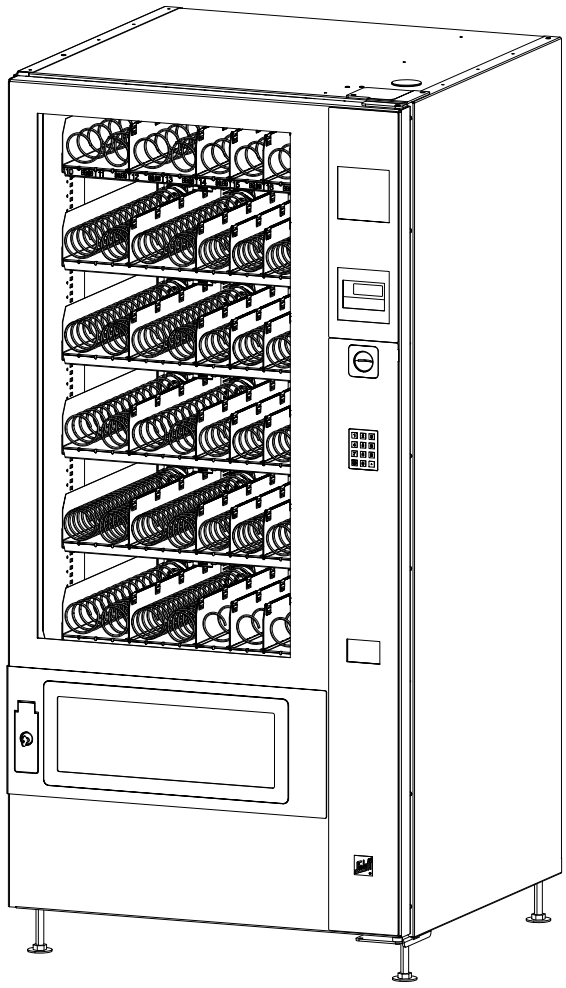
Original Operating Instructions

SN 48 EB04; SN 48 RB04



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1. General information

1.1 Manufacturer

Sielaff GmbH & Co. KG
Automatenbau Herrieden
Münchener Strasse 20
91567 Herrieden
Germany
www.sielaff.com
export@sielaff.de

1.2 About these instructions

Changes
The text, images and data in this operating manual reflect the technical status of the reverse vending machine at the time of printing. We reserve the right to make changes based on future development.

Completeness of the document
This document has a total of 48 pages. If all the pages are present in consecutive order, your document is complete.

Availability of the operating instructions
In order to ensure safe use of the reverse vending machine, the operating instructions must always be accessible to the operator. These should be readily available for referral at all times.
These operating instructions can be ordered from Sielaff or downloaded from the download area of our online customer centre:
http://www.sielaff.de/download-center/

Copyright

1.3 Support and service

If you have any questions about the product, faults or problems with the reverse vending machine, please contact the Sielaff service hotline. Always state the reverse vending machine type, number and software status. This information is essential for any claims regarding defects.

Sielaff service hotline	Telephone	+49 9825 18-31 51 02
	Email	service@sielaff.de
Spare parts orders	Telephone	+49 9825 18-31 52 50
Headquarters	Telephone	+49 9825 18 -0

1.4 Third-party documentation

Different payment systems can be installed in this vending machine, for example coin mechanisms, banknote readers or cashless payment systems.

Please note that special accessories may be required and special settings in the vending machine software may have to be changed in order to ensure error-free use of connected payment systems. Please refer to the additional third-party documentation of the respective manufacturer.

1.5 Performance features

The SN 48 is a spiral vending machine used to dispense pre-packaged, chilled fresh food items. Products that do not require chilling can also be dispensed by spiral vending machines as long as they fit into the spirals.

The vending machine is available in both Food and 2T Food versions.

A two-line (LCD) display provides selection and system information.

All vending machine functions are managed and checked via a microprocessor module. Sales and error data is stored on the control board.

In service mode the selection keypad is used along with the programming keys to programme the control board.

The vending machine is prepared for operation with a coin mechanism as standard.

SIELECTOR software for PC-supported programming, based on Windows, can be used to configure the vending machine. The software supports the duplication, creation, saving and printing out of all parameters.

1.6 Versions

Please note that these operating instructions cover different vending machine versions. For this reason, some information may not apply to your reverse vending machine.

This manual applies to the following versions:

Model	**Part no.**
SN 48 EB04	339 00 000 14
SN 48 RB04	339 00 000 34

1.7 Intended use

- The vending machine must only be used to sell self-service packaged food and similar items.
- No highly flammable or explosive products may be sold.

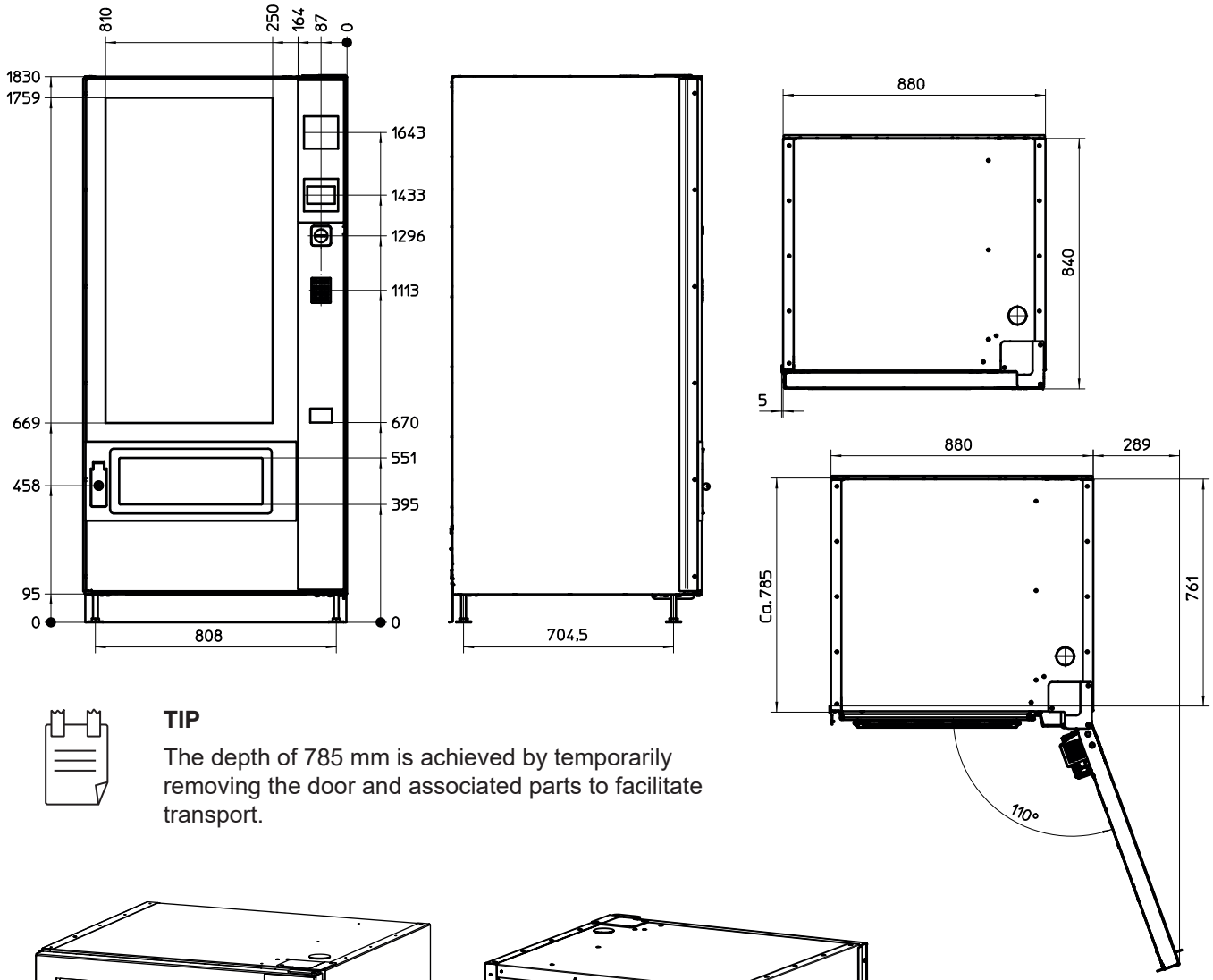
1.8 Terms of use

- This vending machine can be used by adults and children aged 8 and over.
- Persons with impaired physical, sensory or mental capabilities or with a lack of experience and knowledge can also operate the reverse vending machine if they are supervised or have been instructed in the safe use of the reverse vending machine and understand the associated hazards.
- Children should not play with the vending machine.
- Cleaning and maintenance must only be carried out by trained personnel.
- Only trained personnel are permitted to install, repair and modify this reverse vending machine.
- Use original spare parts only.

1.9 Technical data

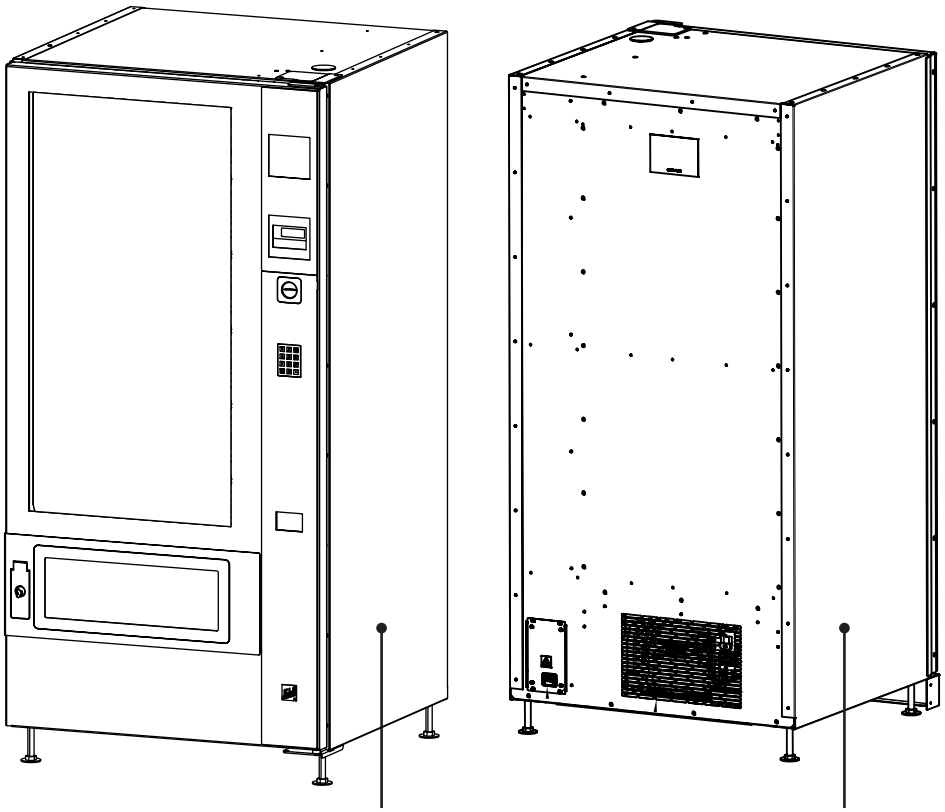
	SN 48	
Height [mm]	1830	
Width [mm]	880	
Depth [mm]	840	
Depth [mm] without door and seal (removed for transport)	785	
Weight [kg]	265	
Electrical connection	220-230 V, ~ 50/60 Hz (earthed socket)	
On-site fuse protection	10A (Characteristic B)	
Power consumption	see type plate	
Ambient temperature (in operation)	+16°C to +32°C	
Operating sound level	L_{pA} <45 dB(A)	
Uncertainty	K_{pA} = 6 dB	
The values were determined in accordance with European standard 60335-2-75:2004+A1:2005+A11:2006+A2:2008 +A12:2010 in conjunction with European standard ISO 11202:2010. The sum of the noise emission value and the associated uncertainty represents an upper limit of the values that can occur during measurements.		
Refrigeration unit (type)	SKA 415 [1]	SKA 705 [1]
Power [W]	400	650
Refrigerant	R290	R290
Filling quantity [g]	130	150
GWP	3	3
CO2 equivalent [t]	0.00039	0.00045
1) Contains propane gas, C3H8 in a hermetically sealed device		

1.10 Dimensions



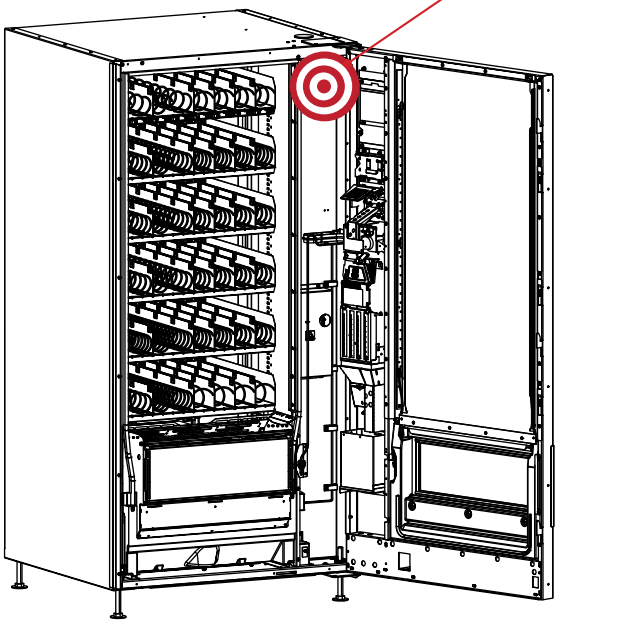
TIP

The depth of 785 mm is achieved by temporarily removing the door and associated parts to facilitate transport.



