This value is the same for the MASTER machine and any connected SLAVE machines.

Message	Default value	Meaning
"Hyster.HL"	6	This parameter acts on the sensitivity of the reading of the system. The lower the value set in this parameter , the greater the sensitivity of the system. The value can vary from a minimum of 5 to a maximum of 30.

E
N
G
L
I
S
H

Command 76 System's operating options ("FTC Options "):
Setting this command determines how the machine will react if the product is not delivered. The value can be set at between 0 and 2. Default = 0.
The meaning of the setting is as follows:

0 = Possibility of another selection; in this case command 63 (single-multisale) must be set at 1 (if it is an executive payment system the multisale must also be set in the payment system).

1 = Automatic credit delivery; in this case command 63 must be set at 0 (if it is an executive payment system the single sale must also be set in the payment system).

2 = Further quarter turn: if the product is not delivered the spiral completes a further 1/4 turn and if the product has still not been delivered then the machine reverts to one of the preceding two options depending on the single or multisale parameter that has been set.

- *For this purpose once the value 2 has been set in command 76, the option is disabled for all the selections by default. Then you automatically access the menu that allows you to enable the option for the individual spirals. To enable the option corresponding to a spiral simply enter the selection number and set the value at 1. Vice versa if this value is set at 0 the option is disabled. The option is not applicable to ½ turn spirals. If the payment system uses Executive protocol, the single-multivend must also be set on the payment system.*
- *Alternatively, the function can be enabled / disabled for each drawer: selection 91 implies that all the selections in the first drawer from the top are, for example, enabled for the quarter turn function. Selection 92 = 2nd drawer; 93 = 3rd drawer; 94 = 4th drawer; 95 = 5th drawer; 96 = 6th drawer; 97 = 7th drawer; if you program the function for selection 99, all the selections in the vending machine will be enabled or disabled.*

The system then asks you to enter the options relevant to the PHOTOCELL SAFETY:
enabling this function (parameter setting = 1) involves entering a number of products within a certain time frame (in minutes). If within the programmed time interval a number of non-readings occurs that is equal to the number of programmed products, the photocells are disabled. The active event is signalled on the display when the door is opened and it is also recorded in Command 99 by Error code 39. The photocell reset can be programmed in manual or automatic mode. If manual, parameter setting = 0, enter the TEST VEND function to re-enable the photocells; if automatic, parameter setting = 1, after 15 minutes the system attempts to reset the function.

N.B.: with the SPIRAL SLAVE connection enabled (see Command 49), after setting the MASTER machine, the same parameters for the SLAVE machine can be set.

Command 80 Cloning:
This command makes it possible to transfer all the parameters of the vending machine to a "Program Key", to program same model machines (see also **Command 50**). When you enter the command "Write Clone Key" appears on the display. Then, enter the "Program Key" and press the ENTER key. "Data Writing…*" appears on the screen while the data is being transferred to the key. Once the data transfer operation is completed, the machine returns to the programming mode.

Caution: DO NOT enter the key before entering the programming mode, otherwise the vending machine will fetch the data existing in the key.

Command 81 Fetch vend data:
This command makes it possible to transfer all the EVA-DTS data to a "Program Key". This data can be extracted using special software (VMC configurator). The maximum number of possible registrations is 100. Attention: if the key is not recognised as a data key, at the first registration the user will be asked to confirm the complete deletion of the existing data.

Command 85 Display of checksum and main and power board software version.

Command 90 Select AUDIT protocol:
The control card has a jack RS232.
The connector I/O is a 9 poles with male container in which the following pins are used:
- Pin 2   Tx   - Pin 7   DTR   - Pin 5   Ground
The transmission happens according to the following specifications:
-9600 baud   - 8 bit of data   - no parity
The transfer of the data is ruled by a control signal DTR (active high) given by the device to fetch data.
The data fetch from the machine happens as follows:
Connection of the device to fetch data to the jack RS232.
Press pushbutton data sending.
After the transmission of data the request to disconnect the device is displayed.
Through command 90 it is possible to choose the quantity of data sent to the jack RS232. There are three levels:
- level 1   totals regarding the transactions
- level 2   totals regarding the transactions of level 1, plus sales per each selection
- level 3   totals regarding the transactions of level 1, data regarding the last 5 power off and on of the machine; data regarding the error events that have happened.

If the command is set at 4, the machine dialogue with the outside world is achieved by means of an 082928 infrared interface, based on the specifications of the EVA-DTS protocol.
If the command is set at 5 the machine dialogues with the external world through an infrared 082925 interface (IRDA interface), according to the specifications of the protocol EVA-DTS vers.5.0.
Then, if the preceding option has been set at 4 or 5, the machine proposes selecting the input / output direction: towards the infrared interface (082928 or 082925 OPTICAL LINK) or towards RS232 (connector situated on the card). In the latter case the connector pins used are 2= VMC Tx, 3=VMC Rx, 5= GROUND in which case the transmission speed is fixed at 9600 baud. To select press any key on the keyboard to scroll the various direction options and confirm the desired value by pressing "B"
If the initial option is set at 5 the machine requests that the peripheral address be inserted: key in the desired value and press "B".
If the initial option is set at 5 the machine offers the choice of the drive speed that must be consistent with the setting on card no. 082925 (see relevant instructions). The settable range is between 2400 baud and 19200 baud, or negotiable between machine and terminal (option only valid for connection with cable). To select press any key on the keyboard to scroll the various speed options and confirm the desired value by pressing "B".
If the command is set at 6 the machine dialogues with the user by means of DEX-UCS protocol.

Command 91 Enter machine identification data:
The first datum requested in alphanumeric format with max 30 characters refers to the machine location; see the table in command 95 for details on how to enter the description. The second datum requested is the numeric machine identification code (asset number).

