



SNACK VENDING MACHINE
SERIES FOODBOX
USER MANUAL



Contact Information

Vending machine manufacturer LLC "KRAFT"
Russian Federation
199155 Saint Petersburg
Uralskaya str.13, let. A
Tel: +7 (812) 449-09-91
Fax: +7(812)350-7089
Website: www.unicum.ru

Version 1.0 / 11-2018



COMPLIANCE DATA

The vending machines series FOODBBOX are compliant with the requirements of the European Directives and Standards:

- 2014/35/EU The Low voltage directive (LVD).
- 2014/53/EU Radio equipment directive (RED).
- 2014/30/EU Electromagnetic compability (EMC).
- 2011/65/EU Directive (Restriction of the use of certain hazardous substances in electrical and electronic equipment) RoHS.



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



CONTENT

1.0 SAFETY	5
2.0 GENERAL INFORMATION	7
3.0 SPECIFICATIONS	12
4.0 VENDING MACHINE DESCRIPTION	14
4.1 Interior	14
4.2 Control compartment	20
4.3 Operation algorithm of vending machine	22
4.4 Vending machine components	23
4.4.1 Giving out compartment	23
4.4.2 Control compartment	23
4.4.3 Touch screen	24
4.4.4 Keyboard	24
4.4.5 Lock	25
5.0 INSTALLATION	27
5.1 Transport and positioning	27
5.2 Installation environment features	27
5.3 Installation	28
5.4 Leveling	29
5.5 Stability	29
5.6 Connection to power mains	31
6.0 USING THE VENDING MACHINE	32
6.1 Warnings	32
6.2 Proper use	32
6.3 Loading	32
6.4 Product vending adjustments	33
6.5 Final check	38
6.6 Start-up	39
7.0 COOLING UNIT	40
7.1 Operating Modes	41



8.0 CONTROL	44
8.1 Controller board	44
8.1 Service buttons	48
9.0 MAINTENANCE	49
9.1 Access to the maintenance area	49
9.2 Preventive maintenance	49
9.3 Cleaning the vending machine	50
9.4 Warnings	50
9.5 General cleaning operations	51
9.6 Recommended cleaning products	52
10.0 STORAGE AND DISPOSAL	53
10.1 Storage	53
10.2 Disposal	53



1.0 SAFETY

For safe operation of the vending machine comply with the rules given below:

- Carefully read the manual before starting or loading the vending machine.
- The vending machine can only be used to sell packaged products and beverages and similar products.
- During the transportation and technical maintenance follow the requirements given in this manual.
- The vending machine should be installed on a level surface.
- The vending machine installation and maintenance should be carried out by qualified technicians only.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- If the power cord is damaged the vending machine cannot be used. The power cord should be replaced by skilled technician only.
- Never connect or disconnect the vending machine power plug with wet hands.
- The machine needs to be installed inside dry, well-ventilated, conditioned premises with temperature between 5 C and 32 C°.
- The vending machine should not be transported when loaded with products.
- For prevention of risk of of reception of trauma at overturning vending machine, as well as exception of cases vandalism, vending machine should be always fixed to the wall (see section 5.5).
- Don't clean the vending machine by pressure water jets.
- Use genuine spare parts only.
- The appliance is not suitable for installation in an area where a water jet



could be used.

- When connecting the vending machine to the power network the use of adapters, extenders and multi-pin plugs are prohibited.
- Switching on several vending machines by using one switch at the central electric panel is prohibited. This may damage the vending machines.
- Connecting the vending machine to the power network without grounding is prohibited.
- Any vending machine changes or modifications without manufacturer's notification are prohibited! Otherwise, the manufacturer assumes no warranty liabilities.
- The lock programming operations should be executed with the vending machine door open! Otherwise, the door will be locked by a latch.
- To return the lock to the programming position only use the master key, used for the latest programming!
- To prevent the vending machine from overturning it's prohibited to open the vending machine doors and pulling out the shelves until the vending machine is securely fixed on the mounting surface!
- To prevent the vending machine overturning pull out one shelf at a time, goods should be laid in such a way, that the space for falling into the product dispensing tray is free from protruding parts of other products or shelves! The shelves should be pushed all the way back!
- **CAUTION:** In order to avoid a hazard due to inadvertent resetting of the thermal cut-out, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.
- To avoid vending machine overturning don't pull out all shelves simultaneously!
- The use of abrasive materials, solvents, bleaching or chlorine-containing materials is prohibited!



2.0 GENERAL INFORMATION

Before installing and using the vending machine read and comprehend this manual which contains important information on safety of installation and rules of usage and maintenance.

The vending machines of Foodbox series are meant to vend packaged products (snacks, beverages, confectionery and similar products).

Vending slave-machines of Foodbox series are meant to deliver packaged products.

To all machines of Foodbox series a slave-machine of modification Foodbox Slave or Foodbox Slave Long can be attached.

The machines of Foodbox series can be performed in 10 modifications (have different exterior and equipment - see paragraph 4.0).

To identify Your machine modification use the brand plate on the back panel of the machine.

Product selection can be performed with the help of keyboard or touch-buttons (icons) in the Touch modifications.

On the display the information on the product choice and other system information can be seen.

The machines provide the possibility of entering data and managing the machine. For this the USB-flash drive is needed.

The management on machines settings can be performed using a special configuration software on the PC or laptop with OS Windows.

In the control module the service buttons for entering the service menu or performing a delivery test is present.

All the machines functions are under the main board control.

A modem can be attached optionally.

The pictures in the manual are numbered according to the manual paragraphs.

The manufacturer reserves the right to make changes in this manual.

Products recommended for loading into the vending machine:

- The piece goods in sealed package, ruling out the possibility of spilling crisps, breakfast cereals, meat snacks, baked breads, chocolate bars, packed



cookies, packed peanuts, packed croissants, etc.);

- Drinks in plastic and TetraPak packaging up to 0.5 l in capacity;
- Drinks in aluminium cans up to 0.33 l in capacity;
- Drinks in plastic bottles up to 0.5...0.6 l in capacity.

Not recommended for loading into the vending machine:

- Products and drinks in glass containers;
- Products in packaging which does not exclude the possibility of the contents spillage;
- Products without packaging;
- Dairy products in soft packaging.

Manufacturer's warranty

The manufacturer's warranty during the warranty period covers all vending machine units and assemblies, except for malfunctions, arising from non-observance of current maintenance documentation requirements by the customer or due to any mechanical failures.

The following components are excluded from the manufacturer's warranty:

Fuses;

Control board batteries.

The Warranty does not include, damages to the vending machine caused by:

- Transport and/or handling;
- Operator errors;
- Lack of maintenance as explained in this manual;
- Failures and/or breakages not due to malfunction of the vending machine.

Intended use

This appliance is intended to be used indoors only, in applications such as:

- Staff kitchen areas in shops.
- Offices and other commercial working environments, break rooms.
- On agricultural estates.
- By clients in hotels, motels and other residential type environments.
- Bed and breakfast type environments.



Requirements of personnel

No one is permitted to carry out service, maintenance or repair work unless they have been properly instructed by the operating company or the manufacturer.

Installation conditions

- Never position or use the machine in the vicinity of sources of heat or gas.
- Protect the machine from splash water.
- Protect the machine against the effects of the weather (moisture, heat, frost, etc.).
- Never use the machine outside.

Assembly/connection conditions

- When connecting the machine to a mains supply, always make sure that this matches the supply voltage specified on the machine's name plate.
- No one is permitted to carry out service, maintenance or repair work on the dispenser unless they have been properly instructed by the operating company or the manufacturer. erly instructed by the operating company or the manufacturer.

Operation

- Read the operating manual carefully before using the machine.
- It is essential to disconnect the machine from the power supply before carrying out any repair work
- Never unplug the machine by pulling on the power cable.
- Stop using the machine if the machine or the power cable are damaged or are no longer functioning perfectly. In such an event, please contact your specialist retailer or the LLC "KRAFT" Service Center.
- Please observe the maintenance advice and intervals.



- Read the operating manual carefully before using the machine.
- It is essential to disconnect the machine from the power supply before carrying out any repair work
- Never unplug the machine by pulling on the power cable.
- Stop using the machine if the machine or the power cable are damaged or are no longer functioning perfectly. In such an event, please contact your specialist retailer or the LLC “KRAFT” Service Center.
- Please observe the maintenance advice and intervals.
- Any maintenance, cleaning and repair tasks that the end customer is not specifically authorised to perform may only be carried out by trained service personnel.
- For your own safety, and to ensure that your machine enjoys a long service life, you should only use original LLC “KRAFT” spare parts.
- The machine can be used by children aged 8 and older as well as by persons with reduced physical, sensory and mental capabilities or with limited experience and knowledge as long as they are supervised or have been trained on how to use the machine safely and understand the resulting dangers. Children must not play with the machine. Cleaning and user maintenance must not be carried out by children.
- Never submerge the machine or the power cable in water.

Disassembly / disposal

- Dispose of the machine in accordance with regional disposal regulations.
- This machine is subject to the Waste Electrical and Electronic Equipment Directive (WEEE/EU directive) and must not be disposed of together with normal domestic waste.



Possible types of misuse

- Relying on personnel that have not been properly instructed and are not fully qualified.
- Using products that are out of date or are close to their best-before date.
- Using products that have not been approved by LLC “KRAFT”.
- Using spare parts that have not been approved by LLC “KRAFT”.
- Any type of use that is at odds with the declaration of conformity.
- Technical changes and modifications to the machine that have not been authorised by LLC “KRAFT”.
- Operating the machine outside of the specifications.

Adherence to the operating manual

Read the operating manual carefully before using the machine.

To ensure the safe operation of the machine, regional regulations (e.g. accident prevention regulations) must be adhered to in addition to following the instructions in this manual. The operating company is responsible for providing the details of these additional regulations.

Disposing of the packaging material

The packaging is made from various materials. After installing the machine, please contact the waste management department of your local authority to check what options are available for recycling the packaging material or disposing of it in an environmentally friendly way.

Machines that are no longer in service

Machines that are no longer in service must be disposed of correctly. This machine is subject to the Waste Electrical and Electronic Equipment Directive (WEEE/EU directive) and must not be disposed of together with normal domestic waste.