Side advertising decoration: 1727 x 768 mm

1.11 Type plate and serial number



If a refrigeration unit with R-290 is installed:
Symbol “Warning of flammable substances”

1.12 Requirements for vended products

- Weight of products: filled drawer must not exceed 15 kg or 40 kg for heavy-duty drawers (heavy loads only permitted on the lower 3 levels).
- The space diagonal for the product must not exceed 150 mm.
- Pack products so that they are not damaged by a drop height of at least 400 mm (max. 1300 mm).
- Pack products – foodstuffs especially – so that no ingredients (e.g. salt, vinegar, etc.) can escape. Otherwise, components of the vending machine may become contaminated and damaged due to recurring or prolonged exposure.
- Product suitability also depends on their shape and stability: prior suitability test is required.

2. Safety

2.1 Safety instructions

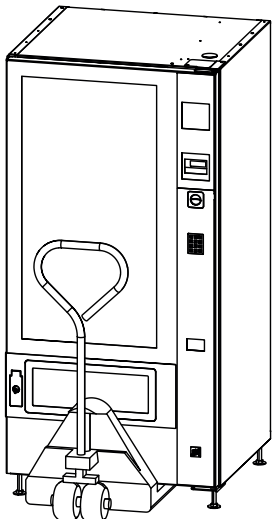
Only use the reverse vending machine if it is in perfect technical condition, for its intended purpose, in a safety-conscious and hazard-conscious manner and in compliance with the operating instructions.

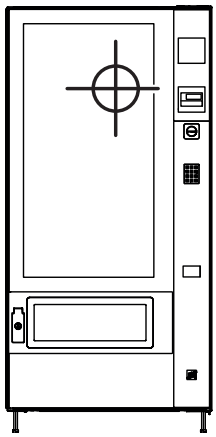
Instructions and warning signs

- Keep the operating instructions easily accessible at the place of use where they can be consulted at any time.
- Read the operating manual carefully and make sure you have understood it before commissioning the reverse vending machine. Observe the safety and warning instructions as well as the warning signs on the reverse vending machine.

Legal obligations

- The protective measures listed are not exhaustive. They also do not release the installer and operator from their obligations.
- The latest versions of all necessary country-specific regulations, such as laws, ordinances, safety regulations and other regulations, must be observed when transporting, installing, operating, maintaining, converting and repairing the reverse vending machine.





Transport and installation

- There is a risk of the reverse vending machine tipping over due to its high centre of gravity. Therefore, always proceed with caution and do not lower abruptly.
- If necessary, lash the reverse vending machines to the transport pallet and use goods lifts instead of ramps.
- Several people are required to transport and set up the reverse vending machine.
- Place the reverse vending machine on a level, stable surface and secure it to the wall or floor to prevent it from tipping over.

Access to the vending machine

- The door on the vending machine must be kept locked and only opened by trained personnel.
- Ensure that no living creatures can get into the reverse vending machine.

Hygiene

- To avoid health hazards from food and its residues in the vending machine, clean the vending machine thoroughly on a regular basis, ensure adequate ventilation and use suitable packaging.
- Only use authorized, food grade cleaning agents for cleaning.
- Adjust the frequency of cleaning accordingly at high ambient temperatures.

Mains cable

- Never insert the mains plug into the socket when it is wet or touch it with wet hands.
- If the connection cable is damaged, it may only be replaced by the manufacturer, their after-sales service staff or a similarly qualified person to avoid hazards.

Cooling with refrigerant R-290 (propane)

- The refrigerant circuit and the gas sensor installed in the cooling area must not be tampered with or damaged. Doing so would otherwise endanger persons and the area surrounding the vending machine.

What to do in the event of malfunctions

- In the event of malfunctions or defects in safety-relevant components (e.g. tripping of the safety switch, damaged cables or lines, etc.), the vending machine must be taken out of operation immediately until they have been rectified by a qualified person.
- If the vending machine suddenly switches off during operation or cannot be switched on, a defect in the refrigeration unit may have triggered the vending machine's safety switch. In this case, naked flames and glowing objects must be removed within a radius of 5m around the vending machine.

Repairs, maintenance and conversion

- The operator must carry out annual safety checks.
- Only trained personnel are permitted to repair and modify this reverse vending machine.
- Before repairing, maintaining or modifying this reverse vending machine, disconnect it from the power supply by pulling out the mains plug. Position the mains plug where it can be seen and checked during work so that it cannot be accidentally plugged in again by another person.
- Only trained personnel are authorised to use the service key. A protective device is bypassed when the service key is inserted.
- Modifying or converting the reverse vending machine without Sielaff’s approval is forbidden. SIELAFF does not accept any claims for material defects in these cases.

2.2 Explanation of signs and symbols

The reverse vending machine has been manufactured in line with current technological standards. Nevertheless, all vending machines pose certain risks that cannot be eliminated by design. To ensure adequate safety for the operator, additional symbols and warnings are used in the operating manual and on the reverse vending machine. These are explained below. Sufficient safety can only be guaranteed during operation if these are observed.

DANGER

Indicates immediate danger that could result in death or severe injury.

WARNING

Indicates a possibly dangerous situation that could result in death or severe injury.

CAUTION

Indicates a dangerous situation that could result in minor injury or damage to the reverse vending machine.

NOTE

Indicates information that must be observed to avoid damaging the reverse vending machine.

TIP

Information to facilitate handling and use of the reverse vending machine.

In addition, the following hazard and warning symbols are used in some places:

WARNING - electrical energy

Danger of electric shocks from live parts. Danger to life. Do not remove covers labelled with this symbol.

CAUTION – electrostatically sensitive components and assemblies (ESD)

Damage to electrostatically sensitive components and assemblies due to electrostatic discharge on contact. Do not remove covers labelled with this symbol. Observe ESD handling instructions. Only specialist personnel with ESD knowledge are authorised to carry out work.

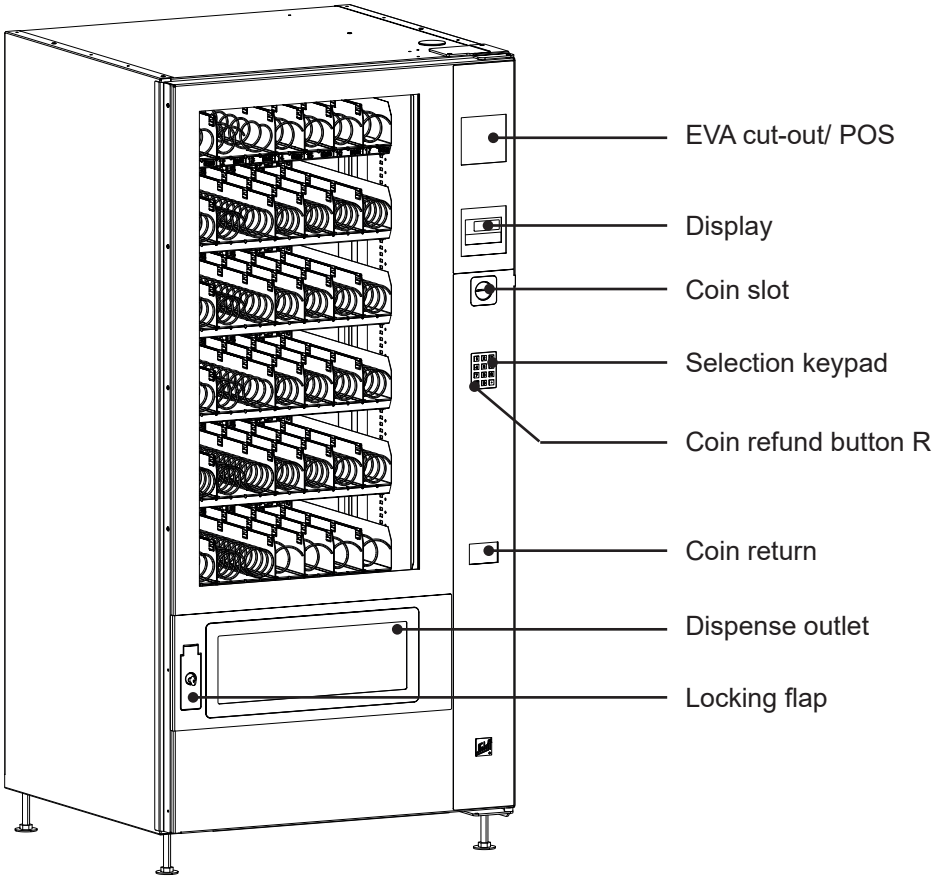
DANGER – flammable substances

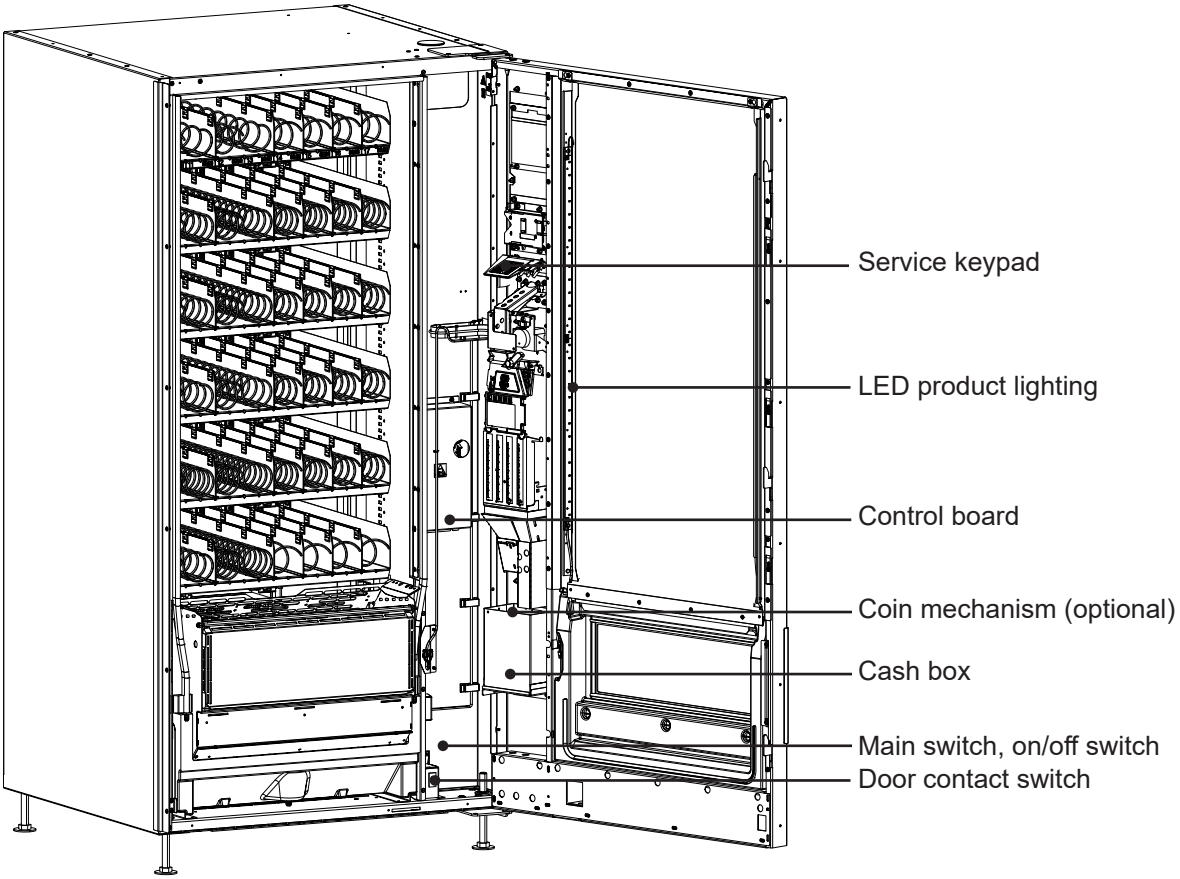
Flammable substances are highly combustible and can cause explosive fires. Danger to life or severe burns are possible. Keep ignition sources away when opening the vending machine door and ensure adequate ventilation.