Command 92 Clear sales data:
The command is used to clear the machine's sales data (see command 10). A special access code must be entered for this operation. The procedure is as follows:
- Programming mode, ... Command 0 appears on the display
- Type 92 and press ENTER, ... Code 0000 appears on the display
- Type 1221 and press ENTER, ...'CLEAR DATA?' appears on the display
Press the ENTER key to clear all the sales data whereas press ESC to return to the main menus without saving the changes.

Command 93 Displays the temperature status over the last 24 hours:
Option available for both the master, and the slave machines if enabled and if the FASTER type (see Command 49).
This command displays the trend of the internal temperature during the last 24 hours. The values are recorded every 60 minutes. To view all the values simply press the 'B' button.
The values can only be recorded if the clock is programmed (see Command 02). After programming the clock, all the data **is automatically zeroed.**

Command 94 Displays the last 10 power-offs:
This command displays the last 10 periods in which the machine has been put off.
The following values are displayed:

POWER OFF   DATE   TIME
POWER ON   DATE   TIME

To pass to another display press pushbutton ENTER.
N.B.: The clock has to be programmed to obtain reliable values.

Command 95 Enter user message 1 (max 63 characters):
This command makes it possible to enable and enter the first of the two messages which can be edited by the manager. This message is displayed in STAND-BY when the payment system can deliver the change. Type 95 and press the ENTER key, the user is asked to enable or disable the user message (value 1=enabled, value 0=disabled).
If it is enabled, the message which is currently available appears on the first line of the display whereas the text "**Character   00**" appears on the second line of the display. To compose the new message type in the required character codes (see table below) and confirm each one by pressing the ENTER key. Lastly, press the ESC key to return to the main menu.

CODE	CHARACTER	CODE	CHARACTER	CODE	CHARACTER
00	Cursor ahed	28	E	56	g
01	Cursor back	29	F	57	h
02	space	30	G	58	i
03	!	31	H	59	j
04	''	32	I	60	k
05	#	33	J	61	l
06	$	34	K	62	m
07	'	35	L	63	n
08	,	36	M	64	o
09	-	37	N	65	p
10	.	38	O	66	q
11	/	39	P	67	r
12	0	40	Q	68	s
13	1	41	R	69	t
14	2	42	S	70	u
15	3	43	T	71	v
16	4	44	U	72	w
17	5	45	V	73	x
18	6	46	W	74	y
19	7	47	X	75	z
20	8	48	Y	76	á
21	9	49	Z	77	å
22	:	50	a	78	ü
23	;	51	b	79	£
24	A	52	c	80	ä
25	B	53	d	81	ñ
26	C	54	e	82	ö
27	D	55	f		

The character with the 00 code moves the cursor forward by one position.

<u>CAUTION!</u> : If the cursor is on the other side of the first character of the message and you press the ESC key to return to the main menu, the message is cut off at the point which corresponds to the position of the cursor; therefore before quitting, make sure that the cursor is moved to the end of the message.

It is advisable to prepare the message on a piece of paper using the codes in the table (spaces included) and then enter it in the machine.

Command 96 Enter user message 2 (max 63 characters):
This command makes it possible to enable and enter the second of the two messages which can be edited by the manager. This message is displayed in STAND-BY when the payment system can not deliver the change. To enter this message the same rules apply as those for the preceeding command.

Command 99 View error events:
This command displays the last 20 error events; to go from one display to another press the B key. At the end of the display, the system asks the user to confirm the clearing of all the data. Press ENTER to confirm or ESC to leave the records as they are.

ERROR CODE	SUB-CODE	FAILURE
01	Number selection code	Motor blocked (the spiral does not rotate)
02	Number selection code	The spiral does not complete the rotation
05	Number selection code	Motor disconnected
09	Number selection code	Possible microswitch defect or spiral motor wiring defect
10	(*) 38 - 39 - 40	Internal temperature feeler faulty
11	(*) 38 - 39 - 40	Evaporator probe faulty
16	(*) 33 - 38 - 39 - 40	Error communication with peripheral (a board for the electric panel)
17	(*) 38 - 39 - 40	Communication break during sale cycle without credit collection
18	(*) 38 - 39 - 40	Communication break during sale cycle with credit collection
30	(*) 38 - 39 - 40	Fridge safety has intervened
31	(*) 38 - 39 - 40	Photocell test error .
32÷38	(*) 38 - 39 - 40	Photocell calibration error
39	(*) 38 - 39 - 40	photocell safety
51	(*) 38 - 39 - 40	Interruption of peripheral connection at the beginning of the sale cycle.
55	/	Payment system out of service.
61	Number selection code	Motor blocked (the spiral does not rotate) SLAVE A
62	Number selection code	The spiral does not complete the rotation SLAVE A
65	Number selection code	Motor disconnected SLAVE A
69	Number selection code	Possible microswitch defect or spiral motor wiring defect SLAVE A
71	Number selection code	Motor blocked (the spiral does not rotate) SLAVE B
72	Number selection code	The spiral does not complete the rotation SLAVE B
75	Number selection code	Motor disconnected SLAVE B
79	Number selection code	Possible microswitch defect or spiral motor wiring defect SLAVE B
91	Number selection code	Selections not reset.

(*) Key:

33 = Photocells
38 = Spirali Master
39 = Spirali Slave A
40 = Spirali Slave B

9.2   SUBMENU FOR SETTING THE CLOCK & DAILY EVENT TIMERS (SEE COMMAND 02)

Alarm set 01 Sets the year/month/day:
This command is used to set the year, month and day on the clock in the control board. The introduction format is YYMMDD.

Alarm set 02 Sets the hour and minute:
This command is used to set the clock on the control board. Enter the correct hour and minute values and press ENTER to memorise it. Then, enter 1 to have the clock appear on the display, otherwise enter 0.

Alarm set 03 Setting the days of the week:
This command is used to set the day on the clock which is present on the control board; the permissible values are from 1 (Monday) to 7 (Sunday).