3.0 SPECIFICATIONS

Differences between models

The vending machine series Foodbox is composed by many models that have the following differences:

Models	Cabinet base divisible	Touch screen	Elevator mechanism	Enlarged body
Foodbox	X			
Foodbox Touch	X	X		
Foodbox Long	X			X
Foodbox Touch Long	X	X		X
Foodbox Lift	X		X	
Foodbox Touch Lift	X	X		
Foodbox Lift Long	X		X	X
Foodbox Touch Lift Long	X	X	X	X
Foodbox Slave				
Foodbox Slave Long				

Vending machine (modification)

Parameters	Foodbox Foodbox Touch	Foodbox Long Foodbox Touch Long	Foodbox Lift Foodbox Touch Lift
Height, no more than	1850 mm	1850 mm	1850 mm
Width, no more than	1000 mm	1280 mm	1020 mm
Depth, no more than	820 mm	820 mm	820 mm
Weight, no more than	300 kg	370 kg	340 kg
Electrical connection	230 V~/50 Hz 220~ V/60 Hz	230 V~/50 Hz 220~ V/60 Hz	230 V~/50 Hz 220~ V/60 Hz
Power consumption	max. 680 W (230 V~/50 Hz) max. 630 W (220~ V/60 Hz)	max. 680 W (230 V~/50 Hz) max. 630 W (220~ V/60 Hz)	max. 680 W (230 V~/50 Hz) max. 630 W (220~ V/60 Hz)
Max. sound pressure	< 70 dB (A)	< 70 dB (A)	< 70 dB (A)
Environmental Limits	+ 5...+32 °C	+ 5...+32 °C	+ 5...+32 °C

Vending machine (modification)

Parameters	Foodbox Slave	Foodbox Slave Long	Foodbox Lift Long Foodbox Touch Lift Long
Height, no more than	1850 mm	1850 mm	1850 mm
Width, no more than	750 mm	1045 mm	1315 mm
Depth, no more than	790 mm	790 mm	845 mm
Weight, no more than	250 kg	300 kg	400
Electrical connection	230 V~/50 Hz 220~ V/60 Hz	230 V~/50 Hz 220~ V/60 Hz	230 V~/50 Hz 220~ V/60 Hz
Power consumption	max. 680 W (230 V~/50 Hz) max. 630 W (220~ V/60 Hz)	max. 680 W (230 V~/50 Hz) max. 630 W (220~ V/60 Hz)	max. 680 W (230 V~/50 Hz) max. 630 W (220~ V/60 Hz)
Max. sound pressure	< 70 dB (A)	< 70 dB (A)	< 70 dB (A)
Environmental Limits	+ 5...+32 °C	+ 5...+32 °C	+ 5...+32 °C

Cooling unit

- Refrigerant type - R134a
- Ventilated evaporator
- Climate class - ST
- Refrigerant charge - 0.04 kg

4.0 VENDING MACHINE DESCRIPTION

4.1 Interior

Foodbox, Foodbox Long, Foodbox Lift, Foodbox Lift Long

In the fig. 4.1 is shown the exterior of the Foodbox vending machine modification with LCD and keypad.

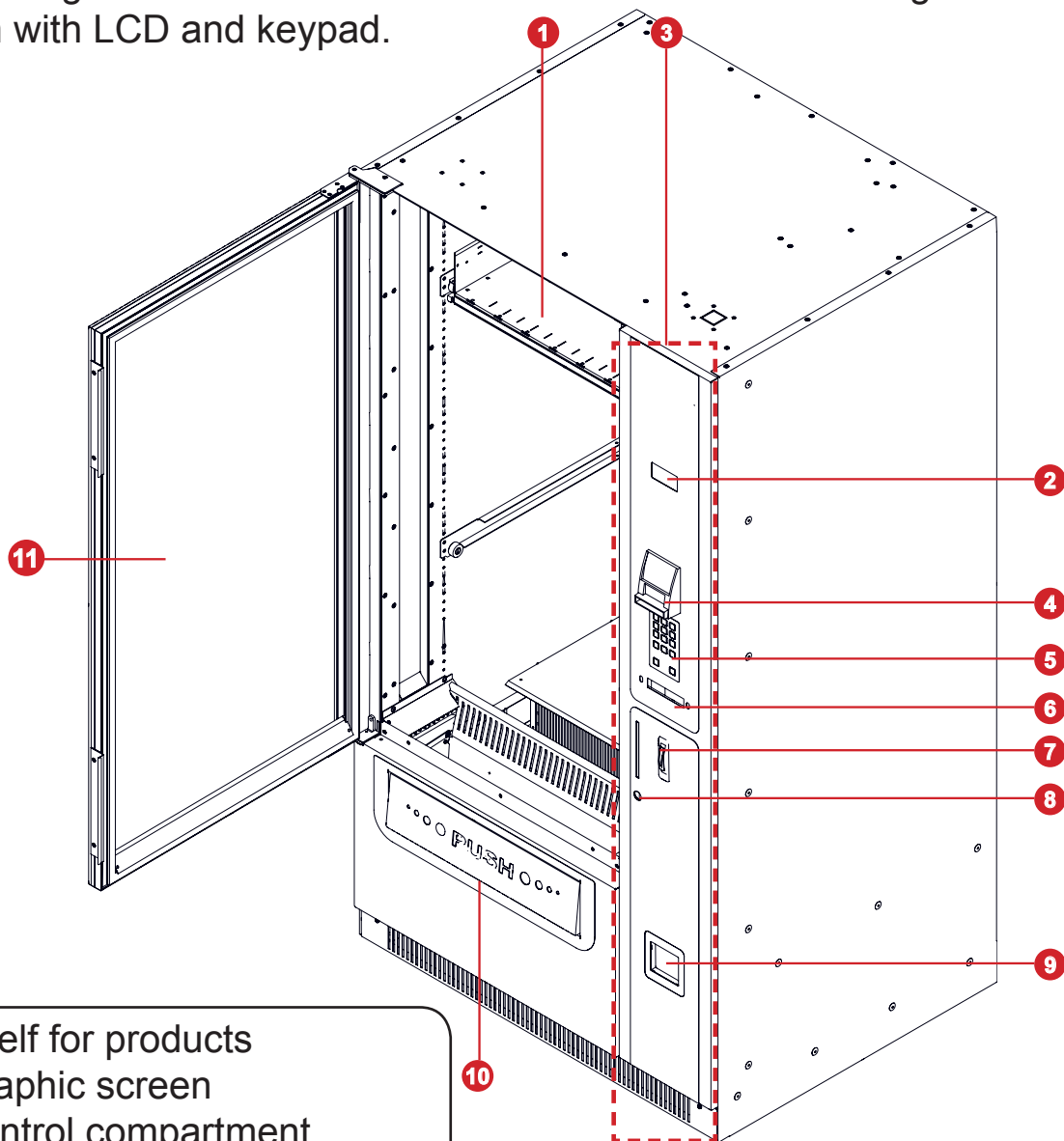


Figure 4.1

- 1 Shelf for products
- 2 Graphic screen
- 3 Control compartment
- 4 Slot for bills/plug
- 5 Keyboard
- 6 Slot for printer checks / plug
- 7 Slot for coins
- 8 Lock
- 9 Change tray (coins)
- 10 Product dispensing tray
- 11 Door

NOTE: The Foodbox Lift, Foodbox Lift Long modifications uses a lift for more careful products giving out.

Foodbox Touch, Foodbox Long Touch, Foodbox Lift Touch, Foodbox Lift Long Touch

In the fig. 4.2 is shown the exterior of the Foodbox vending machine modification with touch screen.

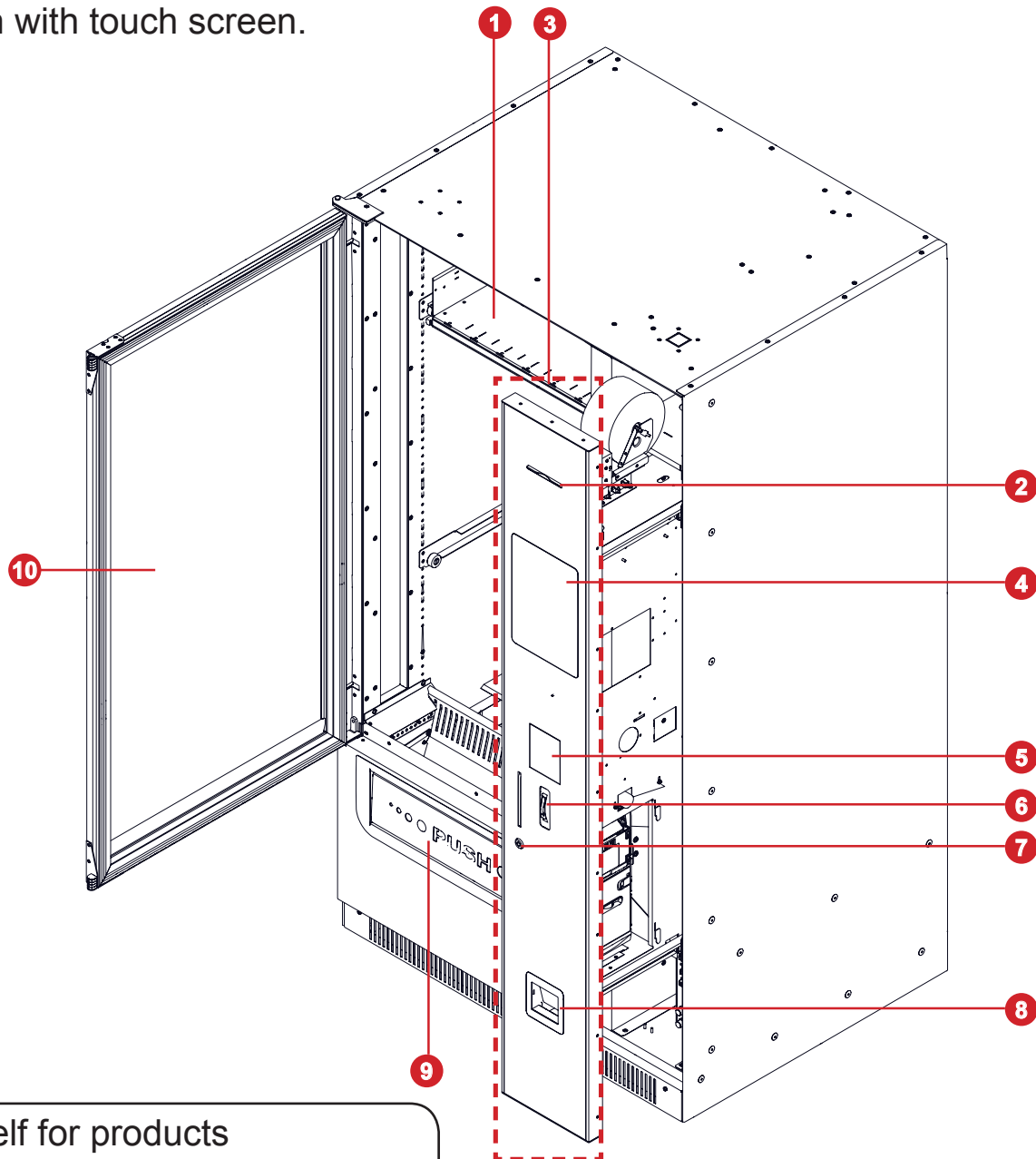


Figure 4.2

- 1 Shelf for products
- 2 Slot for printer checks / plug
- 3 Control compartment
- 4 Touch screen
- 5 Slot for bills/plug
- 6 Slot for coins
- 7 Lock
- 8 Change tray (coins)
- 9 Product dispensing tray
- 10 Door

NOTE: The Foodbox Lift Touch, Foodbox Lift Long Touch modifications uses a lift for more careful products giving out.