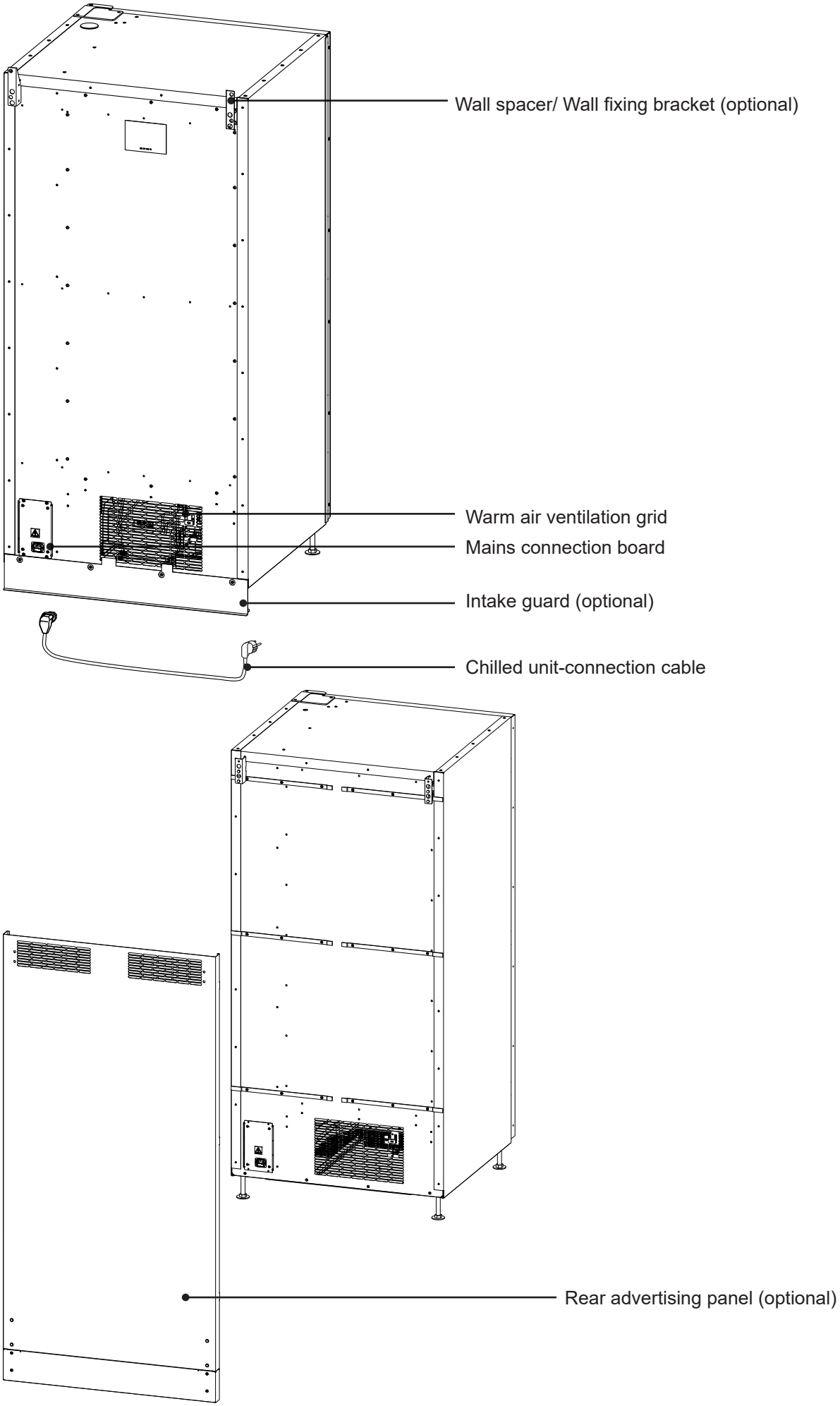
Wear protective gloves.

The product must not be disposed of together with household waste at the end of its service life and must be disposed of separately. Regulations may vary from country to country.

3. Reverse vending machine illustrations






Wall spacer/ Wall fixing bracket (optional)
Warm air ventilation grid
Mains connection board
Intake guard (optional)
Chilled unit-connection cable
Rear advertising panel (optional)

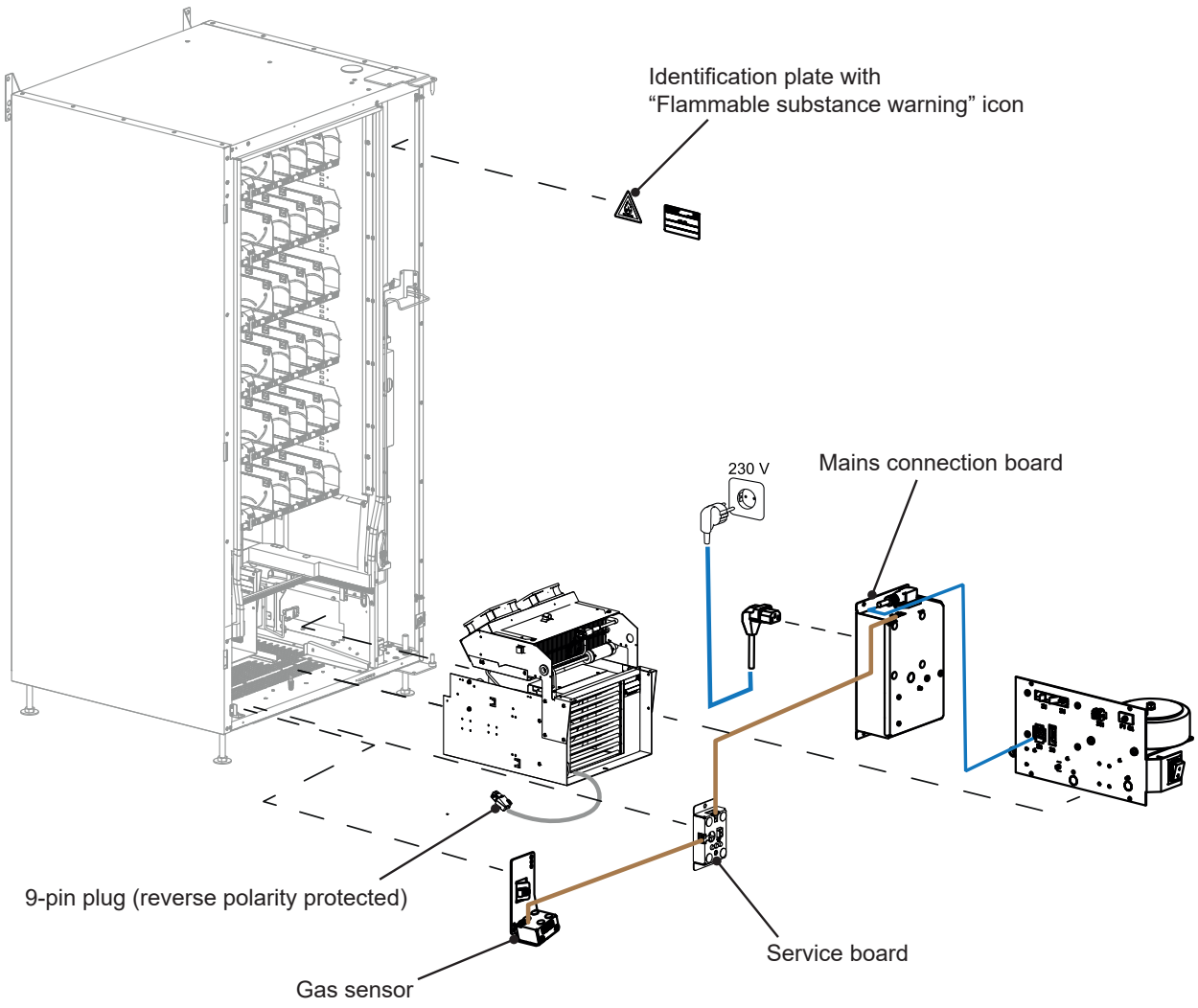
4. Optional components

4.1 R-290 refrigeration unit

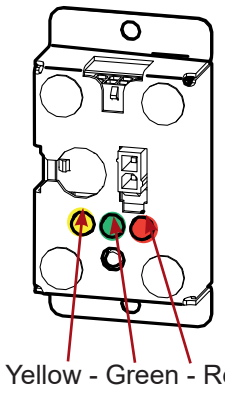
- For safety reasons, vending machines with refrigeration units using R-290 (propane gas, C3H8) as a refrigerant are equipped with a gas sensor system combined with a safety switch. In the event of refrigerant leakage from the refrigeration unit, an explosive mixture may occur inside the vending machine under unfavourable circumstances. In these cases, the safety switch ensures that the vending machine is disconnected from the mains supply in good time, which eliminates the occurrence any ignition sources inside.
- After connecting the mains plug or switching on the FI circuit breaker, the gas sensor safety switch requires approx. 2 minutes to start. The service board displays the current status (Page 15).
- If the vending machine does not start afterwards or the vending machine suddenly switches off during operation, a defect in the refrigeration unit and refrigerant leakage may have triggered the safety switch inside the vending machine. The vending machine may only be put back into operation by a trained person once the safety switch has been triggered.

DANGER – flammable substances

Flammable substances are highly combustible and can cause explosive fires. Danger to life or severe burns are possible. Keep ignition sources away when opening the vending machine door and ensure adequate ventilation.



Service board



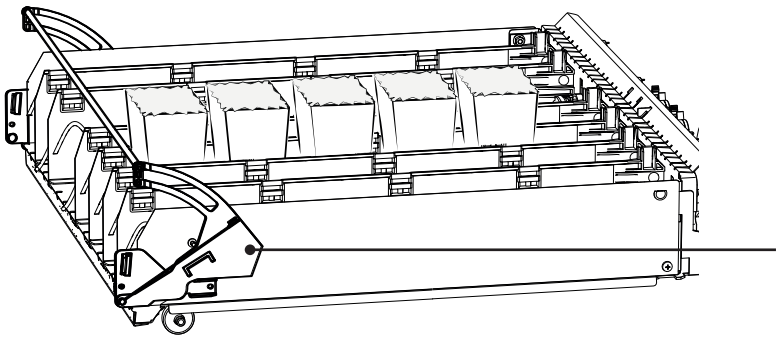
Red lights up 1 sec.
Self-test in progress

Red lights up permanently
Self-test failed

Green lights up permanently
Self-test successful

Yellow lights up permanently
The mains voltage for the vending machine has been enabled.

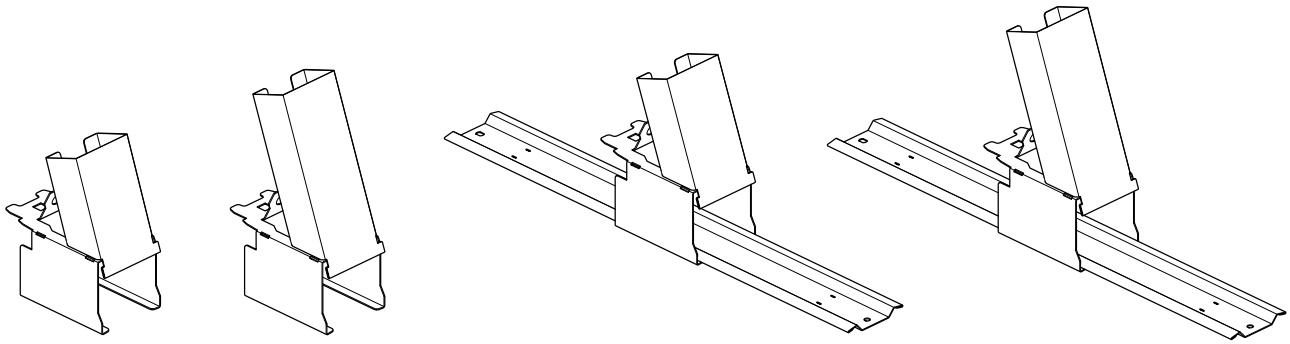
4.2 Product retainer swing (optional)



Product retainer swing (optional): for dispensing certain products that can be problematic when dropping.

4.3 Product holders for spiral drawers

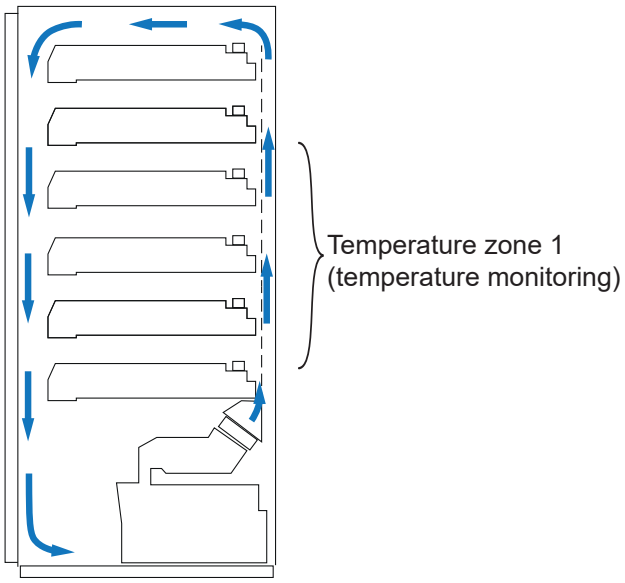
Various product holders are available for dispensing tall products from spirals. This prevents the products from falling backwards or slipping due to the high centre of gravity.
Move the product holder backwards to release it. It can then be pushed easily to the back.