Alarm 10 Lighting control setting:
Use this control to set the lighting all off = 0 or, dimming of the lighting = 1 during the energy saving time slots (see Alarm 11).

Alarm 11 Lights on/off:
With this command 3 daily periods can be programmed for switching the lighting on and off. However, even in the periods when the lighting is programmed off, simply pressing a button on the keyboard or inserting money will activate the lighting for a period of 3' for the vend cycle to take place. If this function is not required, program 2400 in **Alarm 11.**

Alarm 21 Setting discount time slots:
With this command you can program 3 daily discount time slots. In the time slots with the discount active the machine refers to the prices set in the submenu relevant to the discounted prices. Naturally command 62 in the main menu must be set at 1. If this function is not required, program 2400 in **Alarm 21.**

Alarm 31 Selections disabled for daily time periods:
This command allow the selections set at command "Alarm 36" to be disabled for 3 time periods per day. If use of this function is not required, programme 2400 at **Alarm 31.**

Alarm 36 Setting the selections with timed disabling :
Upon entry to the command the system asks the operator to disable the option that concerns the entire machine including any slave machines that may be connected (option 1), or not (option 0). If option 0 is selected, the command allows the operator to choose which selections must be disabled during the time slots when the "selections disabled" function is enabled (see programming **Alarms 31-34**).
Example:
To activate the disabled time slot for selection 15 proceed as follows:
1. Programming mode, ... Command 00 appears on the display
2. Type 02 and press B, ...Alarms 00 appears on the display
3. Type 36 and press B, , ...Select. number 00 appears on the display
4. Type 15 and press B, , ... Dis./En.1/0 N appears on the display
5. Set the value 1 and press B.

*N.B.: With SPIRALI SLAVE connection enabled **(see command 49),** once the settings for the MASTER machine have been completed, access is gained to the setting mode for the same parameters relevant to the SLAVE machine by simply pressing the A (ESC) button.*

Alarm 41 Product expiry time setting:
This command is activated when the number of hours set for the expiry of the product has elapsed, after which the vending machine prohibits the sale of the product. The maximum settable time is 999 hours. If this function is not required, program **00 for Alarm 41.**
N.B. Set the clock before activating this option (see Alarm 02).
This option is only available on MASTER vending machines.

Alarm 46 Product expiry time selection setting:
This command makes it possible to set the selections which will be prohibited from sale, once the time set in Alarm 41 has elapsed. To reset the timer simply enter the code "A0B" on the selection keyboard when the door is open ("DOOR OPEN" appears on the display). Once the code A0B has been keyed in, "Reset Expiry Time" appears on the display. At this point the vending machine will allow the sale of the products for the amount of time set in Alarm 41.
This option is only available on MASTER vending machines.

Alarm 51 Weekly check daily inhibition vend point:
The command only functions if Alarms 01, 02 and 03 are set and the control is enabled, and concerns both the master machine and any slaves connected to it. Up to 3 daily time slots can be set.
N.B.: The value 2400 set on "Start time slot 1" disables the function.

E
N
G
L
I
S
H

9.3   USE OF COINMECHANISM BDV 001

☞	*The coin mechanism must only be connected/disconnected with the machine switched off.*

After having carried out the connection, switch on the machine, enter the programming and set **command 69 to 4**, then switch off the machine for some seconds. By switching it on again the machine and the coin mechanism will communicate correctly.

Command 30	Purchase obligation before return	(def. 0)
Command 31	Maximum credit	(def. 0)
Command 32	Maximum value of returned coins	(def. 0)
Command 33	Inhibition single coins	(all enabled)
Command 34	Coin inhibition with exact amount	(all enabled)
Command 35	Coin level message exact amount	(def. 0)
Command 36	Equation exact amount	(def. 0)
Command 37	Enabling credit card reader	(def. 0)
Command 38	Emptying of change giving tubes	
Command 39	Filling up of change giving tubes	

Command 30 Purchase obligation before return:
By setting this command to 1 the customer is obliged to purchase before receiving back the return. This is to avoid to use the coin mechanism as a coin-changer. If the purchase fails to happen, the return will be given out.

Command 31 Maximum credit:
The maximum credit accepted by the coin mechanism is set. By overtaking this value the acceptance of further coins is blocked.

Command 32 Maximum value of returned coins:
This function is active only in multi-sale. If the value of the credit which remains after a sale is higher than the value set by the command, the allotment of return will be blocked. Therefore it will be necessary to carry out further purchases until the remaining credit will be lower than the set value. By moving the return lever it will be possible to obtain the return.

Command 33 Inhibition single coins:
The acceptance of particular coins by the coin mechanism will be blocked through this command. If you want to block the acceptance of coin 5, proceed as follows:
1. Programming mode, display views ....Command 00
2. Dial 33 and press B, display views .... Coin no. 00
3. Dial 5 and press B, display views 0
4. Dial 1 and press B.

Command 34 Coin inhibition with exact amount:
This command blockes the acceptance of particular coins in case of small return, i.e. when the display views the message "Insert only exact amount".

Command 35 Coin level message exact amount:
A value between 0 and 15 representing the number of coins to be added to the minimum level fixed in the coin return tubes - can be programmed, in order to quit the "exact amount" condition.

Command 36 Equation exact amount:
It represents the combination of empty spaces in the tubes so that the message exact amount can be activated. Here is a list of possible combinations:

0 = A or (B e C)	1 = A and B and C	2 = only A and B
3 = A and (B o C)	4 = only A	5 = only A or B
6 = A or B or C	7 = only A and C	8 = only A or C
9 = only B e C	10 = only B	11 = only B or C
12 = only C		

Command 37 Enabling credit card reader:
The functioning of the credit card will be enabled by setting this command to 1.

Command 38 Emptying of change giving tubes:
This command is used to inventory the coins in the tubes of the coin mechanism. To obtain the allotment from tube 1 (coins of lower value) proceed as follows:
1. Programming mode, display views ....Command 00
2. Dial 38 and press B, display views .... Tube no. 00
3. Dial 1 and press B,
The coin mechanism starts giving out coins from the chosen tube until the release of pushbutton B.