Foodbox Slave, Foodbox Slave Long

In the fig. 4.3 is shown the exterior of the Foodbox vending machine modification without the control module.

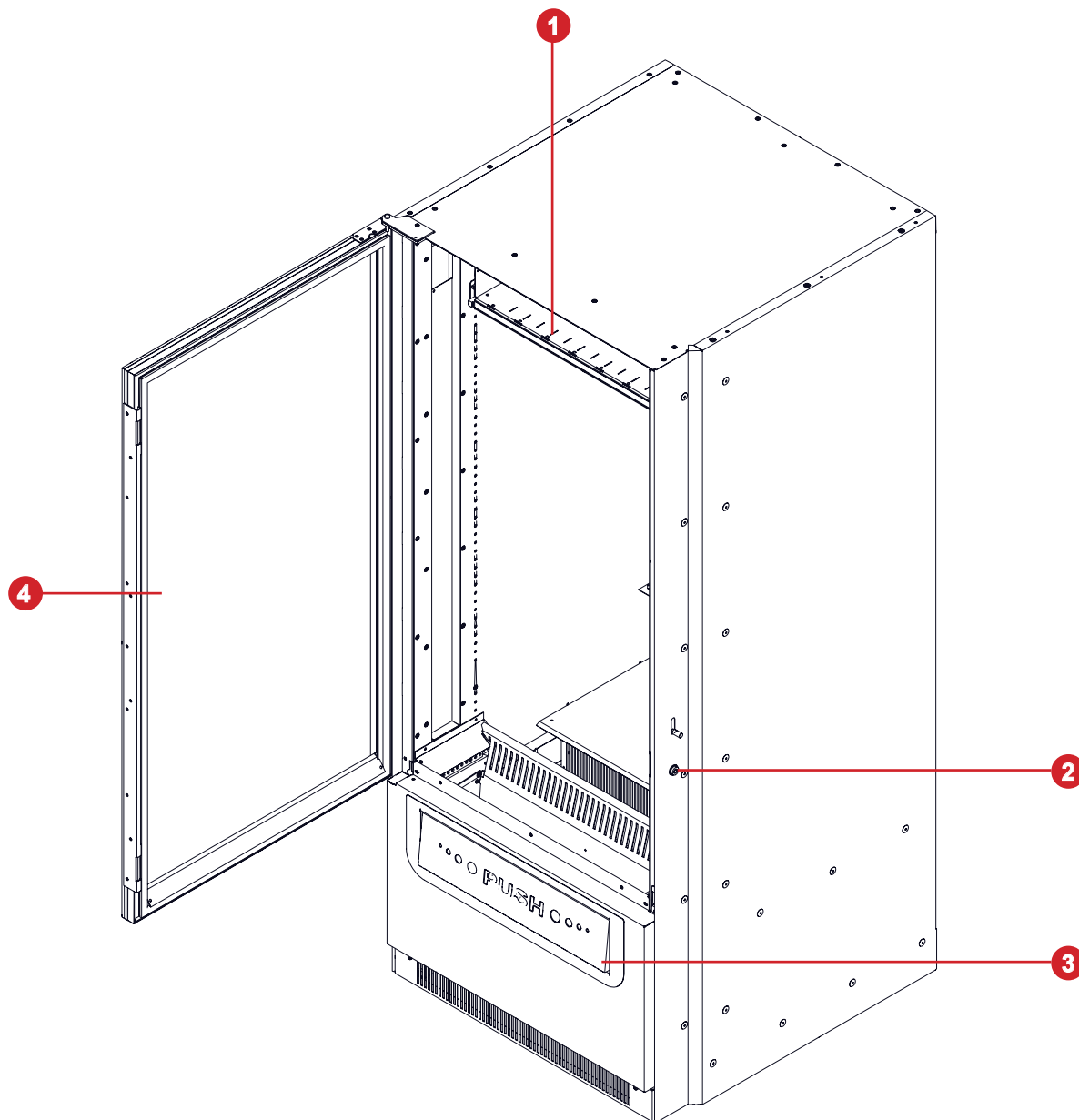


Figure 4.3

- 1 Shelf for products
- 2 Lock
- 3 Product dispensing tray
- 4 Door

Main distinctions of vending machine modifications from basic configuration are listed below.



Foodbox

1. Foodbox - basic modification of the machine.



Foodbox Touch

2. Foodbox Touch - modification of the machine equipped with a touch screen.



Foodbox Lift

3. Foodbox Lift - modification of the machine equipped with lift for more careful product delivery.



4. Foodbox Touch Lift - modification of the machine equipped with lift for more careful product delivery and with a touch screen.

Foodbox Lift Touch



5. Foodbox Long - modification of the machine with enlarged cabinet which lets to maximize the number of cells on each shelf.

Foodbox Long



6. Foodbox Touch Long - modification of the machine with enlarged cabinet which lets to maximize the number of cells on each shelf. It is also equipped with a touch screen.

Foodbox Long Touch



Foodbox Lift Long

7. Foodbox Lift Long - modification of the machine with enlarged cabinet which lets to maximize the number of cells on each shelf. It is also equipped with lift for more careful product delivery.



Foodbox Lift Long Touch

8. Foodbox Touch Lift Long - modification of the machine with enlarged cabinet which lets to maximize the number of cells on each shelf. It is also equipped with lift for more careful product delivery and with a touch screen.



Foodbox Slave Foodbox Slave Long

9. Foodbox Slave - the modification without control module (no display, payment devises preset). Slave-machine is controlled by the Master-machine attached.

10. Foodbox Slave Long - extended modification of Foodbox Slave with enlarged cabinet which lets to maximize the number of cells on each shelf.

4.2 Control compartment

Foodbox, Foodbox Long, Foodbox Lift, Foodbox Lift Long

In the fig. 4.4 the exterior of the control module for the modification with LCD and keypad is shown.

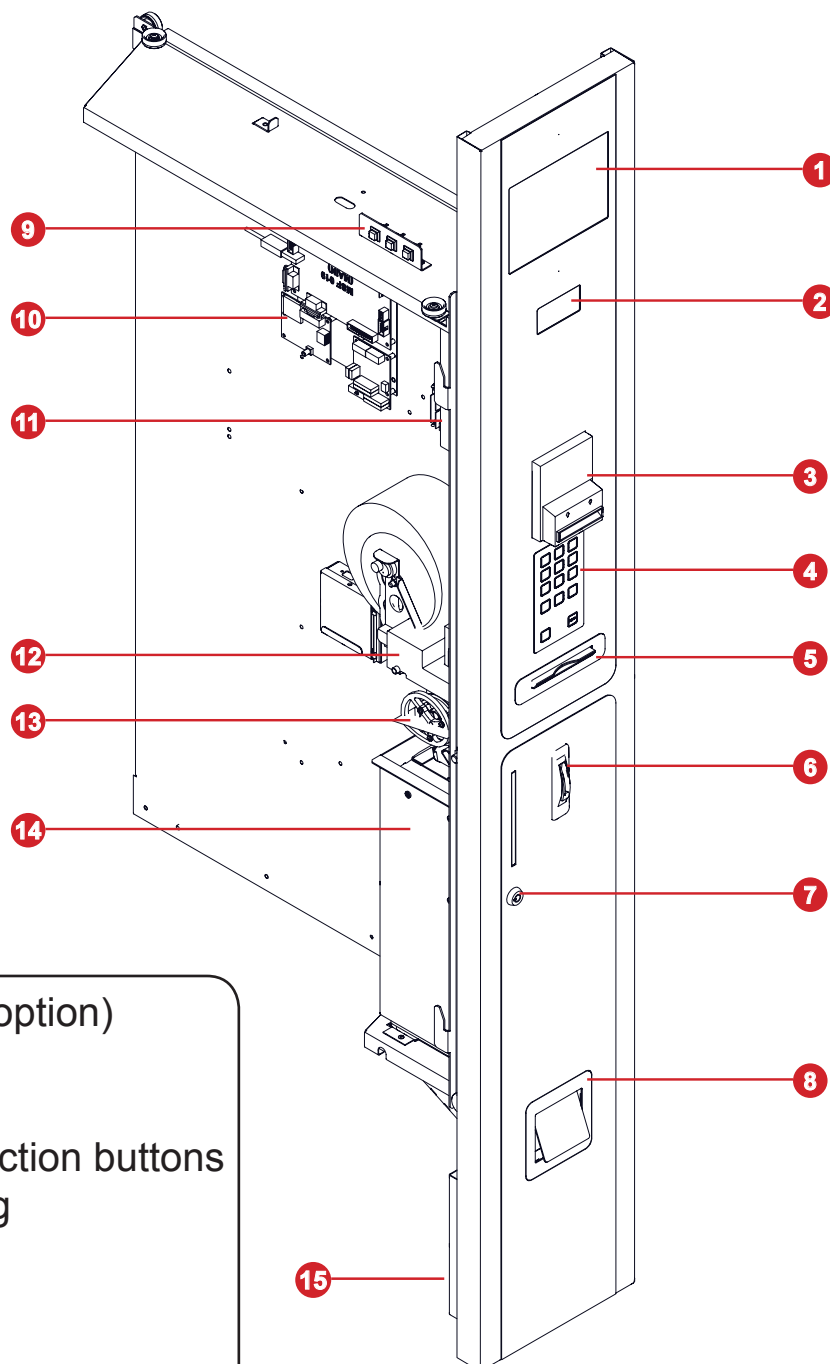


Figure 4.4

- 1 Display Advertising Panel (option)
- 2 Graphical screen
- 3 Slot for bills/plug
- 4 Keyboard with product selection buttons
- 5 Slot for printer checks / plug
- 6 Slot for coins
- 7 Lock
- 8 Change tray (coins)
- 9 Service buttons + USB PC connector
- 10 Control boards (Main Board)
- 11 Cash acceptor
- 12 Printer for receipts (option)
- 13 Change giving out motor (option)
- 14 Coin drawer
- 15 Box for coins

Foodbox Touch, Foodbox Long Touch, Foodbox Lift Touch, Foodbox Lift Long Touch

In the fig. 4.5 the exterior of the control module for the modification with touch-screen is shown.