4.4 Food or 2T food versions

Food version

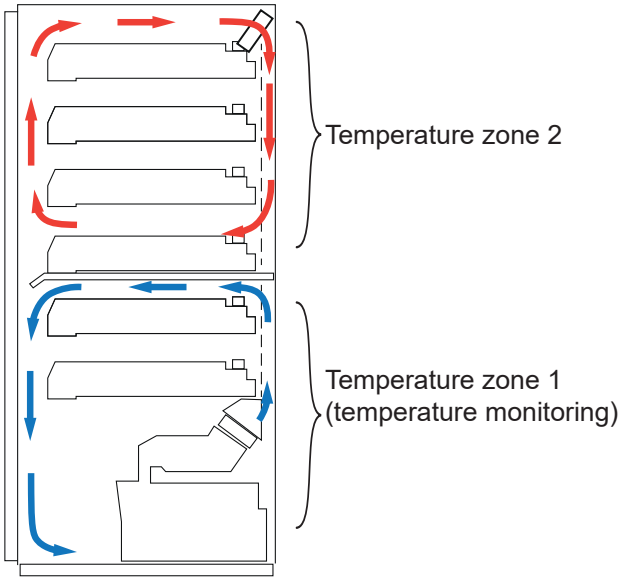
For food safety product storage the legal requirements regarding food product safety must be adhered to. The cold chain of the products must not be interrupted.

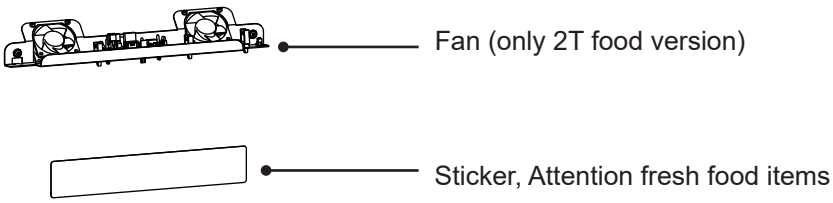


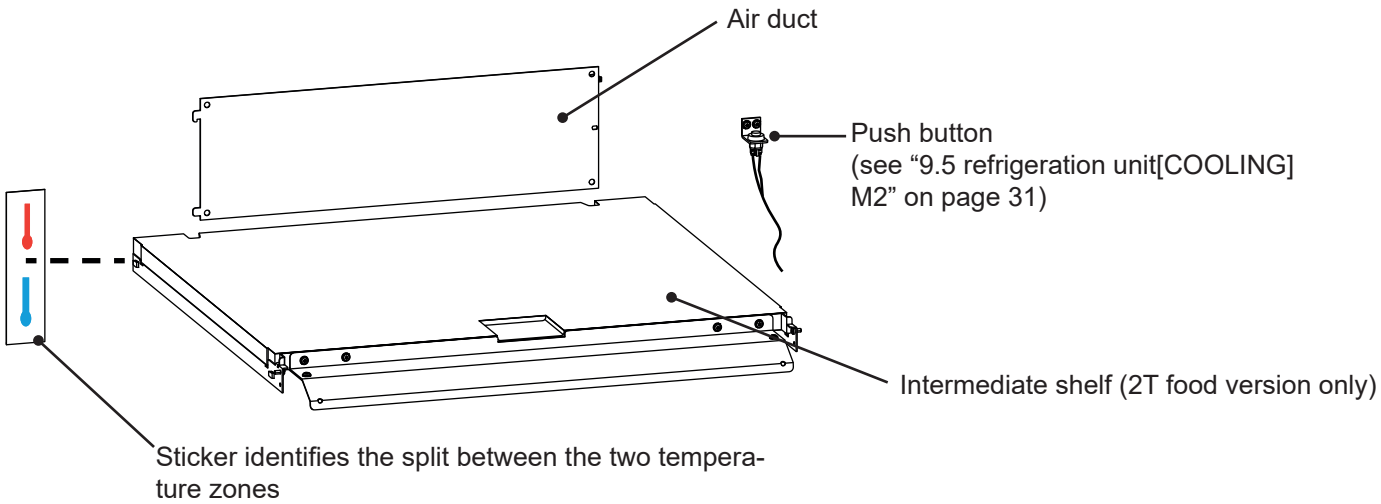
2T food version

For food safety product storage the legal requirements regarding food product safety must be adhered to. The cold chain of the products must not be interrupted.

The chilled area is split into two temperature zones by a separation shelf.







5. Commissioning

WARNING - Risk of tipping!

An unsecured reverse vending machine can tip over. Persons or body parts can become trapped. This will result in serious injuries. Always transport and align the reverse vending machine carefully and with the door closed. Then secure it to the wall or floor using suitable fasteners.

5.1 Installation conditions

Structural requirements

- Space required according to “1.10 Dimensions” on page 7
- Load-bearing, level and vibration-free installation surface
- Only install the vending machine in locations corresponding to its protection class. The vending machine’s protection class is shown on the type plate.

  IP20 The machine is suitable for installation in dry areas and within the limits specified for permitted environmental conditions (see Technical data).
- Maintain ventilation clearance between the back wall of the vending machine and the installation location
- Do not place vending machines with a R-290 refrigeration unit directly next to a depression in the ground (basement drain, pit, trough, etc.).

Power supply

- Electrical connection: Earthed socket, 230 V, 50 Hz
- Fuse protection: 10 A fuse
- No extension leads or multiple sockets permitted
- Mains plug must be accessible
- Fixed connection may only be established a qualified electrician

Radio systems

- Radio aerials inside the reverse vending machine (e.g. from cashless payment systems or telemetry systems) impair its function.
- Only install the aerials of such systems outside the reverse vending machine.
- Observe the manufacturer's instructions for using additional systems.

Ambient conditions

- Ambient temperature during operation: +2°C to +32°C
- Before commissioning the reverse vending machine, make sure that it has reached room temperature.
- Only suitable for dry areas that are **NOT** cleaned with a high-pressure cleaner or water hose
- The reverse vending machine must **NOT** be exposed to the following conditions:
  - Strong heat sources
  - Rapid temperature fluctuations
  - Permanent wetness or condensation
  - Air containing salt or chlorine (e.g. bathing areas in swimming pools)
  - Direct sunlight or strong light sources in the direction of the intake opening
  - Very dusty surroundings
  - Aggressive liquids or vapours

TIP

The glass panels of the vending machine may fog up in unfavourable weather conditions (high humidity, high outside temperature). This phenomenon is only temporary and not a reason for complaint.

5.2 Aligning the vending machine

The reverse vending machine must be correctly aligned to ensure the following:

- Level and stable position
- Height adjustment for vending machine stations
- Reverse vending machine door can be opened and closed without jamming

Procedure

1. Position the vending machine at its designated installation site.
2. Lift the vending machine.

→ Unscrew all levelling feet evenly. Distance from lower edge of side panel to floor approx. 9 cm.

3. Lower the vending machine.
4. Check whether the reverse vending machine tilts along axis B – C: Push the corner of the reverse vending machine in the direction of F2.

→ If the reverse vending machine tilts, screw in levelling foot B until tilting is no longer possible.

5. Check whether the reverse vending machine tilts along axis A - D: Push the corner of the reverse vending machine in the direction of F1.

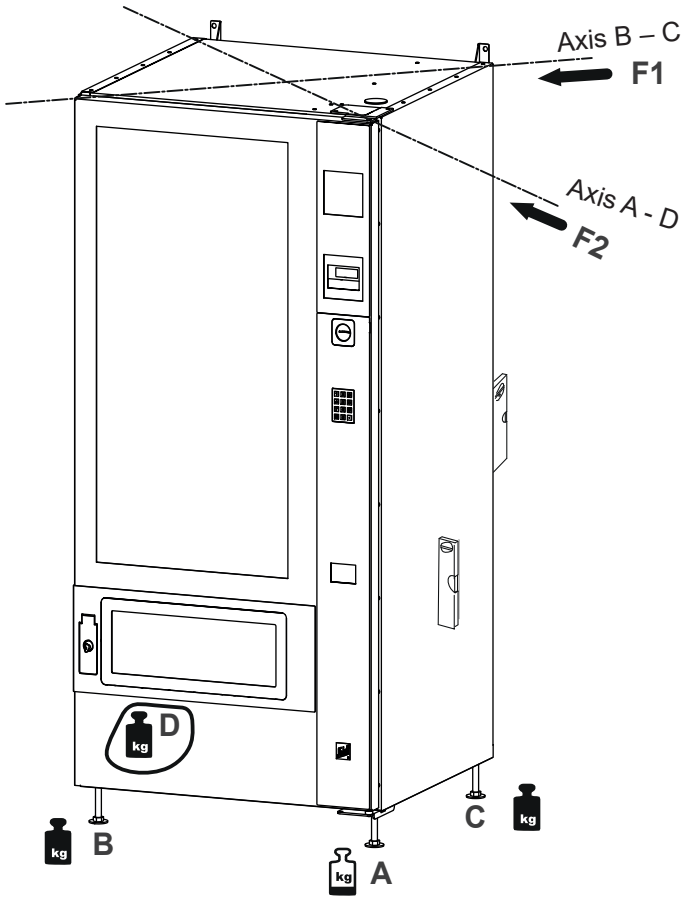
→ If the reverse vending machine tilts, screw in levelling foot A until tilting is no longer possible.

6. Place the spirit level on the rear panel and align the reverse vending machine using levelling foot A.
7. Check whether the reverse vending machine tilts along axis B – C: Push the corner of the reverse vending machine in the direction of F2.

→ If the reverse vending machine tilts, screw in levelling foot B until tilting is no longer possible.

8. Place the spirit level on the side panel and align the reverse vending machine using levelling foot C.

✓ The vending machine has now been aligned.



5.3 Readjusting the machine door

Despite correct alignment of the vending machine, the vending machine door may not open and close without jamming. In this case, it must be readjusted using levelling foot A.

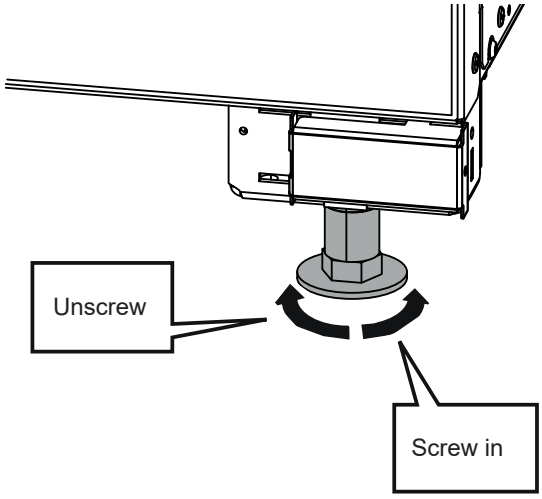
Additional equipment

- Second person
- Size 24 open-end spanner

Procedure

1. Screw in levelling foot A by turning it anti-clockwise until the reverse vending machine tilts along axis B - C when pressure is applied in direction F2 (see diagram, Page 18).
2. Push the corner of the reverse vending machine hard in the direction of F2. At the same time, unscrew levelling foot A clockwise until it reaches the floor.
3. Turn levelling foot A clockwise half a turn using an open-end spanner.

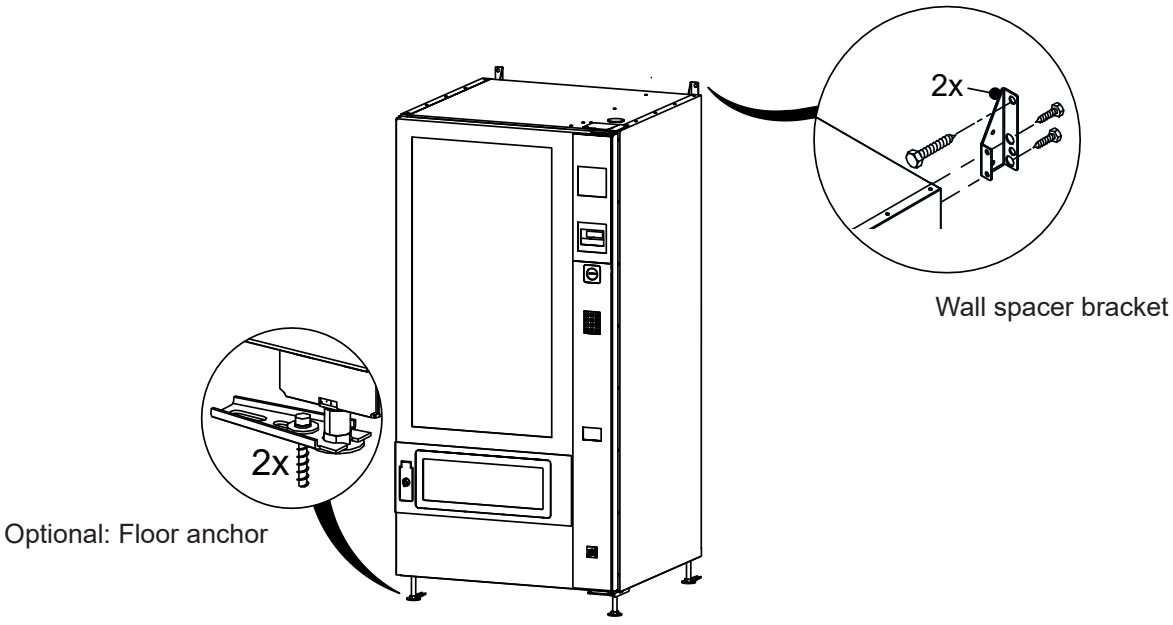
✓ The machine door should now operate smoothly and the reverse vending machine will be stable.