Command 39 Filling up of change giving tubes:
Proceed as follows:
1. Programming mode, display views ....Command 00
2. Dial 39 and press B
3. Insert the coins into the coin mechanism.
4. Press again pushbutton B

N.B. If the procedure is not correctly carried out, you can find wrong values in commands 09 - 10.

9.4   USE OF PAYMENT SYSTEMS MDB

☞	*The coin mechanism must only be connected/disconnected with the machine switched off.*

The command **69 has to be programmed to value 5**, then turn off the machine for some seconds. By putting it on again the machine and the coin mechanism will comunicate correctly.
There are the following additional commands for the use of these payment systems:

Command 27   Setting the signal for payment system out of order.
Command 28   Select change giving tube content counter.
Command 29   Cashless credit cannot be displayed.
Command 30   Purchase obligation before return.
Command 31   Setting max key or cash credit accepted.
Command 32   Minimum coin level in the tubes.
Command 33   Disabling single coins / banknotes
Command 34   Inhibits coins during exact amount.
Command 35   Resetting coin meters in change giving tubes.
Command 36   Condition exact amount (no coins available for change).
Command 37   Inhibits note validator during exact amount.
Command 38   Emptying of change giving tubes.
Command 39   Filling in of the change giving tubes.

Command 27 Setting the signal for payment system out of order:
If the command is set at 1, when the connection with the MBD payment system is interrupted the vending machine goes out of order and the message appears on the display; if the command is set at 0 (zero), the option is disabled. The default setting is 0.

Command 28 Select change giving tube content counter:
This command allows the user to select whether to use the counters corresponding to the content of the coin mechanism change giving tube or use only the counters inside the machine. If the command is set at 1 at each power-up the counters inside the machine which correspond to the content of the change giving tubes are updated with the values transmitted by the coin mechanism. If, on the other hand, the command is set at 0 the values transmitted by the coin mechanism are ignored.

Command 29 Cashless credit cannot be displayed:
This command allows the user to prevent or enable display of credit from the MDB cashless device (key or card reader). If the command is set at 1 the credit corresponding to the cashless device is not displayed, whereas if the command is set at 0 the machine also displays the credit available on the cashless device.

Command 30 Purchase obligation before return:
By setting this command to 1 the customer is obliged to purchase before receiving back the return. This is to avoid to use the coin mechanism as a coin-changer. If the purchase fails to happen, the return will be given out.

Command 31 Setting max key or cash credit accepted:
The max credit accepted by the coin mechanism by either key/card or cash is set, and if this amount is exceeded acceptance of further coins or notes is blocked.
Next follows a request for the maximum return option, that is the maximum quantity of coins that can be returned; default value 1000, max value 9000.

Command 32 Minimum coin level in the tubes:
This is the number of coins for each coin box mechanism which must remain in each tube in order to guarantee the correct function of the coin delivery system. (Consult the manual of the coin box mechanism for instructions on setting the correct value of this parameter). If a different value is associated to each tube, the maximum value set must be between those indicated. The setting of this parameter is fundamental for ensuring the correct coin management by the vending machine.
N.B. The inventory of the tubes, command 38, stops when the contents of each tube reaches the value set at command 32. To empty the tubes completely, use the delivery pushbuttons of the coin box mechanism.

Command 33 Disabling single coins / banknotes:
This command allows you to perform the two adjustments described below:
1) To block acceptance of particular coins by the coin mechanism.
2) To block acceptance of particular banknotes by the reader.

To go from the first parameter to the second, press the ESC key.

N.B.:   To activate changes made through command 33, switch the machine off then back on after the change has been made.

Command 34 Inhibits Coin inhibition with exact amount:
This command blocks the acceptance of particular coins during small change giving, i.e. when the display shows the message "insert only exact amount".
1.   Go into programming mode to display ....Command 00
2.   Key in 34 and press B to display..Coin No. 00
3.   Key in 5 and press B to display...1
4.   Key in 0 and press B.
N.B.: To activate the possible modifications of command 33, turn the machine off and then on after modification itself.

Command 35 Resetting coin meters in change giving tubes:
Use this command when replacing token meter or emptying the change giving tubes with the machine off to synchronize the meters with the actual contents of the change giving tubes.
1.   Programming mode, display views ....Command 00
2.   Key in 35 and press B , display views..Code 0000
3.   Key in 6203 and press B.

Command 36 Condition exact amount (no coins available for change):
This command is for setting (for each change giving tube) the number of coins below which the machine can be considered to be in a condition of 'no coins available for change'. The set value must always take into consideration the coin minimum level in the tubes (command 32), that is it must be higher than the latter (example: if command 32 is set at 5, the command 36 values must have a setting of 6 as their minimum value). The tubes that are not included in this condition must be set at "0".
When the contents of any one of the tubes included in the condition drops below the corresponding set value the machine displays the warning that there are no coins available for change.

Command 37 Inhibits note validator during exact amount:
Setting this command to 1 during exact amount will inhibit the note validator.
N.B.: If only the note validator is installed, this command has to be set to 0.

Command 38 Emptying of change giving tubes:
This command is used to inventory the coins in the tubes of the coin mechanism. To obtain the allotment from tube 1 (coins of lower value) proceed as follows:
1.   Programming mode, display views ....Command 00
2.   Dial 38 and press B, display views .... Tube no. 00
3.   Dial 1 and press B,
The coin mechanism starts giving out coins from the chosen tube until the release of pushbutton B.

Command 39 Filling in of the change giving tubes:
Proceed as follows:
1.   Go into programming mode to display.. Command 00
2.   Key in 39 and press B
3.   Insert the coins in the coin mechanism
4.   Press again the pushbutton B
N.B. If the procedure is not correctly carried out, you can find wrong values in commands 09 - 10.