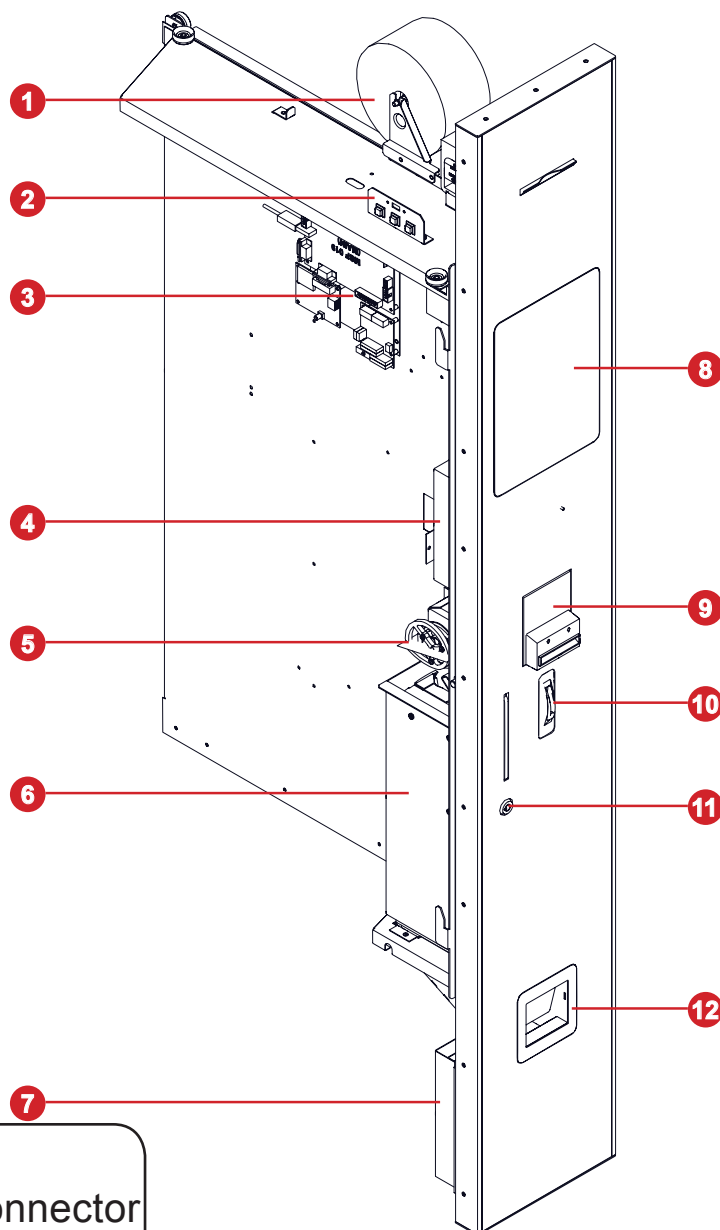
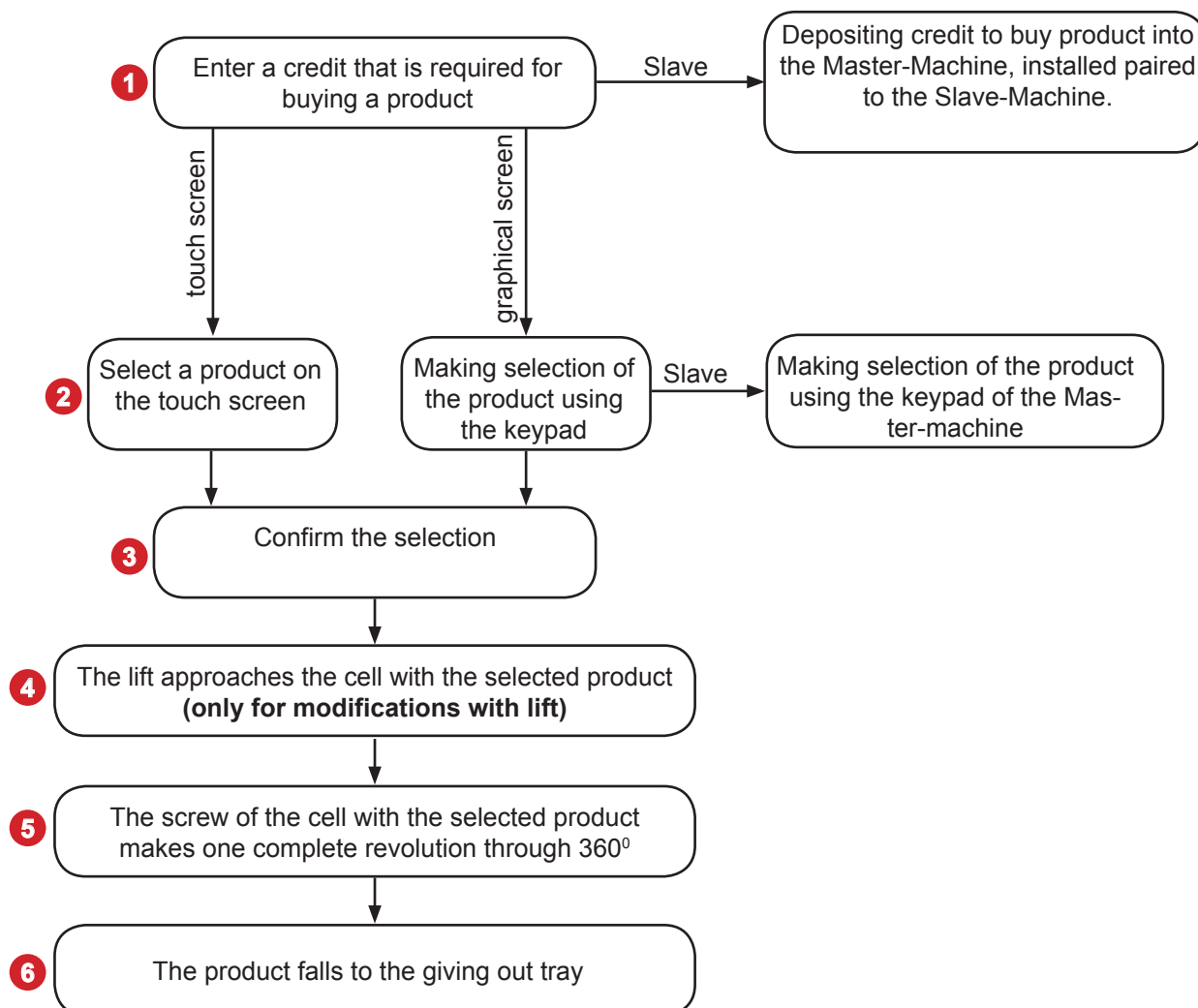


Figure 4.5

- 1 Printer for receipts (option)
- 2 Service buttons + USB PC connector
- 3 Control boards (Main Board)
- 4 Cash acceptor
- 5 Change giving out motor (option)
- 6 Coin drawer
- 7 Box for coins
- 8 Touch screen
- 9 Slot for bills/plug
- 10 Slot for coins
- 11 Lock
- 12 Change tray (coins)

4.3 Operation algorithm of vending machine

The main flow-chart diagram of vending machines is shown below.





4.4 Vending machine components

4.4.1 Giving out compartment

Product dispensing compartment occupies the largest volume of the vending machine and is closed by a glass door, which is blocked by a slide-out panel of the control compartment.

The product dispensing compartment dimensions allow installing up to 6 (optionally - up to 8) shelves with cells of different configurations:

- Cells for wide products with two synchronously rotating spirals (double cells);
- Single cells with one spiral;
- One-and-a-half cells with one spiral.

Shelves are designed in such a way that they can be easily slid in and out for quick loading/unloading the products. Shelves are closed by the door with a glass unit. Products by using the spirals are fed to the product dispensing tray. Optical sensors located at the dispensing tray register the product release. The customer takes the product from the tray. In the lower part of the vending machine, there's a ventilation casing.

In the lower part of the dispensing compartment, there's a cooling unit, maintaining the product storage temperature conditions that are preset by the user.

4.4.2 Control compartment (if provided by modification)

The control compartment is a rectangular metal compartment, isolated from the product dispensing compartment. The control compartment is closed by a slide-out panel. The control compartment accommodates the following:

- The vending machine main control board (hereinafter - the controller);
- Payment systems (cash acceptor, coin drawer, card reader);
- Control boards;
- Power pack;
- Receipt printer (option);
- Coin box;
- Touch screen / Graphical screen.

NOTE: depending on your order the presence or absence of these elements is possible.

Control compartment panel, as well as product dispensing compartment door, are closed by using a lock.

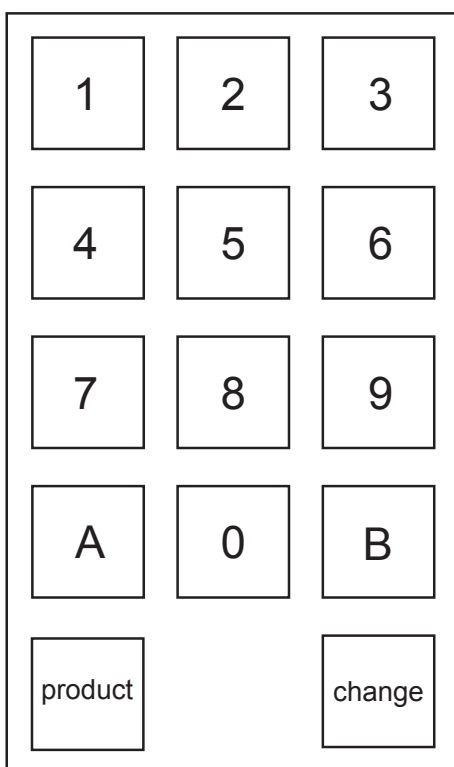
4.4.3 Touch screen (if provided by modification)

On the front panel of the control compartment, there's a touch screen. In the selling mode, the user interface is displayed, by which the customer can buy the desired product in the vending machine. The screen is also used for displaying all functional messages.

In the service mode, the screen displays the menu technician or operator menu with the necessary settings.

4.4.4 Keyboard (if provided by modification)

The keyboard (see figure below) is a singular anti-vandal suitable module with buttons. Depending on the mode of operations the buyer or the serving personnel (operator, technician) enter, by pressing the buttons, information, which is used by the Regulator to execute certain actions.



The exterior look of the keyboard

4.4.5 Lock

The vending machine is supplied with the RIELDA lock, which can be programmed for the required key set that permits using one work key for several RIELDA locks at once, as well as easily change any lock combination for the new work key in case of old key loss, theft or breakage.