5.4 Attaching the vending machine

NOTE
Installations (pipes, underfloor heating etc.) in the wall or floor may be damaged when drilling holes to secure the reverse vending machine. Before starting work, check the location and obtain drilling approval.

- Use the supplied wall spacers for wall mounting.
- Use wall plugs and screws that are suitable for the material properties of the wall at the installation site (not included in the scope of delivery).
- Optional: Floor mounting with screw anchor (art. no. 603 02 639 00).
- Optional: Intermediate panels with wall bracket (part no. 707 50 050 00)



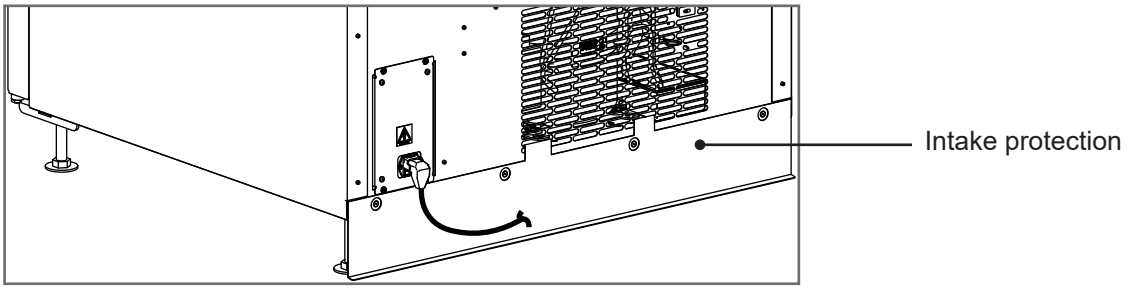
5.5 Attaching the intake protection and kickplates

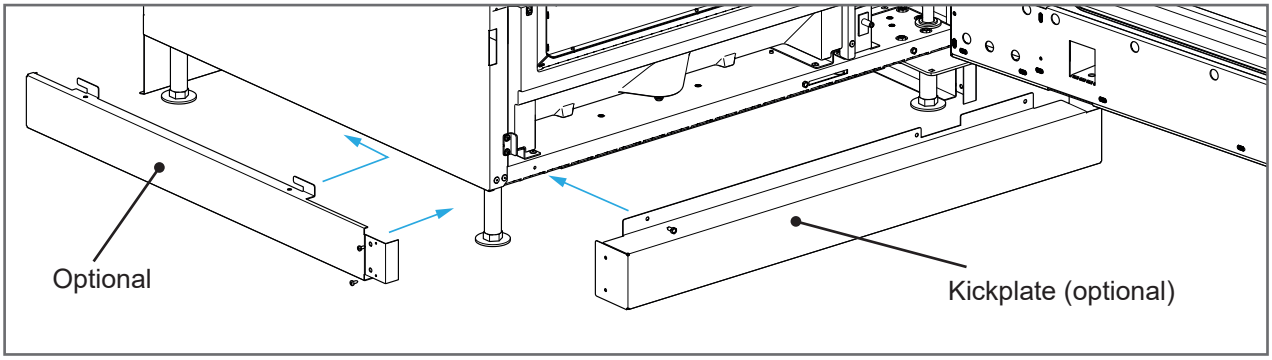
Additional equipment

- TX 20 bit

Procedure

1. Attach the intake protection at the back.
2. Optionally fit the kickplates at the side and front.





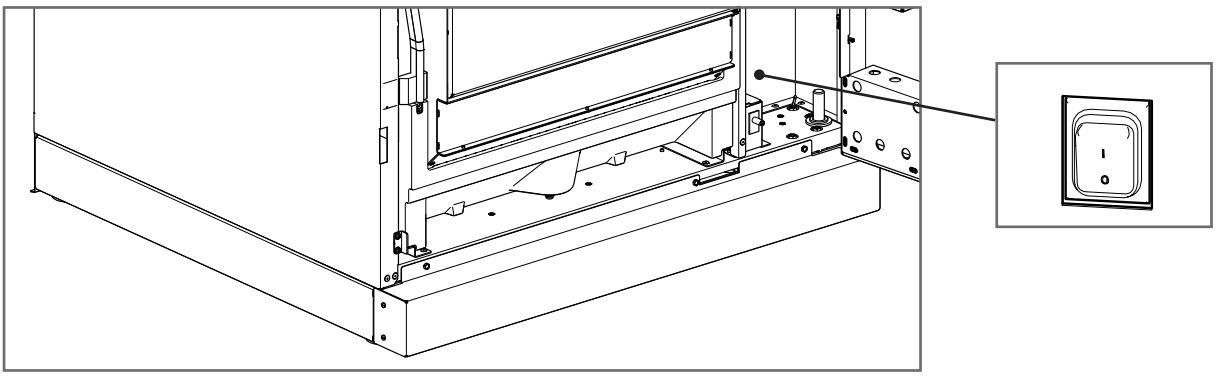
5.6 Electrical connection

Procedure

1. Open the vending machine door (good ventilation)
2. Insert the mains plug
3. Switch on the machine from the main switch.

→ Shut-off device for the safety shut-off needs approx. 2 minutes to start up

→ The vending machine is operational when [READY TO USE] is shown in the display.



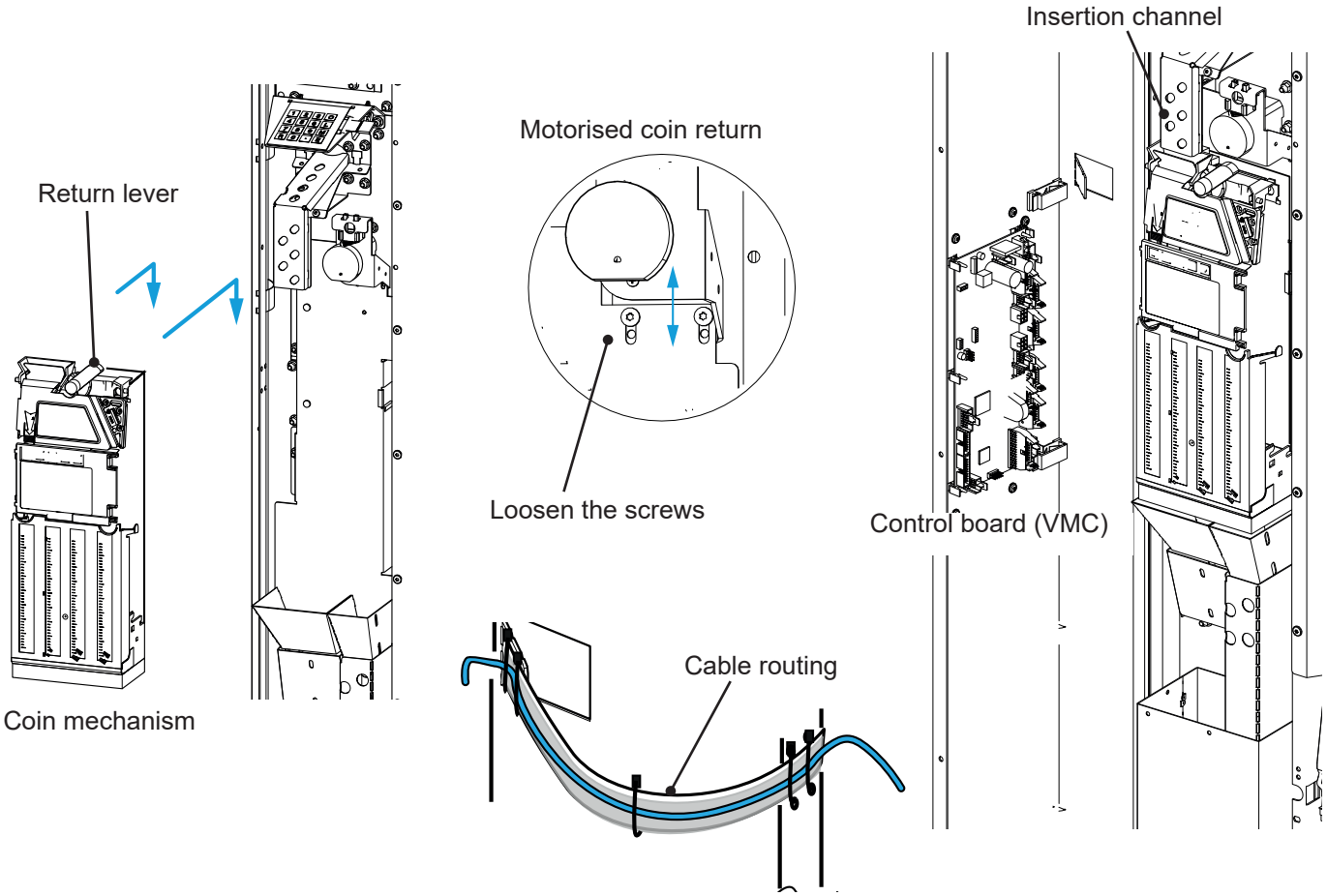
5.7 Installing the coin mechanism (optional)

- Most of the machines are set and tested at the factory for a specific protocol for the respective coin mechanism.
- The vending machine coin mechanism and the control unit (VMC) must be connected to the power supply. Various adapter sets are available (on request).
  - Example: Parts kit for Executive part no. 640 01 522 00 consisting of:
    Part no. 640 00 522 00 Cable connection power supply
    Part no. 640 00 523 00 Cable connection data bus
- The coin mechanism is usually installed at the customer's premises by the customer.

Procedure

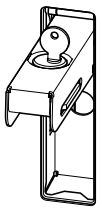
1. Observe the documentation of the coin mechanism manufacturer.
2. Fit the coin mechanism in the designated place and insert the locking screw if necessary.
3. Adjust the height of the motorised return so that the return lever on the coin mechanism is safely actuated by the eccentric disc when the return button is pressed.
4. Adjust the insertion channel so that the coins can fall properly into the coin slot of the coin mechanism.
5. Connecting the adapter set
6. Secure the cables between housing and door to the cable routing using cable ties.
7. Configuring the software;
   - Access menu [INSTALLATION] M7: [M] + [7] + [E]
   - Access [CREDIT SYSTEM] by pressing 1 x [M]. Press [E] to confirm
   - Press [1] to set the communication protocol, e.g. [Executive].
   - Press [E] to confirm.
   - Return to the main menu by pressing [M + L].

✓ The vending machine can be operated with the built-in coin mechanism.



6. Daily operation

6.1 Opening the vending machine door

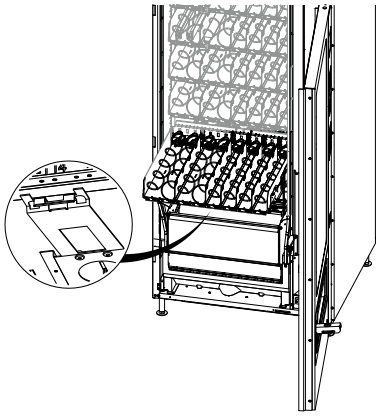


Procedure

1. Turn the lock.
2. Fold the locking lever upwards by 90°
3. Pull the locking flap.

✓ The door is now open.

6.2 Filling drawers



Procedure

1. Press the locking device underneath the drawer
2. it out.
3. Fill the drawer (pay attention to “Rules for filling the spiral” on page 22!).
4. Push the filled drawer into the vending machine until you hear a clear click.

✓ The container is now full.

6.3 Rules for filling the spiral

Product suitability

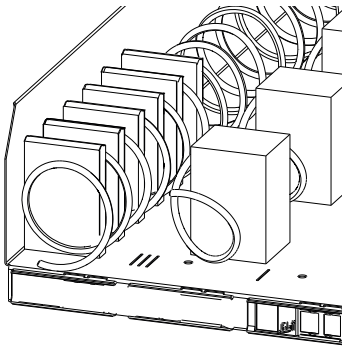
- The individual compartments are filled as shown in the documents enclosed with each vending machine.
- Only offer products that are suitable for the vending machine (observe “Requirements for vended products” on page 8!).
- The product height for a pusher shelf must be selected so that there is no contact with the shelf above.
- Each product should fall out of the drawer after half a turn of a spiral.

Filling process

- Do not pull out more than one pusher shelf at one time.
- Always fill the drawers from the back to the front to ensure that no position between two coils remains empty.
- Follow the first in, first out principle.
- Do not cover the selection and price labels.

Product positioning

- To avoid the spirals from jamming, the products must be able to move between the coils and rest loosely on the bottom of the drawers (not on the wire of the spiral).
- Always allow thin products to rest against the rear coil so that they do not inadvertently slide over the edge of the drawer in the foremost position.
- For thicker products, the spiral end must end in the middle at the top. For thinner products, the spiral end must end in the middle at the bottom (see “6.4 Spiral adjustment” on page 23).



6.4 Spiral adjustment

The position of all spiral ends can be adjusted to optimise product dispensing.