9.5   USING THE EXECUTIVE STD/EXECUTIVE PRICE HOLDING PAYMENT SYSTEMS

Command 39 Filling in of the change giving tubes:
Proceed as follows:
5.   Go into programming mode to display .... Command 00
6.   Key in 39 and press B
7.   Insert the coins in the coin mechanism
8.   Press again the pushbutton B

☞	The decimal point in the prices that appear on the display must be set through the payment system.

Executive Standard ⇒ Command 69 programmed at 0
The Executive standard payment system manages the prices directly in the machine and not on the payment system.
For example, to set selection 21 at 30 pence, follow the instructions below:
1.1) Enter programming mode to display ....**Command 00**
1.2) Key in 03 and press B to display..**Selection No. 00**
1.3) Key in 21 and press B to display...**Price 00**
1.4) Key in 30 and press B to display...**Selection No. 00**

If you wish to programme another selection, repeat the sequence from point 1.2. Alternatively, press A twice.

Executive price-holding ⇒ Command 69 programmed at 1
In the Executive price-holding, the prices are managed by the payment system.
In this case, it is necessary to copy the price table (price list) programmed on the payment system to command 03 of the machine (from price 1 to price n) , while at Command 05 the prices will be matched to the selection by referring to their number.
For example, to set the selection 11 at 35 pence, proceed as described below:
Let us assume that the second price set on the payment system is 35 pence.
Enter programming mode to display   Command **00**
Key in 03 and press B to display**Price Number 00**
1.1)   Key in 02 (second price) and press B to display ....**Price 00**
1.2)   Key in 35 and press B to display .... Price Number **00**
1.3)   Press A to display...Command 00
1.4)   Key in 05 and *press* B to display ....**Selection No 00**
1.5)   Key in 11 and press B to display .... Price Number **00**
1.6)   Key in 02 (second price) and press B to display ....**Selection No 00**
1.7)
1.8)   If you wish to programme another selection, repeat the sequence from point 1.6. Alternatively press A twice.

Executive price-display ⇒ Command 69 programmed on 1.
In the Executive price-display payment system the prices are controlled by the payment system.
In Command 05 the prices referring to the number of the selection will be matched to the selection.
Example:
1.1)   Type 05 and press ENTER, the screen displays .... Selection No. 00
1.2)   Type the selection no. and press ENTER, the screen displays...................................... Price Number 00
1.3)   Type for example 02 (second price) and press ENTER, the screen displays .... Selection No. 00

If you wish to program another selection repeat the sequence from point 1.1 otherwise press ESC twice.

10   ADJUSTMENTS

10.1   SPIRALS

🔧	Most of the products can be sold without problems when the end of the spiral is placed on hour 6. To modify the end, draw the spiral forward until the base of the spiral support will come out from the pit; then turn the spiral in the wished position and put it again into the pit. **Each spiral can be turned each time of 45°.** CAUTION: when carrying out this operation ensure that the motor micro cam is always in the standby position. To do this simply carry out several dispensing operations in the "TEST VEND" mode (see paragraph FUNCTION/PROGRAMMING KEYBOARD).
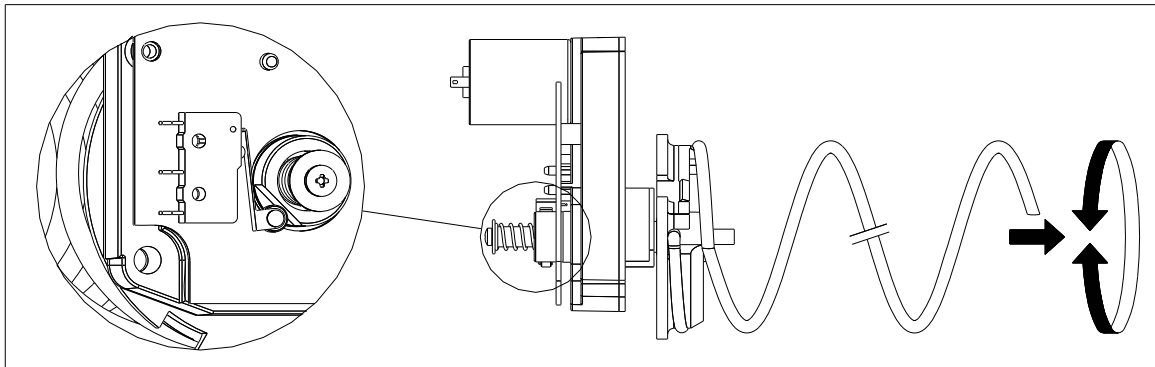
10.2   PROCEDURE FOR REPLACING SPIRALS AND EXPELLER MOTOR GROUP

|	
🔧 ⚠️	The machine is supplied with trays with spirals of different diameters and pitches. To vary their quantity or their order, proceed as follows: • Switch off the machine by means of the main switch and pull out the power plug. • Open the main door. • Pull out the tray on which you have to vary the spiral. • Switch off and take out the group motor-spiral. • Take out the spiral from the plastic support (lever between spiral and support) and replace with the other spiral or with the other expeller motor group. • Fit up the new spiral group reversing the above operations. After having finished this operation, make sure that the end of the spiral is put on hour 6, otherwise see paragraph "SPIRALS".