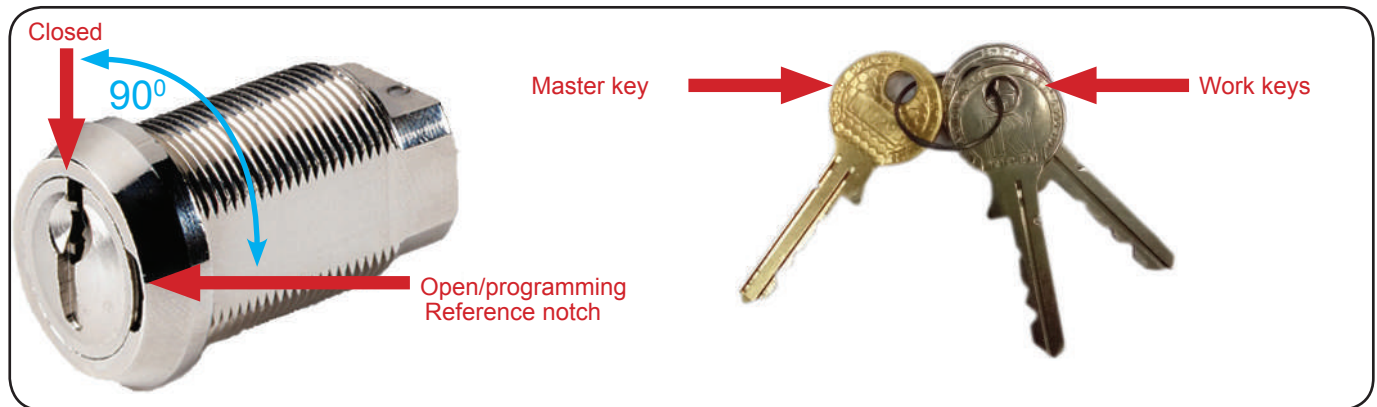


Figure 4.6

The lock is supplied together with three keys (fig. 4.6):

- One master key - a **GOLDISH** key used only for lock programming;
- Two work keys - **SILVERY** keys used for the vending machine door opening/closing.

The lock may be in two positions:

- Working position (“locked” position - fig. 4.6);
- Programming position (“open” position - fig. 4.6).

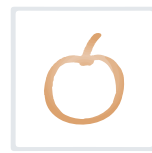
The vending machine is supplied with a ready-programmed lock. To open/close the vending machine door insert the SILVERY work key (sfig. 4.6) and turn it in the lock by 90° in the required position (fig. 4.6).



ATTENTION!

The lock programming operations should be executed with the vending machine door open! Otherwise, the door will be locked by a latch.

To return the lock to the programming position only use the master key, used for the latest programming!



To program the lock for another work key (e.g. for using one work key for several vending machines or in the case of the work key loss) it's necessary to execute the following operations with the vending machine door **OPEN**:

- Insert the master key («close» position - fig. 4.6), by which the lock was the last time programmed or the one that was supplied with the lock (for initial programming), into the lock. Secure the master key in the lock for at least 1 second. Then turn the key by 90° in the direction of the reference notch (fig. 4.6).
- While holding shutting off device of the door in order to avoid a spontaneous turn of the lock, remove the master key from the lock and insert them into the new master key , which you want to program the lock. If you want to program the lock on the same master key, don't remove the master key from the lock.
- Then turn the master key by 90° to the opposite direction («closed» position - fig. 4.6).
- Take out the master key from the lock and put it in a safe place. To open/ close the lock use the work keys supplied with your new master key.



5.0 INSTALLATION

5.1 Transport and positioning



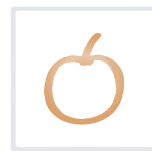
To transport and handle the vending machine, carefully follow the instructions below:

- Use a pallet/lift truck with minimum carrying capacity of 400 kg.
- Should the machine not be installed immediately, store the vending machine vertically and in a dry and protected room.
- **CAUTION:** it is strictly forbidden to transport and/or position the vending machine horizontally.
- In the event the machine is **mistakenly laid horizontally**, place in the upright position and **wait at least 12 hours** before switching on; otherwise, damage may be caused to the cooling system.
- Position the vending machine in the installation area, work carefully and avoid maneuvers that may cause damage to the machine.
- Remove all packaging from the vending machine, and carefully move it to its final position
- The vending machine should be transported in a vertical position on its own base.
- It's forbidden to drop and overturn the vending machine.
- It's forbidden to use ropes, strands, cables, etc. for the vending machine movement.
- Before moving the vending machine make sure that the power cord is disconnected from the mains.
- After transportation of the vending machine for long distances at which it was exposed to high level of vibration or impacts, check the contact connections between the elements and functional nodes, as well as the mounting of the elements and functional nodes.

5.2 Installation environment features



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



Environmental conditions for installing the vending machine

- The vending machines series Foodbox should be installed in environments/ rooms where the temperature does not exceed 32°C or fall below 5°C. In temperatures outside these parameters the electrical parts (compressor) may be subject to overheating or may not work properly.
- Air circulation is crucial for the cooling and heating systems, there must be at least a 10cm gap between any obstructions to the rear of the vending machine.
- Make sure that the capacity load of the surface on which the vending machine is positioned is adequate to support the weight declared by the manufacturer

5.3 Installation

Remove the shipping package and packaging material from the vending machine. Contact the supplier if the vending machine has any visible damaged.

- Before the first activation, hold the vending machine in the premise at room temperature for at least 5 hours. Make sure there's no condensate on the vending machine internal elements and, in particular, on the screen and door.
- Carefully move the vending machine by using the fork loader to the placement location and lift it for 20...30 cm.
- Secure the loader.
- By using a S=10 mm spanner unscrew the fastening bolts and remove the wooden supports. It's recommended to put bolts with washers and wooden supports into a plastic bag together with packaging for storage.
- Take four supporting feet, packed for the duration of transportation into the product dispensing tray, unpack them and screw into the holes in the vending machine base corners.
- Lower the vending machine to the placement location and remove the forklift from under the machine.
- By using a S=34 mm spanner adjust the supporting feet, so that the vending machine is level in a horizontal plane.
- Use a level for ensuring the level installation.

- After the vending machine installation and levelling take the ventilation cover, packed for the duration of transportation into the product dispensing tray, and install it on the vending machine by using the screws from the fitting kit (fig. 5.1).

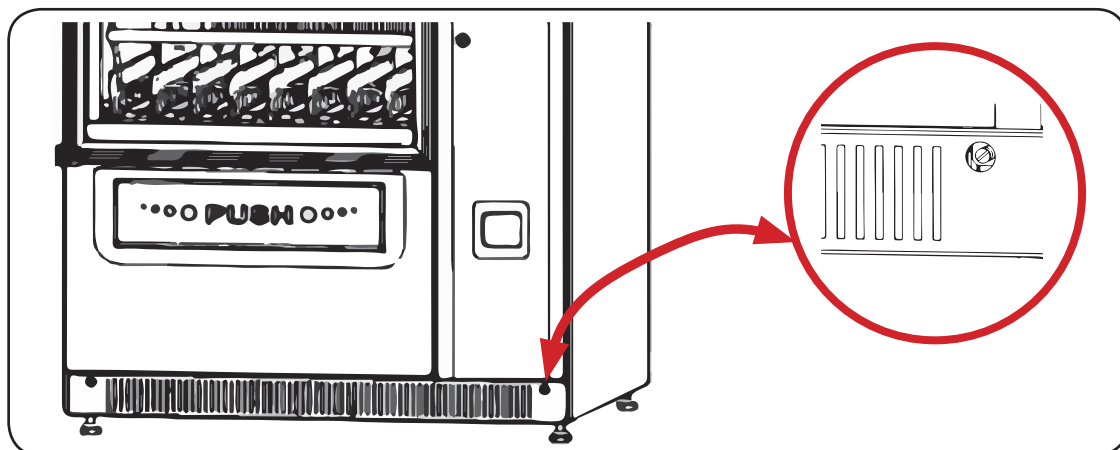


Figure 5.1- Installation of ventilation cover



ATTENTION!

To prevent the vending machine from overturning it's prohibited to open the vending machine doors and pulling out the shelves until the vending machine is securely fixed on the mounting surface!

5.4 Leveling

For correct operation the vending machine must be sited on a level surface. Any irregularities in the floor can be compensated by adjusting the screw-on feet on the vending machine in order to get it perfectly level and to guarantee stability.

Note: The vending machine will operate correctly when positioned on a horizontal surface.

5.5 Stability

The stability of vending machines against overturning is guaranteed whether the vending machine is empty or full and / or with the door open.

The overturning of the vending machine without external influence is impossible.

However, to protect the machine against vandalism, such as attempts to tilt the vending machine, we recommend to attach one of the following optional kits:

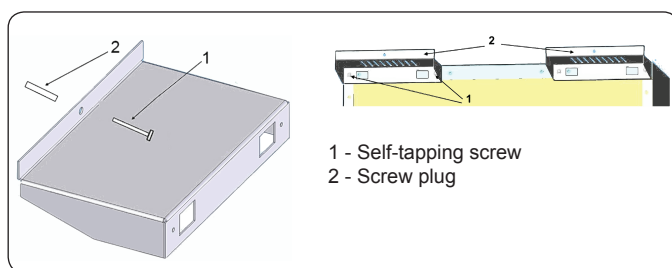


Figure 5.2 - Vending machine wall mounting

To mount the vending machine to the wall:

- Take the rests and self-tapping screw packed for the duration of transportation into the product dispensing tray.
- Fix the rests to the vending machine by using four screws.
- Move the vending machine close to the wall.
- Mark the location of mounting holes by a marker.
- Move the vending machine away from the wall and drill 2 blind holes for the screw plugs installation.
- Install the screw plugs and move the vending machine to the wall, so that the fixing holes in the wall match with the holes in the rests. Then fix the vending machine by using self-tapping screws.

Note: When fixing the vending machine to the wall, at the first place fix the wall mount rests to the vending machine, and only then proceed fixing the vending machine to the wall!



LLC "KRAFT" does not assume responsibility for any damage caused by the lack of consulting this instructions. All the operations must be done by authorized personnel

5.6 Connection to power mains



CAUTION: Before completing the electrical connection make the following checks:

- Ensure the mains power supply (voltage and frequency) are the same as those indicated on the machine's rating plate: this vending machine must be connected to a 230V, 50Hz or 220V, 60Hz power mains.
- Ensure that the main power supply outlet is grounded and that, after making the connection, the entire appliance is ground connected.
- Ensure that the appliance is positioned so that the plug connecting it to the mains power supply can be easily accessed after installation.



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



CAUTION: Never use extension leads.