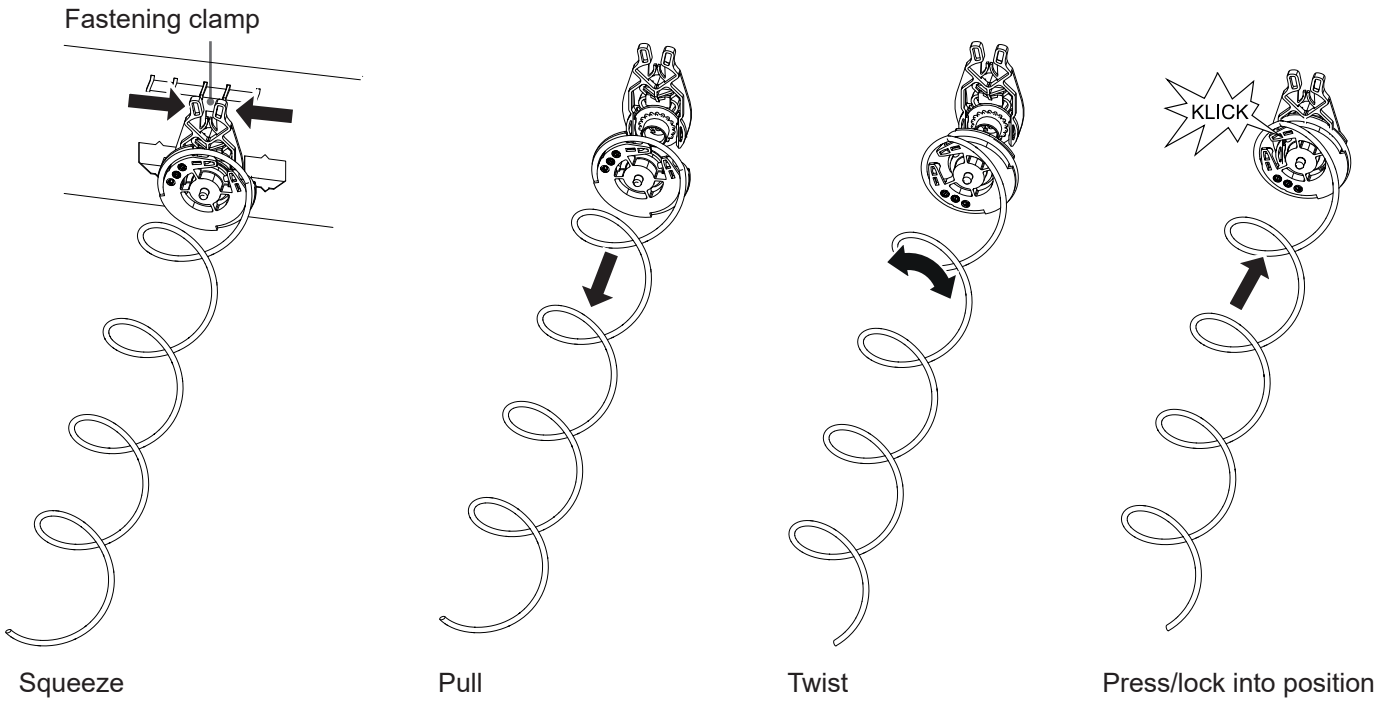
Procedure

1. Squeeze the fastening clamp at the back of the drawer.
2. Pull lightly on the spiral!

→ Spiral is free.

3. Release the fastening clamp.
4. Twist the spiral.
5. Push the spiral back until it engages automatically.

✓ The end of the spiral is now set



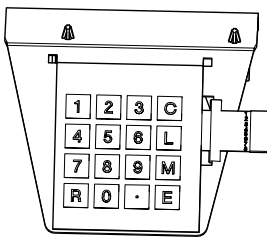
6.5 Filling the coin mechanism (optional)

On first-time filling approx. ten coins should be inserted into each coin tube (sleeping coins). The number of coins required depends on the coin mechanism that is used and the settings in the [INSTALLING MODE] menu.

Procedure

1. Press [M] - [8] - [E] - [E] one after the other.
2. Fill each tube with 10 coins.

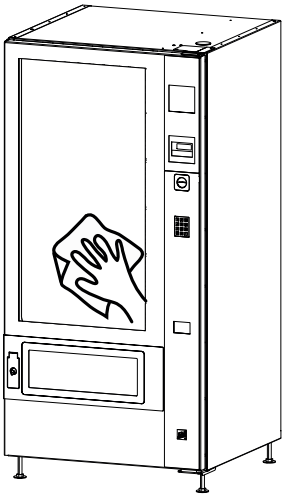
→ The coin mechanism counts the value of the coins inserted. Once the minimum quantity is reached, the control board is informed and the vending machine goes into vend mode.



7. Cleaning

Cleaning and, if necessary, disinfection should be carried out every time the vending machine is refilled and documented in a cleaning schedule.

7.1 Cleaning the vending machine front and exterior surfaces



NOTE

Sensitive surfaces can be damaged by aggressive cleaning agents and rough cleaning cloths or sponges. Only use water or a warm cleaning solution of water and mild washing-up liquid and soft, lint-free cloths for cleaning. Never wipe across the direction of grinding on ground stainless steel.

TIP

Stainless steel cleaning cloths are available under part no. 998 00 119 52.

Additional equipment

- Water / cleaning solution
- Cloth

Procedure

1. Clean the front of the reverse vending machine with a damp cloth.

7.2 Cleaning the interior

CAUTION – sharp edges

Risk of cuts due to sharp edges inside the vending machine. Wear cut-resistant gloves.

WARNING – health hazard due to chemical residues

Residues of unauthorised cleaning agents may cause symptoms of poisoning and other adverse health effects. Only use cleaning agents that are authorised for use in the food sector.

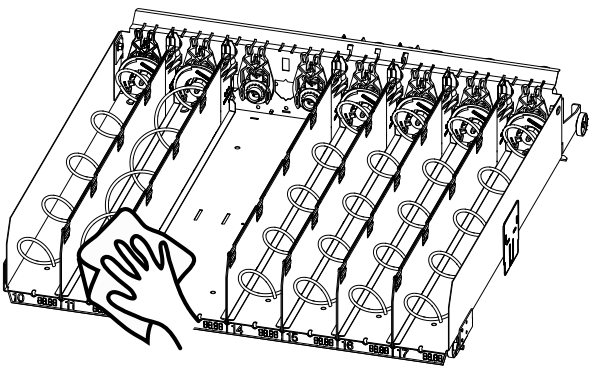
7.2.1 Clean the drawers

Additional equipment

- Water / cleaning solution
- Cloth

Procedure

1. Clean the drawers.
2. Clean the spirals.



7.2.2 Cleaning the dispense outlet

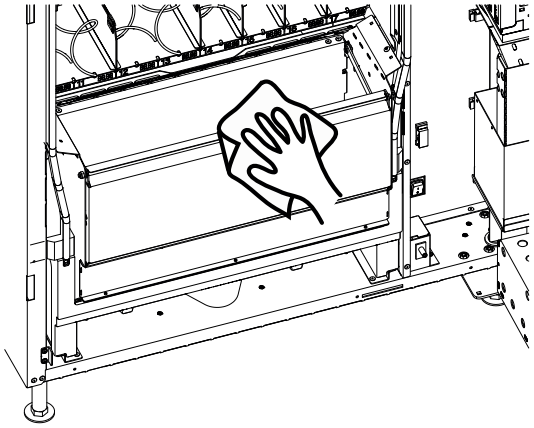
Additional equipment

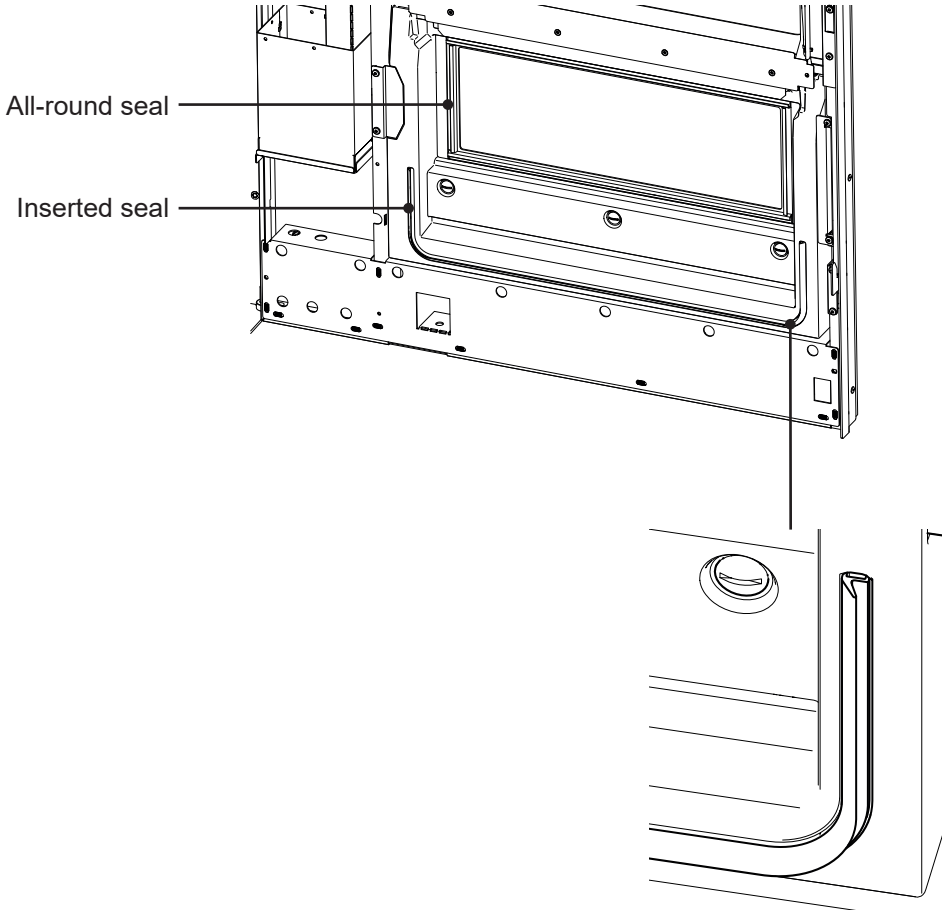
- Water / cleaning solution
- Two cloths

Procedure

1. Clean the dispense outlet with a damp cloth.
2. Clean the seal with a damp cloth.
3. Wipe parts dry with a dry cloth.

✓ The dispense outlet is clean.





8. Maintenance

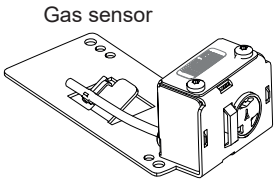
The operator must carry out and document regular inspections in order to operate the vending machine safely. If malfunctions or defects are detected, the vending machine must be put out of operation immediately until they have been rectified!

Component	Check	Interval
Gas sensor	Check for damage and clean Check operation	12 Months
Shut-off device	Check operation	12 Months
Temperature control (food version)	Check operation	Regularly

8.1 Gas sensor: Carry out a visual inspection and clean

Additional equipment

- Brush



Procedure

1. Check the gas sensor for possible damage.
2. Clean the gas inlet with a brush.

NOTE
Never clean the gas sensor with compressed air. Compressed air damages the sensor.

8.2 Gas sensor: Check function

Requirements

- The gas sensor must be accessible (gas inlet): remove the drawer if necessary

Additional equipment

- Standard stick lighter

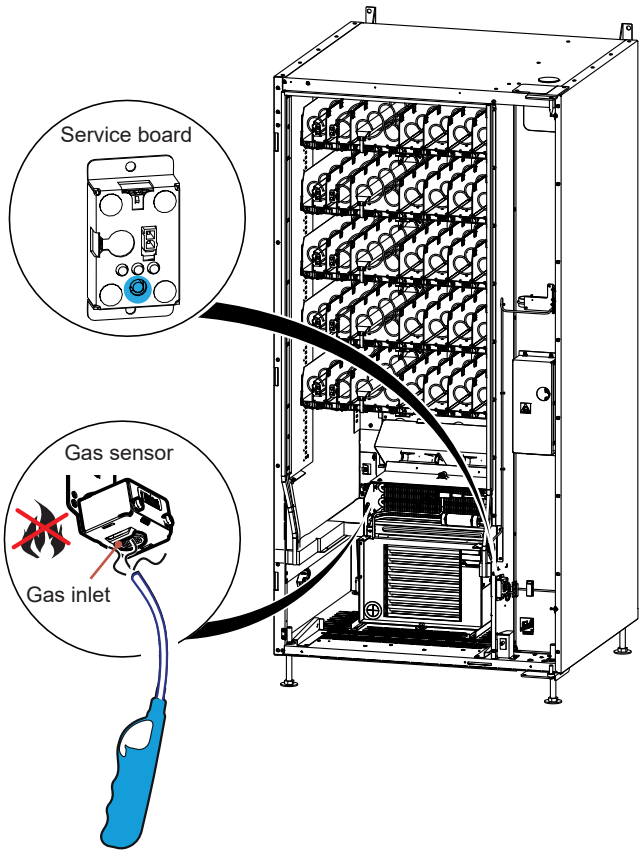
Procedure

1. Switch the machine on.
2. Ignite the stick lighter away from the vending machine (flame height 2 cm).
3. **Extinguish** the stick lighter flame while continuing to hold down the stick lighter actuator.
4. Hold the opening of the stick lighter in front of the gas inlet opening of the gas sensor for a maximum of 20 seconds.
5. Put the lighter to one side and wait a few seconds.