E
N
G
L
I
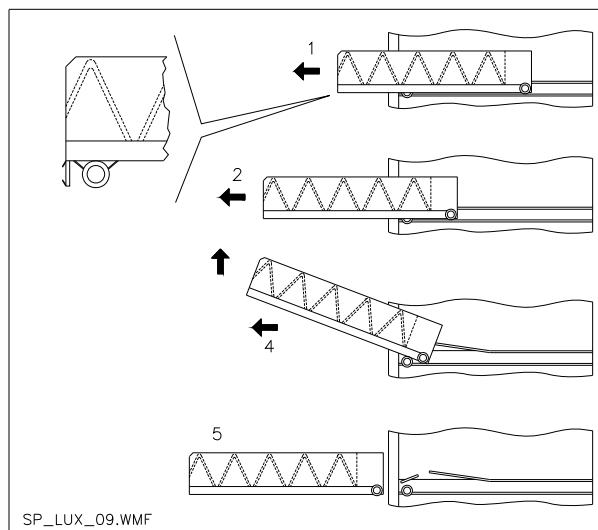S
H

fig. 4

fig. 5

SP_LUX_09.WMF
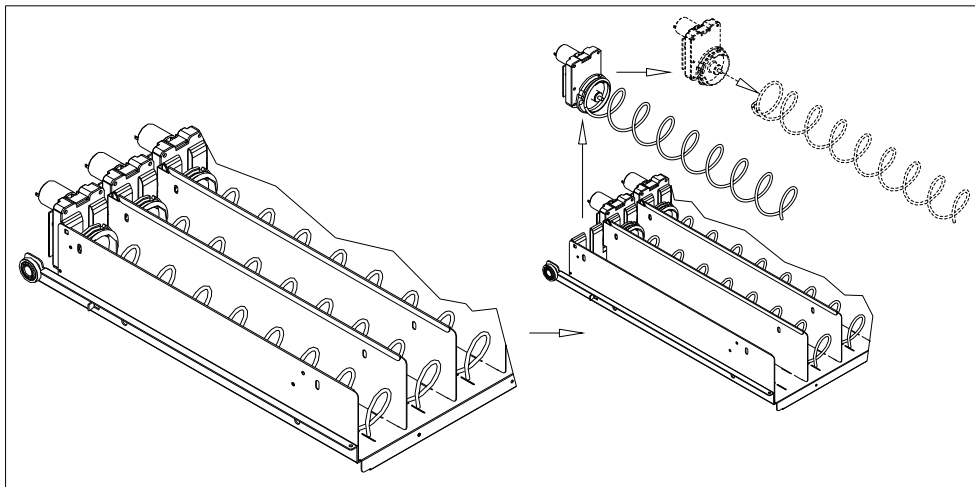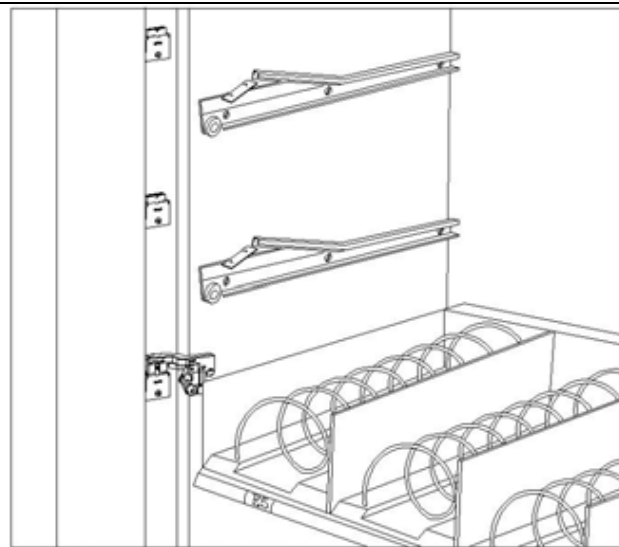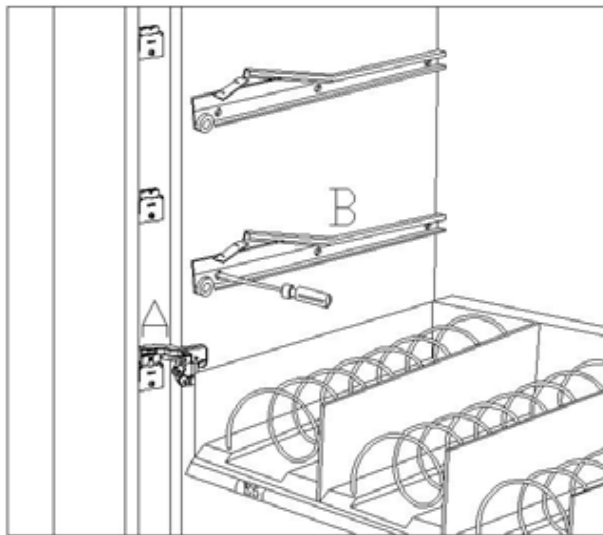
fig. 6

10.3 PROCEDURE FOR REMOVING THE TRAYS

To replace the tray proceed as follows:

- Switch off the machine by means of the main switch and pull out the power plug.
- Open the main door.
- Remove the electric connector -A- .
- Pull out the tray by overcoming the resistance exerted by the positioning spring (pull gently).
- Pull the tray until it hits the stop, pull it upwards, rotate it downwards until it is released from the guide, then finally remove it from the machine.

To mount a tray proceed as follows:
- Insert the tray.
- Push the tray until it engages in the locked position.
- Insert the electric connector -A-.
- Close the main door.
- Energise the machine by means of the main switch.

10.4 MODIFYING THE TRAY NUMBER

Vending machines with 6 trays can be transformed into machines with 7 trays by proceeding as follows:

- Switch off the machine by means of the main switch and pull out the power plug.
- Pull out all the trays from the vending machine.
- Move the guides det. B (the last one on the bottom is already in the correct position consequently it does not need to be moved).
- Move the connectors, det. A, placed on the bottom of the cabinet.
- Add a pair of guides.
- Mount 7 trays and check that the connectors are plugged in correctly.
- Set the new prices.