You may now connect the machine to the mains electrical supply.

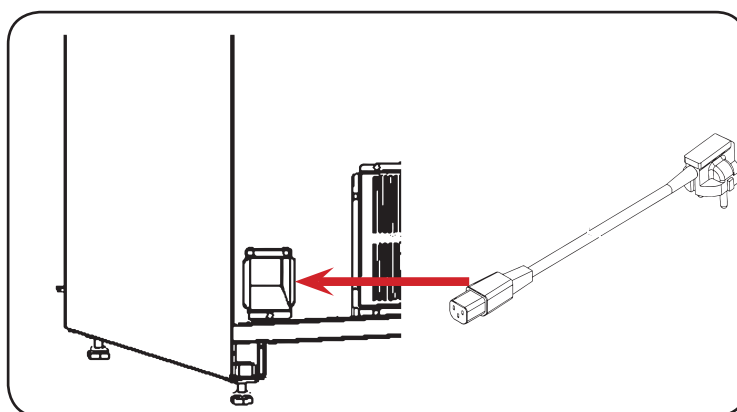


Figure 5.3 - Power cord connection

6.0 USING THE VENDING MACHINE

6.1 Warnings

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

6.2 Proper use

The Vending Machines series Foodbox have been designed and built for the sale and distribution of the packaged products.

6.3 Loading

Product to be vended from the vending machine series Foodbox can be loaded in the 6 SHELVES found inside the machine. Optionally, an additional 7 and 8 shelves can be installed in the vending machine. Counting shelves starts at the top of the machine.

To load products:

- Open the vending machine door (ref. 7.1 ACCESS TO MAINTENANCE AREA).
- Pull the shelf latch, located on the left, following which pull out the shelf up to the stop by firmly holding the shelf by its lower part. To facilitate loading the upper shelves are inclined when pulled out (fig. 6.1).

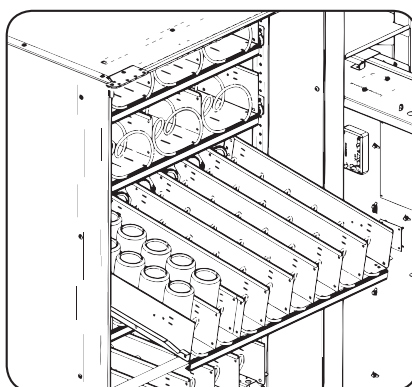


Figure 6.1 - Shelves loading



- Insert the desired products in the spaces between the spirals up to the full load, do not leave empty spaces.
- When filling the spirals check that the products are not too tight in their housing. If necessary replace the spiral with one that has a higher step.
- The products shall not be forced into the spaces because the package must fall by its own weight out of the spiral.
- After the loading fit the shelves back into the vending machine up to the fixed position.
- Re-close the vending machine door.

6.4 Product vending adjustments

Once you have decided upon the product you wish to vend, you need to make the appropriate adjustments to the machine itself. The adjustments are as follows:

- Spirals
- Spirals replacement
- Number of spirals for each shelf
- Setting of the drawers position

All operations described in this section are carried out with the vending machine disconnected from the mains!

Pull out the shelf and free it from any products.

Set the optimal position of spiral ends. For this pull out the spiral in accordance with fig. 6.2, turn in through 45° or larger angle multiple of 45° and release.

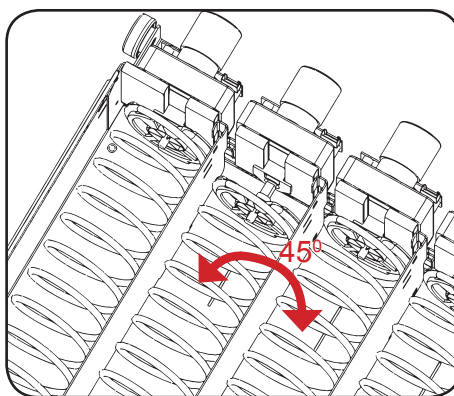


Figure 6.2

Changing spirals

Disconnect the electric motor power connectors (fig. 8.3, pos. 1) and pull out the shelf.

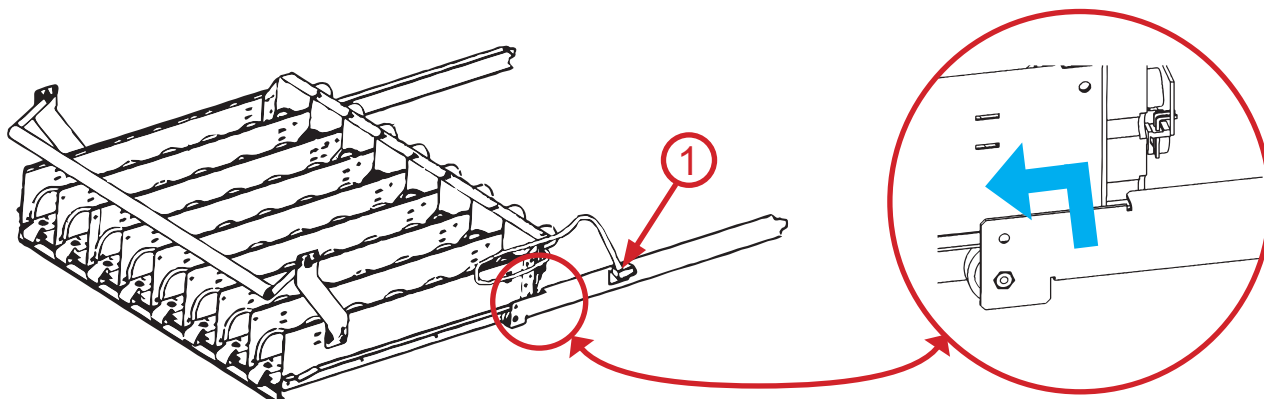


Figure 6.3



ATTENTION!

To avoid vending machine overturning don't pull out all shelves simultaneously!

If the factory installed spiral is not adequate for selling products, you can select a spiral, corresponding with the product dimensions, and replace the factory installed spiral.

Turn the spiral with left spooling counter-clockwise (in the case of right spooling - clockwise) until the spiral end clicking position and remove the spiral from the holder (fig. 6.4).

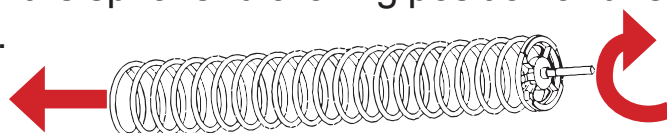


Figure 6.4

Install the required spiral on the holder (fig. 6.5) and turn it until the spiral end clicking position.

After the spiral replacement put the shelf in place and connect the motors.

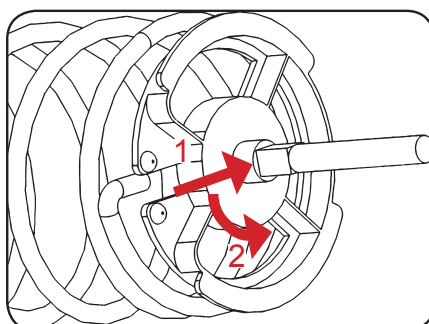


Figure 6.5

Adjustment of the spiral end position

For a stable product support and a reliable dispense the correct adjustment of the spiral end position is very important.

The spiral end position is set properly when the product is safely held and is pushed out from the spiral end.

Turn the spiral counter clockwise, for the control of sales according to product.

Replacing single cells with double cells

1. Remove the four shelf barriers in the direction shown by arrows in fig. 6.6.
2. Disconnect the motor connectors (fig. 6.7) and remove all motors with spirals.
3. Remove any four spirals from the holders (see above).
4. Install the spirals on the motor holders (see above), moreover, use two spirals with different spooling directions but with an identical spooling pitch.
5. Install the motors on the shelf and restore the connections.

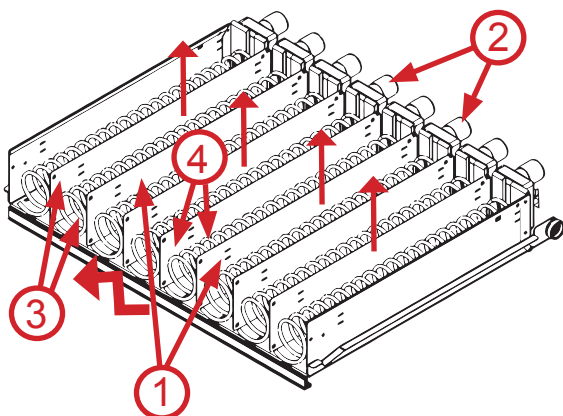


Figure 6.6 - Shelf with single cells

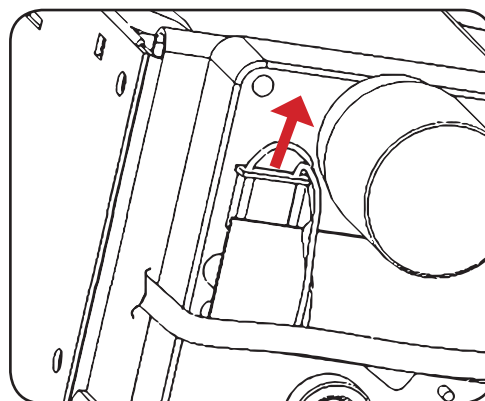


Figure 6.7 - Motor connector disconnection

Note: When using high products the use of high barriers is recommended.

Note: when using narrow products the use of additional limiters is recommended (fig. 6.8).

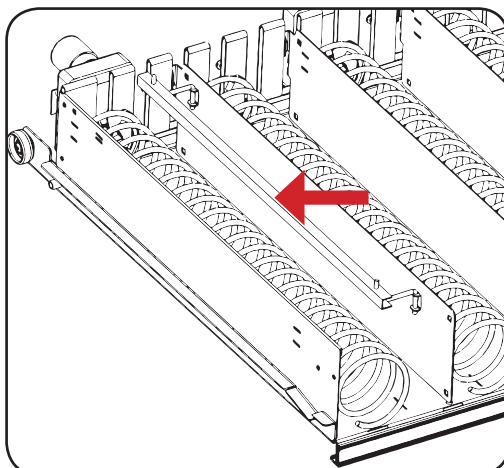


Figure 6.8 - Limiter

Guides

When using canned or bottled products it's recommended to purchase a set of guides and a set of limiters for bottles, and to carry out the following operations (fig. 6.9):

1. Install the guide (1) by inserting it into the shelf slot (2) and matching the guide hole (3) with the spiral holder axis.
2. Secure the guide with a tapping screw (4) from the guide set.