→ Shut-off device disconnects the vending machine from the mains. Display, vending machine lighting etc. switch off.

6. Wait a while until the safety switch automatically reactivates the power supply.

✓ The gas sensor function has now been checked.



8.3 Safety switch – check function

Requirements

- The vending machine is ready for operation.
- Yellow LED on the service board lights up (see the diagram on Page 26)

Procedure

1. Press the button on the service board for approx. 2 seconds.

→ Green LED lights up briefly. Self-test successful

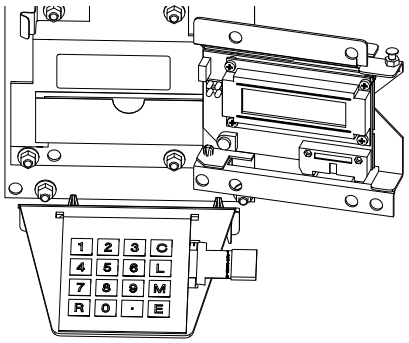
→ Yellow LED lights up: everything all right, vending machine ready for operation

or

→ Red LED lights up: Self-test failed

9. Software

9.1 Service keypad and display



Service keypad

When the vending machine door is open the service keypad can be accessed. The programming keys are labelled [C] , [L] , [M] and [E]. These buttons and the selection keypad are used to program the vending machine.
The display can be folded inwards for programming.

Service keypad extension

When fitting the banknote reader the display can no longer be folded back because it is blocked. For this reason there is a service kit (part. no. 339 50 155 00) which enables the service keypad to be operated from the front of the vending machine using a long ribbon cable.

The programming keys have the following functions:

Menu selection M0 to M9

	Programming keys	Note	Meaning
1 2 3 C 4 5 6 L 7 8 9 M R 0 · E	C	"clear"	Confirm error messages /delete data
	L	-	Scroll backwards in the menu
	M	"Menu"	Scroll forwards in the menu
	E	"enter"	Confirm entry, move to next menu item
	R		Refund button

Navigation

Select menu

The menus are used to set and change all modifiable values in the vending machine. The menus appear after the [M] button is pressed. The following information is displayed after pressing button [M].

```
CHECK
←L SEL. M→      :E
```

Change setting

- [1] change the selection in the respective menu

Access vend mode

- Press keys [L] and [M] at the same time
- Press refund button [R] (exits any menu)
- If no key is pressed; after approx. one minute the vending machine reverts automatically to vend mode.

9.2 Structure of the main menu

Exit	Display message	Security code	Function
M0	CHECK	-	Error display, Deletion of error messages
M1	PROGRAMMING MODE	B	Assign selling prices Entering product names for each selection key
M2	COOLING	A	Electronic monitoring of the chiller unit Chilling temperature and times
M3	TEST VEND MODE	A	Checking the allocations Checking the vend process
M4	SHOW STATISTICS	A	Display sales statistics Deletion of short-term statistics
M5	SHOW FULL STAT.	B	Display sales statistics Full statistics can only be deleted by the manufacturer
M6	PROG. TIME/LOCKS	B	Set time, date, inhibit times
M7	INSTALLATION	B	Setting country, currency, machine type, machine number, security codes, pre-selection times, credit system, vending mode, coin mechanism parameters, vending machine options, service telephone number
M8	SERVICE MENU	B	Test of vending machine components Reading of vending machine parameters
M9	TUBE INVENTORY	-	Filling and emptying coin mechanisms

9.3 [CHECK] M0

Delete error	Current vending machine errors are displayed as text in the [CHECK] menu. An up-to-date counter reading is displayed with each fault.
ERROR #001 CON. 4 BLOCKED	▪ Button [E] acknowledges the error messages. ▪ [C] + [E] deletes the error messages. ▪ If several faults occur at the same time, the next message will be displayed once the previous error has been acknowledged. ▪ Press refund button [R] to revert to vend mode.

Display error history	
ERROR C#002 CREDIT SYSTEM ?	▪ Pressing [M] + [1] + [E] one after the other displays the error history. ▪ Press [E] to scroll through the error history. ▪ Press refund button [R] to revert to vend mode.

9.4 [PROGRAMMING MODE] M1

Price	
[PRICE CASH]	The normal cash selling price of the product.
[HAPPY HOUR}	To use this price in the [INSTALLING MODE] - [CREDIT SYSTEM] - [HAPPY HOUR] menu the setting must be [on]. Various settings in [PROG.TIME/LOCKS] must be entered.
[PRICELIST]	To use two price lists the setting must be [on] in [INSTALLING MODE] - [CARD SYSTEM] - [PRICE LIST]. Then [PRICE LIST 1] and [PRICE LIST 2] are stored. This function depends on the card reader being used. [PRICE LIST] and [HAPPY HOUR] cannot be used at the same time.

Setting prices	
PROGRAMMING MODE CASH PRICE ↓E SEL 10:£ 4.00 ↓new price for key 10 SEL 10:£ 2.00 ↓E	▪ Press [E] to call up the selections in succession ▪ Use [L] to go back to the previous selection ▪ Using numbers 0 to 9, enter the new price and press [E] to confirm

Setting a standard price for all selections	The most frequently used price can quickly be programmed for all selections.
SET £ 45.00 CASH PRICE ↓new price +E SHELF ? 1-9 SURE ??	▪ When [CASH PRICE] appears press [M] ▪ Using numbers 0 to 9, enter the new price and press [E] to confirm ▪ Press [E] when the question [SURE ??] appears.

Age verification	Set [INSTALLATION] - [VENDING MACHINE] - [AGE VERIFICATION] to [active] in order to use the age verification function. This function depends on the document reader in use.
SEL 1 :£ 2.00 18+	▪ Using [R], access the options [OK+] [18+] [16+] ▪ [OK+] The product is sold without age verification. ▪ [18+] The product is sold after verifying a minimum age of 18 years. ▪ [16+] The product is sold after verifying a minimum age of 16 years.

Copying prices (from price list to price list)	A programmed price list (e.g. cash price) can be copied to another price list. To do this, [on] must be set in [INSTALLING MODE] - [CARD SYSTEM] - [PRICE LISTS] so that the two additional price lists are available.
[COPY PL 1] [TO PL 2]	▪ [PL 1] stands for [PRICE LIST 1] ▪ [PL 2] stands for [PRICE LIST 2] ▪ Press [E] to call up the selections in succession

9.5 refrigeration unit[COOLING] M2

Refrigeration unit	
[EL. COOLING?]	Press [1] to advise the control unit that the chiller unit is installed. Press [E] to confirm.
[AUTO SET?]	Standard settings are loaded by pressing [1]: Cooling temperature 16°C and raised temperature 16°C. Confirm with [E].
[TEMP.COOLING1] [NORM.] [PLU.]	▪ Using numbers 0 to 9 enter the required cooling temperature and press [E] to enter. ▪ [PLU.] stands for raised temperature which is reached outside the cooling time (energy saving effect)
[TEMP.COOLING 2]	Irrelevant in this case (only refers to a second chiller unit in an auxiliary machine)
[COOLING] [FROM TO]	[MO] stands for Monday, [TU] for Tuesday etc. Press [1] to select the weekday. Press [E] to confirm.
[COOLING TIME] [FROM] [TO]	Using 0 to 9 enter the hours and minutes. Press [E] to confirm.
[TEMP1/ STAT/ DUR.]	The current chilled zone temperature is displayed
	STAT stands for chiller unit status. An empty rectangle indicates that refrigeration unit is switched off. A full rectangle indicates that refrigeration unit is switched on.
	DUR. = compressor run time since last switched on.

Food version	
→ 6C	Vending machine is cooling down
← 6C	Temperature increasing in vending machine
£ 0.00 x I6C READY TO USE	The refrigeration chain has been interrupted, the temperature in the cool zone is too high. Remove products and press the red button for at least 20 seconds.
SORRY SOLD OUT TEMP. TOO HIGH	If a customer selects a product which is not sufficiently chilled, the vending machine prevents the product being dispensed.

9.6 [TEST VEND] M3

- The selected product is dispensed free of charge and recorded in the statistics memory as a test vend.
- If the vending machine is filled, the selected product will be dispensed.
- If a test vend is performed with a money card, the amount will not be debited from the card.

TEST VEND MODE	
[PLEASE SELECT]	Using numbers 0 to 9, enter the required selection and press [E] to enter

9.7 [SHOW STATISTICS] M4

- In the menu [SHOW STATISTICS] the sales statistics are displayed. These vend statistics can be used to stock product appropriately.
- If a [SECURITY CODE] has been entered, the statistics may be deleted by the operator via [CODE A].
- All non-zero values are displayed.
- The statistics are not actually deleted until the next vend.

Stat. Displays	
[MACHINE NUMBER]	The vending machine number is displayed.
[CASH]	Cash is displayed.
[SALES]	The number of sales made is displayed.
[CASHBOX CONT.]	The cashbox content is displayed.
[TUBES CONT.]	The tubes content for the coin mechanism is displayed.
[TEST VEND]	The number of test vends made is displayed.
[yes=1, no=0] [SHOW STATISTICS]	Press [1] to delete the short-term statistics. Press [E] to confirm.

9.8 [SHOW FULL STAT] M5

The [SHOW FULL STAT] menu shows sales since the vending machine was first commissioned. Full statistics cannot be cleared.

9.9 [PROG. TIME/LOCKS] M6

Locking times are flexible. The whole vending machine can be in operation or just individual selection buttons. In total, 4 locking times can be set.

PROG. TIME/LOCKS		
[TIME]	Use 0 to 9 to enter the time. Press [E] to confirm.	
[DATE]	Use 0 to 9 to enter the date. Press [E] to confirm.	
[off/on/time =0-2] [ILLUMINATION ?]	[off] the illumination is permanently switched off [on] the illumination is permanently switched on [time] the illumination is time-controlled	
[AUTO SET?]	Press [1] to accept the standard settings.	
[yes=1, no=0] [LOCKING?]	[0] Locking times not activated, vending machine is always operational. [1] Locking times activated, vending machine is locked out at specific times	
[AUTO SET?]	Press [1] to accept the standard settings.	
[LOCKING 4321] [MO ACTIV : 1111]	The 4 locking times are shown as activated in the diagram on the left [1]. To change; use numbers 0 and 1. A four-digit number must always be entered. A 0 under locking time no. 4 means: Locking time not activated. Press [E] to move to the next weekday.	
[LOCKING zjJHF--S] [SELECTION10 11111111]	Here you have the option of linking selection key functions with off-times. An eight-digit number must be entered. 0 = locking time not activated; 1 = locking time activated.	
LOCKING tyYHF--L SEL.1 00100000	z coupled with 1	Deactivates age verification for this selection during locking time 1
	z coupled with 0	Age verification not time-dependent
	j coupled with 1	If this option is selected, the lower age is checked (usually 16 years) if the age verification function is switched on
	j coupled with 0	If this option is selected, the higher age is checked (usually 18 years) if the age verification function is switched on
	J coupled with 1	Age verification function switched off for this selection
	J coupled with 0	Age verification function switched on for this selection
	H coupled with 1	During locking time, this selection is sold at Happy Hour Price.
	F coupled with 1	During locking time, this selection is set to free vend.
	S coupled with 1	During locking time, this selection is locked.

See also: Age verification function
[INSTALLATION] - [VENDING MACHINE] - [AGE VERIFICATION]

See also: Happy hour
[INSTALLATION] - [CREDIT SYSTEM] - [HAPPY HOUR]

9.10 [INSTALLATION] M7

Vending machine parameters are programmed in the [INSTALLATION] menu. There are 7 sub-menus.