## 10.5 FITTINGS FOR FASTENING TRAY WIRING 🔍⚠️
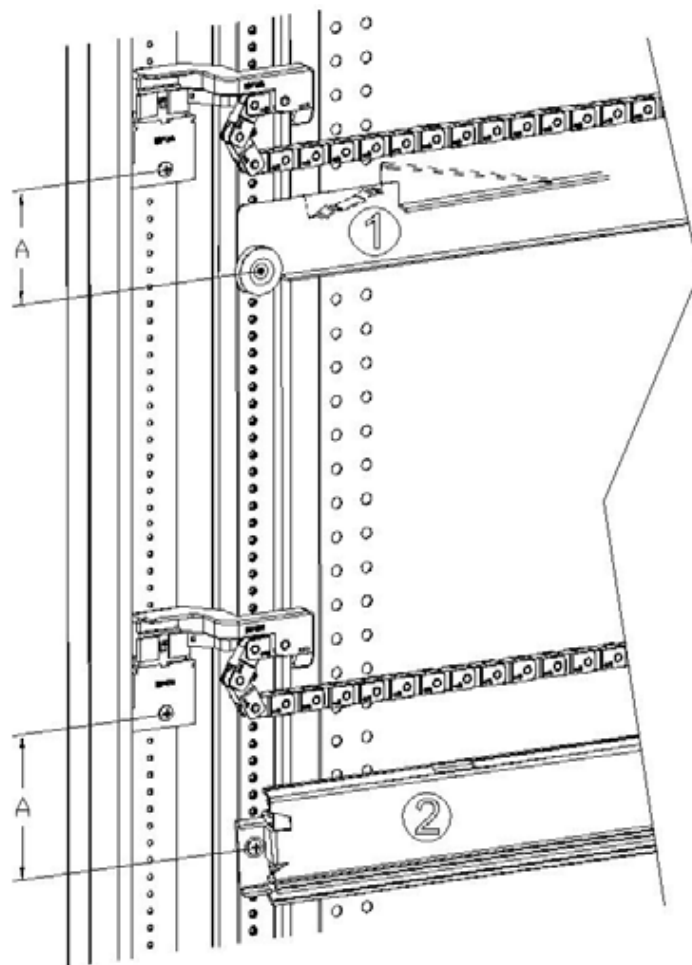
If there is a change in the number of drawers installed in the automatic vending machine, or if their position is rearranged, it is advisable to adhere strictly to the recommended measurements set out in the following table for a correct winding of the wiring when the drawer is pulled out:

TYPE OF TRAY/RUNNER	DIMENSION "A" (mm)
Tray with standard runner 1	60
Tray with reinforced runner 2	70
Any tray with bottle discharge bar	110

10.6   INSTRUCTIONS FOR CONVERTING THE TRAYS 🔧⚠️

from one large space to two small spaces.
- Switch off the machine by means of the main switch and pull out the power plug.
- Open the door.
- Remove the neon cover.
- Pull out the tray to be modified.
- Remove the spiral + motor unit det.1.
- Remove the tray det.3.
- Replace the spiral with large diameter with a spiral with small diameter.
- Insert the spiral with small diameter + motor unit in the left hand slot on the support det. 4.
- Insert the new spiral with small diameter + motor unit in the right hand slot and connect it to the wiring on the tray.
- Add the new divider in between the two spirals det. 2.
- Install the new price and selection labels.
- Insert the modified tray and make sure that the connector is plugged in.
- Programme the new selections at the desired sale price.
- Test the new selections to ensure that they work correctly.
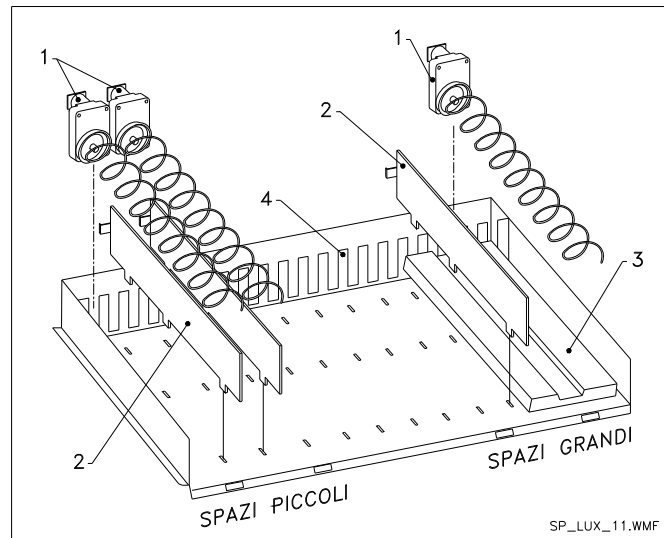
from two small spaces to one large space.
- Switch off the machine by means of the main switch and pull out the power plug.
- Open the door.
- Remove the neon cover.
- Pull out the tray to be modified.
- Remove the spiral + motor units det.1.
- Put one spiral + motor unit aside and in the other one replace the spiral with small diameter with a spiral with large diameter.
- Remove the divider det.2.
- Insert the tray det.3.
- Insert the spiral with large diameter + motor unit in the central slot of the support det. 4.
- Install the new price and selection plates.
- Insert the modified tray and make sure that the connector is plugged in.
- Programme the new selections at the desired sale price. **NOTE: In the large space selections, the selection numbers are odd numbers. E.G.: Selections A 1 and A 2 converted to a single compartment become a single selection A 1.**
- Test the new selections to ensure that they work correctly.

10.7   ACCESS TO THE ELECTRIC PANEL AND REFRIGERATION UNIT 🔧⚠️

To access the electric panel or the refrigeration unit proceed as follows:
* Switch off the machine by means of the main switch and pull out the power plug.
* Open the door.
* Use a phillips screwdriver to undo the two screws that fasten the product collection pocket to the cabinet. Remove the pocket.
* To remove the refrigeration unit, lower the two levers located on the side of the evaporator box, ensure that the gasket positioned on the top edge of the evaporator box is not attached to its lodging, pull the special handle. CAUTION : beware of the cables.