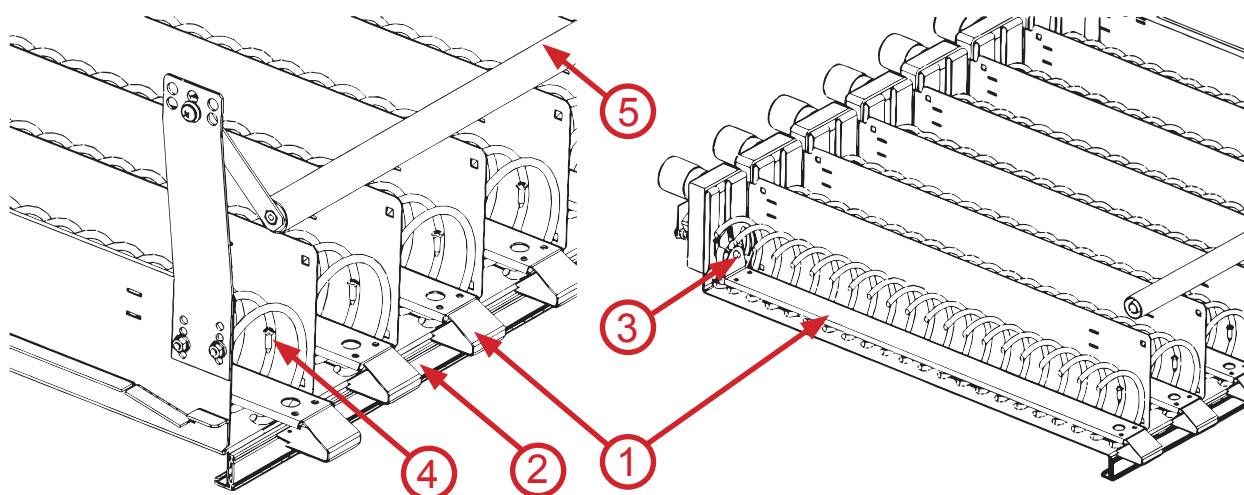


Figure 6.9 - Guide installation

Note: For high bottles and cans there's an additional mechanism preventing their accidental falling and jamming, located closer to the showcase - bottle limiter (5).

Pusher

To improve the effect of pushing out the product by a turning spiral and to decrease the possibility of its falling the possibility of installing the special pusher (fig. 6.10) on the front part of the spiral is provided.



Figure 6.10 - Pusher

Shelf height adjustment

1. Pull out the shelf and free it from any products.
2. Remove the shelf from the vending machine (see the section about replacing the spirals above).
3. Remove a screw (fig. 6.11, pos.1) from a guide that should be moved.
4. Remove the guide (fig. 6.11, pos. 2) from the slot (fig. 6.11, pos. 3).
5. Install the guide to a new position by inserting it into the slot and by fixing the screws (fig. 6.11, pos. 1).

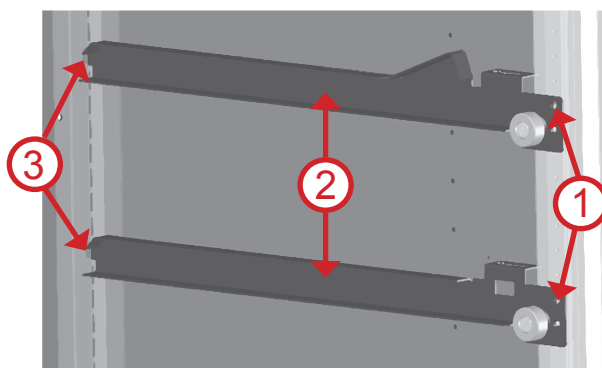


Figure 6.11 - Shelf guide installation

The vending machine has a 7-th connector for connecting the 7-th shelf motors.

The connector is located under the lower shelf, attached by cable binders on the right wall of the dispensing compartment (fig. 6.12).

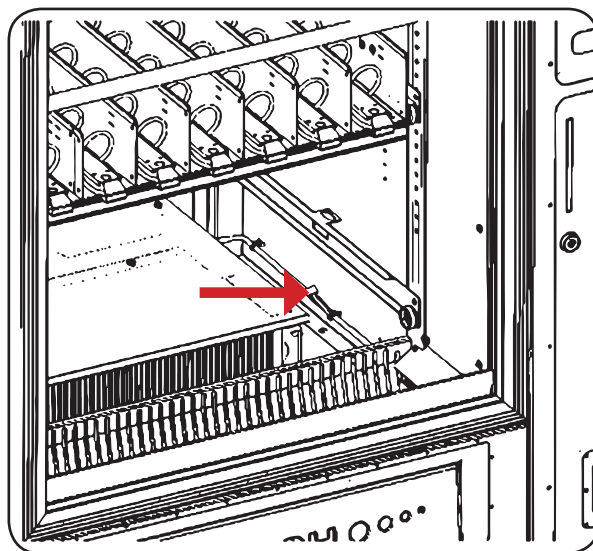


Figure 6.12 - The 7-th shelf location

To install the 7-th shelf you should order the following:

- 1 - Shelf set
- 2 - Ready-assembled guide (right and left).

6.5 Final check

- 1- Load the shelves with product
- 2 - Test several selections, check the reloading and the delivery of the products.



6.6 Start-up

To start-up the Vending machine, please follow the instruction below:

- Make sure the plug is connected to the mains supply.
- Open the control compartment door / Open the door of the cabinet.
- Set the MAINS switch to ON position.
- Load the vending machine with the desired products.
- Close the vending machine door and wait for the general machine check.
- The vending machine is now ready for use.

CAUTION: IN CASE OF FAILURE AND/OR POOR MACHINE OPERATION, CONTACT TECHNICAL SUPPORT AT OUR SERVICE CENTER.

7.0 COOLING UNIT

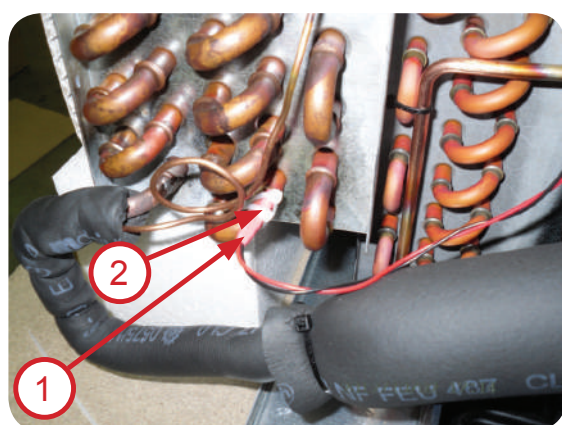
The cooling unit performance control is executed by scanning 3 temperature sensors:

- Sensor No.1 - is located in the lower part of the product dispensing tray;
- Sensor No.2 - is located in the upper part of the product dispensing tray;
- Sensor No.3 - is located on the cooling unit evaporator (fig. 7.1).

Notice:

Recommended temperature settings:

- **Min. temperature $4 \pm 2^{\circ}\text{C}$**
- **Max. temperature $10 \pm 2^{\circ}\text{C}$**
- **Min. evaporator temperature $1 \pm 1^{\circ}\text{C}$**
- **Max. evaporator temperature $5 \pm 1^{\circ}\text{C}$**



- 1 - Temperature sensors
- 2 - Buckles

Figure 7.1 - Location of temperature sensor No. 3



ATTENTION!

To maintain the correct operating mode of the cooling unit, it's important that the temperature sensor No. 3 is installed correctly. It should be securely fixed on the next to last evaporator elbow as shown in fig. 7.1. The sensor installation should be executed outside the vending machine. After placing the cooling unit inside the vending machine the sensor connector should be connected to the temperature sensor wiring harness.



7.1 Operating Modes

The cooling unit operating mode control is executed by the vending machine controller. There are 4 modes of the cooling unit operation:

- Standby;
- Defrosting;
- Cooling;
- Anti-icing.

In each mode there are the cooling unit activation and deactivation, evaporator fan activation, and deactivation, temperature sensors monitoring.

When activating the vending machine the cooling unit is switched to a **STANDBY** mode for two minutes. The further operation is taken place in accordance with the stabilized condition algorithm.

If when activating the vending machine the evaporator temperature (sensor No.3) is lower than the evaporator temperature minimum value, the controller is switched to **DEFROSTING** mode. When the temperature at this sensor reaches the minimum value or higher, the cooling unit switches to **STANDBY** mode.

Standby

In the standby mode, the cooling unit is deactivated, the evaporator fan operates in accordance with the user-defined mode, and the temperature sensors are monitored.

If the temperature at sensor No.1 exceeds the value, specified in the (**Max. temperature**) menu item, and the defrosting time is expired - the unit switches to **COOLING** mode.



Defrosting

In the defrosting mode, the cooling unit is deactivated, the evaporator fan operates in accordance with the user-defined mode, the temperature sensors are monitored.

The duration of the defrosting mode is determined by defrosting time, specified in the (**Defrosting time**) service menu item. Upon completion of the specified time period the unit switches to **STANDBY** mode. The duration of defrosting is also affected by sensor No. 3 - at the evaporator temperature below the minimum value the unit switches to the defrosting mode or remains in this mode until the evaporator temperature exceeds the minimum value.

Cooling

In the cooling mode, the unit is activated, the evaporator fan operates in accordance with the user-defined mode, the temperature sensors are monitored.

The cooling unit operating time may not exceed 30 minutes. Upon expiration of this period the unit is deactivated and after the additional two minutes the controller switches to **STANDBY** mode.

In the cases, if during the cooling unit operation the temperature at sensor No.1 lowered down to the temperature, specified in (**Min. temperature**) menu item, the unit is deactivated and after the additional two minutes, it switches to **STANDBY** mode.

If the temperature at sensor No. 3 is below the value specified in (**Min. evaporator temp.**) menu item, the cooling unit is deactivated and switches to **ANTI-ICING** mode

Anti-icing

The anti-icing mode is used for preventing the cooling unit icing. In this mode the unit is deactivated, the temperature value at sensor No.3 is monitored.

Upon reaching the value preset in the (**Evaporator max. temp.**) menu item, the controller switches to the **STANDBY** mode. To reduce the possibility of icing use the recommended values of temperature settings.

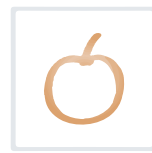
Evaporator fan

The evaporator fan operation mode can be changed by choosing the required mode in the service menu (**menu item Fan control**):



- Always on (*menu item Always on*);
- Activated only in the cooling mode (*menu item only when cooling*);
- The fan operates in the cooling and defrosting modes (*menu item Cooling and defrosting*).

When activating the vending machine the evaporator fan is activated automatically, regardless of its operating settings. When changing the cooling unit operation to **COOLING** or **DEFROSTING** mode the fan will operate in accordance with the selected mode.



8.0 CONTROL

8.1 Controller board (if provided by modification)

Controlling the operation of vending machine assemblies and equipment is executed by the control board (hereinafter – controller), which is located in the control section (see figure 8.1).

The vending machine can operate in two modes in accordance with the embedded software algorithm - the control program (hereinafter – firmware):

- Sales mode (main operating mode);
- Service mode (designed for specialists).

The main mode of operation is the sales mode. In this mode, the customer service is carried out (products selling, storage and giving out). Entry in this mode is realized immediately after the controller activation.

The service mode is intended for testing the vending machine equipment, setting the parameters of assemblies and equipment, controlling the vending machine critical parameters, price management. Changing to the service mode is executed by pressing the service keys (see below).

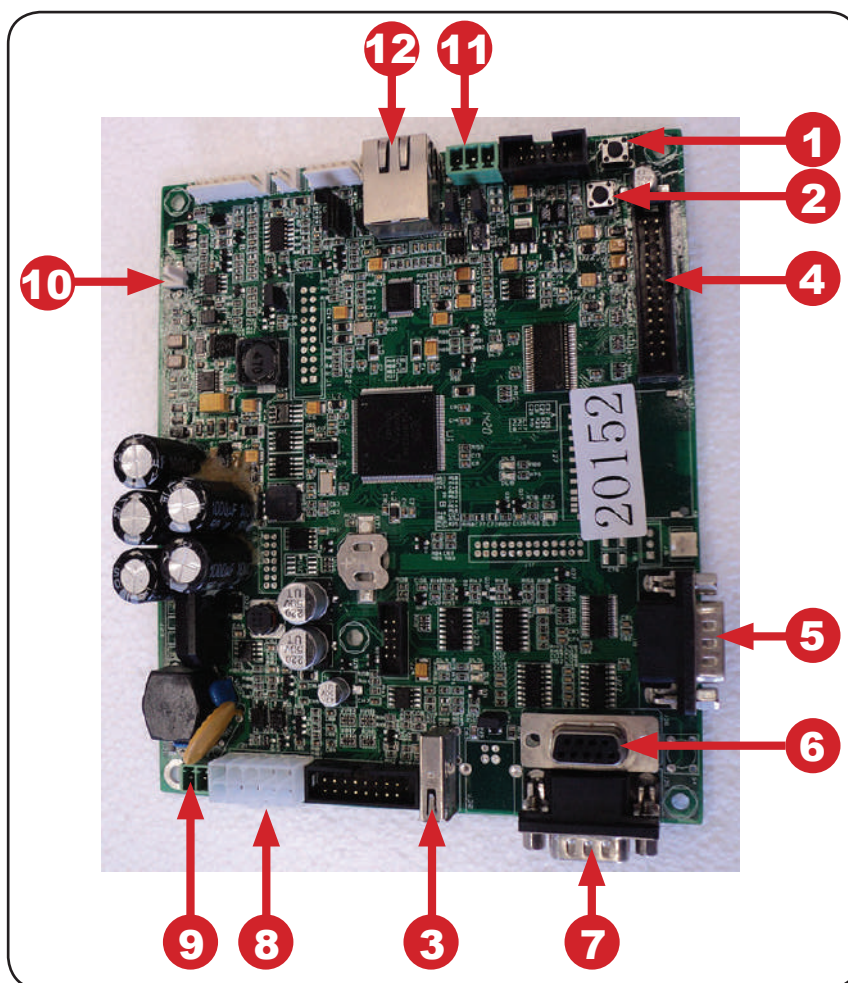


Figure 8.1 - Main Board (controller)

1. A button for accessing the operator menu (used as a backup button in the cases when the service button is not connected)
2. A button for accessing the menu technician (used as a backup button in the cases when the service button is not connected)
3. USB-flash drive connector
4. The connector is not used
5. Modem connector
6. RS232 card reader connector
7. The connector is not used
8. Modem power and MDB payment system connector
9. Controller board power connector (~24V)
10. The connector is not used
11. Power board connector (CAN-BUS)
12. Vending machine PC unit connector (Ethernet)
13. The connector is not used
14. The connector is not used



The vending machine controller permits conducting the vending machine setting, software updating and collecting the statistics by means of file interchange via the USB-flash drive.

The drive is connected to the USB connector, located on the controller board (fig. 8.1). The connection should be carried out in the sales mode. When connecting the drive the touch screen will display the relevant messages about the drive operation.

ATTENTION! The vending machine accepts USB-flash drives only! Disk drive and flash-disks are not supported. Only USB-flash drives with FAT16 or FAT32 file systems are supported. Other file systems (including NTFS) are not supported.

Information that may be read from the USB-flash drive from the vending machine:

1. ***Statistics (Audit):*** The information about the vending machine operation, sales, equipment operation, events. is saved to files in the EVA-DTS format, file name: Axxmmddi.DTS

- xx = the 2 last digits of the vending machine serial number
- mm = month (if date and time are set in the vending machine menu)
- dd = date (if date and time are set in the vending machine menu)
- i = a number in the range from 0 to 9. You can save up to 10 files with different names within 24 hours.

To read the information insert the USB-flash drive into the controller board connector while in sales mode and confirm the ***Save audit?*** request.

2. ***Current configuration:*** File in the EVA-DTS format. Filename: cxxxxxxx.DTS, then the 7-digit vending machine number, (e.g.: c0000123.DTS).

The file contains the information about the equipment configuration, as well as the information about the products placement, names, and prices.

To read the information insert the USB-flash drive into the controller board connector while in sales mode and confirm the ***Record configuration?*** request.

Information that may be loaded from the USB-flash drive into the vending machine:

1. ***Configuration for the specific vending machine:*** File in the EVA-DTS



format. File name: cxxxxxxx.DTS, then the 7-digit vending machine number. The file will be loaded into the vending machine only if it matches the number and in the file name. This permits loading different configurations for different vending machines from one USB-flash drive.

To load the information insert the USB-flash drive into the controller board connector while in sales mode and confirm the **Load configuration?** request.

2. **General configuration:** File in the EVA-DTS format. Filename: CONF_GEN.DTS. The file can be loaded into the vending machine with any number.

To load the information insert the USB-flash drive into the controller board connector while in sales mode and confirm the **Load the main configuration?** request.

3. **Software updating:** To update the vending machine software visit the manufacturer's web-site <http://www.unicum.ru> and in the DOCUMENTATION section select on the opened page the necessary model of the vending machine for updating the software. Then on the opened page select the CONTROLLER FIRMWARE section, following which the file downloading to the computer starts. The files are downloaded in the form of an archived folder. To record these files to the USB-flash drive extract the folder and save the folder contents to the USB-flash drive root directory. In the archived folder, there are files for updating the vending machine software with the explanatory text files.

To update the vending machine insert the USB-flash drive with the saved files into the controller board USB connector. After these files are recognized by the controller the display will show the proposal to update the software.

To load the power board software confirm the request: Load shack software?

To load the controller board software confirm the request: Load software?

Editing the configuration files, as well as viewing the audit files is realized by using the special Unicum Vending Machine Tools program, which can be downloaded from the following link:

<https://uonline.unicum.ru/ef/tools/uVMTools.msi>



8.2 Service buttons (if provided by modification)

When the control compartment is pulled out, from above the control compartment the three service buttons + USB connector become available (fig. 8.1 pos. 2).

The buttons have the following functions:

- **Operator menu** - to enter the operator menu. Push and hold the button for 2-3 sec until the beep signal.
- **Menu technician** - to enter the menu technician. Push and hold the button for 2-3 sec until the beep signal.
- **Test** - the products giving out mode without payment (for testing the vending machine operation).
- **The USB PC connector** – for connecting the USB-flash drive to the vending machine PC (monoblock).

9.0 MAINTENANCE

The following section is a basic guide for the general maintenance and cleaning of the vending machine. Maintenance on the cooling unit may only be performed by trained specialist staff. Maintenance personnel must be made aware of the potential danger in touching hot metal parts.

9.1 Access to the maintenance area

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



Figure 9.1 - Access key

9.2 Preventive maintenance

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

- Check the vending machine and the surrounding area, check for signs of rust on the outer cabinet and obstructions in the air vents.
- Open the door and check there is no accumulation of water, signs of rust, and humidity around the corners.
- Check that the evaporator outlet is not blocked (condensed water in the evaporator must drain out towards the condenser pan).



- Periodically check the door seals. Should they be damaged, replace the seals immediately.
- Periodically check that the condenser is clean.
- Check that the evaporator fan and the cooling system work normally (the fan blades must be free from any foreign mater).
- Check that all the selections are correctly delivered.

9.3 Cleaning the vending machine

The vending machine should be cleaned in order to keep the machine in good working order.

In general, we advise that you:

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



CAUTION: NEVER USE PRESSURED WATER CLEANER OR WATER JETS!

9.4 Warnings

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

- Cut off the power supply to the machine
- Do not use blades or other sharp tools to scrape parts or components in the vending machine
- Do not clean the vending machine in direct sunlight or in high temperatures
- Cut off the power supply before cleaning electrical parts and/or parts protected by covers
- Do not use cleaning products other than those recommended
- All types of cleaning that require the use of liquids should only be carried out after disconnecting the machine from the mains power supply.



9.5 General cleaning operations

In order that the machine is in the best working condition it is important it is clean and well kept. Please follow the instruction below:

Cleaning of painted areas and removal of small scratches

Clean the Vendor with water and soap. The exterior may be waxed with any good automobile wax. Small internal signs of corrosion can be removed using sand paper and covering the surface with nitrocellulose lacquer. Paint splashes and grease or glazing compounds can be removed using solvent.

Cooling area

Be sure that all vanes and tubings are clean and air passage is free of any obstructions. Condenser and evaporator must be kept clean in order to achieve the full cooling performance. The condenser should be cleaned every three months with a vacuum cleaner and brush. Make sure that all fans and tubes are free and clean. Caution When working on the cooling unit: Do not touch the evaporator heater (on outdoor machines only). Contact can cause burns.

Product delivery exit

Keep the product exit clean and without deposits.

General precautions

Never use:

- Cleaning products that are chemically aggressive.
- Cleaning products that are abrasive.
- Never clean with blades or pointed objects.
- Before start of cleaning turn off power supply.
- Never clean at high temperatures or under direct sunlight.
- Do not wash with water jets.
- If using liquid detergent, turn off the power supply.



9.6 Recommended cleaning products

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

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



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

- Abrasive detergents
- Very alkaline or acidic detergents
- Benzene
- Petrol
- Acetone



10.0 STORAGE AND DISPOSAL

10.1 Storage

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

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

10.2 Disposal

Information about protecting the environment

Dispose of the packing in conformity with the recycling procedures.

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

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



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