🔧⚠️	**Electric panel**: When the product collection pocket is removed the entire vending machine remains energised. To disconnect the power remove the red key inserted in the terminal board. Total isolation from the electric power supply is only obtained when the plug is removed from the external magnetothermal switch. Consequently, all operations required by the vending machine without the protection of the product collection pocket, must only be carried out by qualified personnel who are aware of the specific hazards which this condition involves.
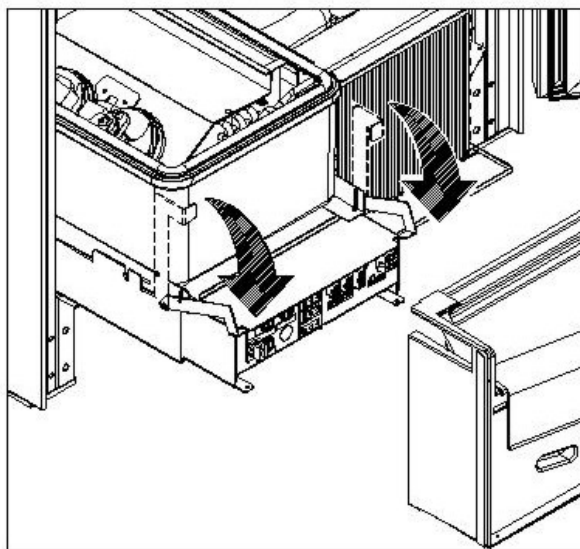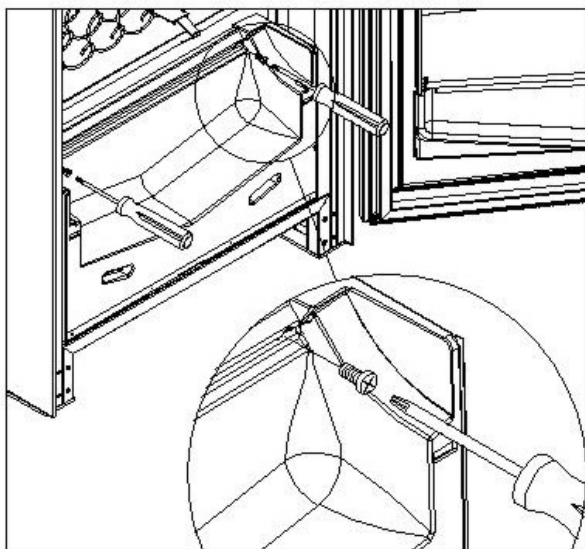
10.8   BOTTLE UNLOADING KIT 🔧

If the spiral springs in the tray have a six product capacity, insert the bar in hole "A"; whereas if the spiral springs have a five product capacity then insert the bar in hole "B"; if the tray have selections by product support, insert the bar in hole "C".

CAUTION: the bottle discharge bar must not be used to pull-out the tray.
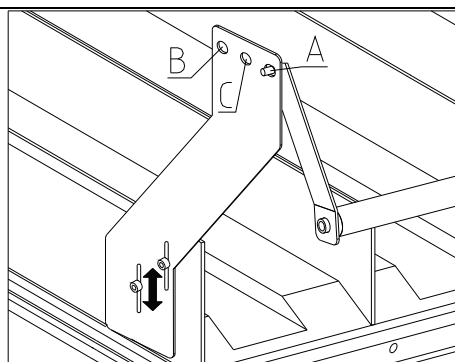
10.9 INSTRUCTIONS FOR REPLACING THE INTERNAL LIGHTING DEVICE

🔧⚠️	• Switch off the machine by means of the main switch and disconnect the plug. • Open the main door. • Remove the cover from the light source. • Replace the light source. • Carry out the operations in reverse order to reassemble.

11   CLEANING INSTRUCTIONS

☞	**These operations, which concern safety and hygiene, must be carried out by personnel having practical experience with this machine**.

Adequate recurring maintenance of machine grants its reliability in operation. This section describes the required maintenance operations and their frequency which has however to be considered as indicative since it depends upon various factors such kind of products, climatic conditions and, especially, humidity. The operations described in this section do not exhaust all maintenance operations. During maintenance vending machine has to be switched off. Do not wash vending machine with direct jets of water and high pressure. Clean carefully stainless steel and painted surfaces in order to avoid oxidation or chemical etching. Do not use toxic detergent substances.

⚠	Switch off the machine by means of the main switch and pull out the power plug. Do not wash the vending machine with direct and/or high pressure water jets.

11.1   IMPORTANT CLEANING POINTS

Use the cleaning products as instructed on the label. Do not use detergents that that are too "aggressive" as they could damage some machine parts; in this case, the manufacturer declines all responsibility for damage caused by the incorrect use of such detergents, or by the use of toxic agents.

With sanitising products (chlorine-based detergents or similar products) 🔍	Inside cabinet (drawer zone), drawers, display window . Remove detergent, disinfectant and foodstuff residues with a damp sponge before restarting the machine.	At each reload, or at least every 5 days

With vacuum cleaner or compressed air 🔍⚠	Remove the dirt from the condenser. Make sure there is an air gap between the front and back of the condenser. Always clean the inside of the cabinet after this operation.	every month
If this operation is not performed correctly, the refrigeration system could be seriously damaged.		

⚠	NEVER IMMERSE THE COIN MECHANISM IN WATER DO NOT USE ABRASIVE MATERIALS DO NOT USE SPRAY LUBRICANTS

11.2   INACTIVITY

If long periods of machine inactivity are expected, it is recommended to adopt adequate precautions to prevent dangerous situations when the machine is re-started; for long periods, it is intended complete machine inactivity exceeding one month.
For long resting period, it is necessary:
- To clean the machine thoroughly and to dry it;
- To check carefully for damaged or worn parts and to replace them;
- To check that the screws and bolts are securely tightened;
- To cover the machine after having stored it in a protected environment.

To re-set the machine at work, comply with the instructions given in the paragraph "Installation" of this manual and pay particular attention if food products are to be sold (see paragraph "Use of the vending machine for the sale of food products").

SNACKPOINT DUO NEON LIGHTS

SC082068

1/1