No.	Sub-menu	Note
1	[> VENDING MACHINE]	Basic vending machine settings that affect dialogue with the user, e.g. language, age verification, locking codes, etc.
2	[> COOLING CONTROL]	Switches fresh food monitors on and off
3	[> CREDIT SYSTEM]	General settings for money changers, card systems and banknote readers
4	[> READOUT]	Configuration and statistical data readout
5	[> COIN MECHANISM]	Relates to the coin mechanism settings
6	[> CARD SYSTEM]	Settings for payment systems made by e.g. microtronic ®, fage ® coges ®
7	[> BANKNOTES]	Relates to settings on the banknote reader

[> VENDING MACHINE]	
[LANGUAGE]	Press [1] to change the language for text messages, press [E] to enter.
[CURRENCY]	Currency belonging to the country
[EXT. PROFILE]	The profile to be used is specified here. [EXPERT], [USER 0], [USER 1]
[AGE VERIFICATION]	[None] The age verification function of the vending machine is deactivated. [active] The age verification function of the vending machine is activated. For this purpose a document reader must be connected.
[VARIANT(1)]	The variant must be set in accordance with your vending machine version (see sticker on the inside of the vending machine). The control board needs to know what the configuration is. SN48 , 8 shelves, FS03 SN48 2T, 6 shelves, LM02 SN48 2T, 7 shelves, LM39
[FREE VEND MODE(1)]	If the sale is only to be accessible to specific customers (e.g. hotel foyer), the free vend mode can be switched on. Before making a selection the four-digit [FREE VEND CODE] must be entered. [FREE VEND TIME] is when goods are dispensed once the free vend code has been entered
[EXT. SERIAL. 5.2]	Set the readout function for vending machine data. [HMI] or [readout]
[MACHINE NUMBER]	The vending machine can be given its own vending machine number
[MACHINE NUMBER]	The serial number is located on the vending machine identification plate.
[PCB-SERIAL NUMBER]	PCB = Printed Circuit Board (circuit board) Nothing can be changed.
[SECURITY CODE] [CODE A IS:]	Managing the access to menus / access rights; Enter password; See “9.10.1 Password request (locking code)” on page 40
[SECURITY CODE] [CODE B IS:]	
[Tel. No. DC]	DC stands for data centre. The vending machine dials this number automatically. Telemetry connection is required for this.
[IN CASE OF DEF. TEL.]	If a fault occurs this number is shown to the customer in the display.
[SHOW TEMPERATURE]	With [yes] the cool zone temperature is shown in the display.
[TIME to DELIV.]	This is the time that the dispense outlet is open for the customer to remove the product.
ESCROW MOTOR (1)	[with] if the customer presses the refund button, the refund motor turns and prevents a possible jam.
[2 TEMP.SENS (1)]	Second chiller unit in auxiliary vending machines. Set to [no] here.

[> VENDING MACHINE]	
[LIGHT BARRIER (1)]	The light barrier in the dispense outlet recognises when a product has fallen.
[STORE EMPTY (1)]	[no] default [yes] If this setting is made, the control unit records the number of the shelf from which no product could be vended. If a customer selects the same number again to purchase a product [SORRY SOLD OUT] is shown.
[SHELF DETECT (1)]	[off] default (does not apply to this vending machine)
[HELIX STOP]	[Only by motor SW.] The spiral stops when the final position is reached. [by MotSW or LB] (LB stands for light barrier (light grid)) The spiral stops after reaching the limit switches. Or even if the limit switch has not yet been reached, if the light grid has been interrupted in the dispense outlet.
[HELIX MODE]	These settings only have an effect if [By MotSW or LB] is programmed under [HELIX STOP]. [Light barrier] The motor switch is ignored and the spiral continues to rotate for a maximum of 4 seconds. If the light grid has not been interrupted, the display shows [SORRY SOLD OUT] is shown. [Single turn] The spiral stops when the limit switch is reached or the light grid in the dispense outlet has been interrupted, whichever occurs first.
[PROMOTION RUN]	Does not apply to this vending machine.
[OPEN DOOR LIGHTS]	[on] LED-product illumination is on when the door is open.

[> COOLING CONTROL]	
[TEMP. MONITORING] [SHELF 1: 0]	The respective shelf can be switched on and off using the number button [1]. If 1 is set, fresh food monitoring is switched on. If 0 is set, it is switched off. Shelf 1 is on the top, shelf 6 at the bottom.

[> CREDIT SYSTEM]	
[CREDIT SYSTEM]	The communication protocol is set here. [Free Vend] - [BDV] - [Executive] - [BDV dual] - [MDB] - [Key system] - [MDB+EXEC] - [MDB+BDV]
[CRED. CONFIG.]	Setting the configuration for the coin mechanism automatically or manually. Some of the following fields appear only if you enter [MAN.CONFIG]. Refer to coin mechanism instructions.
[VEND MODE]	[NO CHANGE/SINGLE] After a coin has been inserted, at least one product must be purchased before coins are refunded. [CHANGE/SINGLE] Single vend: In the case of over-payment refunding is automatic following product selection. [CHANGE/MULTI] Refund: No product has to be purchased; coins are refunded if the process is aborted. In this setting, the vending machine may be misused as a coin mechanism (coin changer).
[ESCROW AUTOM.]	Refers to change given in coins [off] (default) [on] requirement: [CHANGE + MULTI] or [NO CHANGE + MULTI] is set in [VEND MODE]. Change is automatically dispensed (without pressing the refund button) as soon as the credit is lower than the amount set under [max. RETURN].
[HAPPY HOUR}	[off] (default) The function is deactivated. If you set [HAPPY HOUR] to [on], various selections can be sold at a different price during a specified time. The cash price and the Happy-Hour price are entered in the [PROGRAMMING MODE] menu [M1]. The Happy-Hour time and the selections it applies to are set in the [PROG. TIME/LOCKS] menu [M6].

[> CREDIT SYSTEM]	
[PRESEL. TIME]	During the time specified it is possible to make a selection before inserting coins. The selection remains until money is inserted. If 0 is set, money must first of all be inserted, then a selection made so that a vend can take place.
[CLEAR CREDIT]	180 s (default) This function enables an additional waiting time to be entered whilst non-returnable change is still displayed, before it is finally deleted. This might be required for contactless card payment systems, where the card is debited with the amount and it only turns out afterwards that the product requested cannot be dispensed. The time entered here gives the customer the option of reversing the charge by presenting their contactless card to the vending machine again.
[SESSION TIMEOUT]	For some card payment systems [CREDIT SYSTEM] instead of [VMC] must be programmed here.
[BLOCK CHANGE]	[from 255 coins] [CHANGE BLOCKED] can be set to prevent the vending machine from being used as a coin changer. The limit for changing can be set from 0 to 255 coins, where only the number of coins inserted are counted and not their value. Even if the [VEND MODE] is set to no change, the vending machine will change inserted coins up to the lowest sales price.
[EXEC VEND RETRY]	This value defines the number of retries for sales requests if the EXEC-changer does not respond.
[CASH SALE]	[MDB 42] (default) The Cash Sale command operates in accordance with the MDB 4.2 version.
[CORRECT CHANGE]	[automatic] (default) [EXACT MONEY] is shown in the display if there are insufficient or no coins available. For cashless payment systems, the display [EXACT MONEY] is suppressed with [never]

[> READOUT]	
[PROTOCOL]	[EVA-DTS] (default) Data transfer protocol between vending machine control board and payment system. [DEX/UCS]
[EVA-DTS VERSION]	[6.0 (5.x, 4.x)] (default) EVA-DTS Version setting.
[IRDA Adapter]	IRDA = Infrared interface [IRDA] EVA-DTS Data is downloaded via the integrated IRDA interface. [Cable] This setting is required if, for example, a DEX/UCS interface can be connected to the display and it will be used to read out EVA-DTS data.
[EVA/DTS SEL.No.]	You can determine how the selection numbers are reported to MDB here and in EVA-DTS. This setting has no effect on vending machines with selection numbers starting with 1. [starts with 1] (default) The lowest selection number in the vending machine is 1. [starts with 10] The number being transmitted is the one shown as the selection number on the dispense outlet.
[DDCMP BAUDRATE]	[AUTO] Infrared interface transmission speed.
[EXT. SERIAL 5.2]	Program vending machine data export function. [HMI] Export using HMI protocol [READOUT] Export using downloading devices.
[EXT.READOUT PROT]	[DDCMP] Export using DDCMP protocol [DEX/UCS] This protocol is only required if a display with DEX/UCS interface is connected. The vending machine must subsequently be restarted.
[CGW REPORTS]	[no] (default) Is only necessary if online modules compatible to "Verbose" are to be installed. Sielaff uses FTL mode for data transfer, which includes additional information on the NAMA standard Verbose.
[INTERVAL DT. CTL.]	(only when using EVA-DTS 6.1 Standard) [automatic] Once the statistics have been downloaded, they are deleted when the next vend is made (as before). [do not delete] The statistics are not deleted after downloading. Deletion must be started via IR.
[INTERVAL EV. CTL.]	(only when using EVA-DTS 6.1 Standard) [automatic] The errors are deleted once they have been read out and when the next vend is made (as before). [do not delete] The errors are not deleted after downloading. Deletion must be started via IR.
[DTS data select]	Fields can be switched on and off individually. The definition of the fields is described in the EVA-DTS specification. Fields: PA2 - PA3 - PA4 - PA5 - PA6 - PA7 - PA8 [on] Transfer is enabled. [off] The transmission of the corresponding field (e.g. PA8) is suppressed.

[> COIN MECHANISM]	
[TUBE FILL LEVEL]	[Coin mechanism] (default) Tube fill level is not counted by the control board, but by the coin mechanism. The tube level transmitted by the coin mechanism is what should be available for coin return. Please note that transmitting the tube level from the coin mechanism to the control board can take up to one minute.
[ALT. PAYOUT]	[on] The coin mechanism decides how the change is returned. For example, 20 cents can be returned as 2 x €0.10 or 1 x €0.20 or 4 x €0.05. [off] The control board determines how the change is returned. The number of coins dispensed is kept to a minimum.
[COIN 1 DIS.: GA] .... [COIN 16 dis.: GA] COIN 1 dis.: GE 0.05 0T:000	The coin can be disabled by linking keys 0 and 1. Its value (0.05 corresponds to 5 cents) and the number of coins in the tube or in the cashbox is displayed. Meaning of the letters: G - disabled, A - paid 0T - no coins in the tube 0C - no coins in the cashbox 00 The coin is always accepted. 10 The coin is generally not accepted. 01 The coin will not be accepted if [CORRECT CHANGE] is displayed.
[TOKEN 1 VALUE]	If the coin mechanism accepts tokens, you can program the values for up to three different tokens here.
[LIMIT COINS]	The minimum number of coins to the value shown that must remain in the coin mechanism is entered using the number keys. Using these settings the coin mechanism is filled or emptied in M9 [TUBE INVENT.] menu.
[HOPPER 1 VALUE]	The value of up to three hoppers can be entered here.
TUBES EMPTY INFO]	If the refund tubes are empty according to the logic link that is programmed here, the following message is indicated in the display [CORRECT CHANGE]. A → Tube with the lowest coin denomination
[BLOCK CHANGE]	[from 255 coins] [CHANGE BLOCKED] can be set to prevent the vending machine from being used as a coin changer. The limit for changing can be set from 0 to 255 coins, where only the number of coins inserted are counted and not their value. Even if the [VEND MODE] is set to no change, the vending machine will change inserted coins up to the lowest sales price.
[CORRECT CHANGE]	[automatic] (default) [EXACT MONEY] is shown in the display if there are insufficient or no coins available. For cashless payment systems, the display [EXACT MONEY] is suppressed with [never]

NOTE
Menu options [CHANGE BLOCKED] AND [CORRECT CHANGE] are also in the [CREDIT SYSTEM] menu; they interact with each other.

[> CARD SYSTEM]	
[ALWAYS IDLE]	For contactless card readers. [off] The card must be held against the contactless card reader at the same time as the product selection is being made. [on] Pre-selection of a product using contactless card readers is possible.
[PRICE LISTS]	This function depends on the card reader being used. [off] Price lists are disabled. [on] Two different prices for one selection can be entered here. The two prices are set in the [PROGRAMMING MODE] menu. This function can also be used for price lines in BDV/Executive. With this function, the prices are stored in the coin mechanism and the price line corresponding to the selection must be programmed on the control board.
[REVALUE]	Revalue = top up onto a card. This function depends on the card reader being used. [on] The amount inserted is credited onto the card. For this purpose, the card must be inserted before the money.
[MIXED PAYMENT]	[on] Mixed payment is possible (e.g. coins and card).
[MDB CARD 2]	[on] if a second card reader is connected.
[P.LIST / READER]	[L1+L2 -> all] Both price lists are valid for card 1 and card 2. [L1->R1/L2 ->R] Price list 1 is valid for card 1, price list 2 is valid for card 2.
[MIXED PAYM. PRICE]	[cash price] The [CASH PRICE] entered in the [PROGRAMMING MODE] menu is used. [cashless PL] The price entered in the [PROGRAMMNG MODE] menu is used for the corresponding [PRICELIST 1] or [PRICELIST 2].
[MDB-comp.mode]	[standard] Most credit systems work in this mode. [b. practice] (best practice) Additional information is transmitted in this mode. It is required mainly for future applications. Some credit systems already work in this mode.
[REFUND FAILURE]	How the vending machine is to react if an error occurs during product delivery is programmed here. [CLEAR CREDIT] this is the standard setting. The credit is deleted. [USE AS CASH] The amount is topped up on a card or key when it is allowed to do so by the card reader and [REVALUE] is set to [on]. If no card reader is connected, the amount is converted into cash. The credit remains for the amount of time programmed in [CREDIT LOST] in sub-menu [CREDIT SYSTEM].
[MDB ITEM NUMBERS]	Defines how selection number data is transmitted in Vend Request and other MDB commands. [Hex value] default. [BCD] Selection numbers are transmitted BCD-coded. Some card systems require this coding.
[CARD REMOVAL]	[before vend] The card can be removed before product delivery. [after vend] The card can only be removed after product delivery.
[CASH SALE]	MDB 42 (default) The Cash Sale command operates in accordance with the MDB 4.2 version.
[EVA/DTS SEL.No.]	You can determine how the selection numbers are reported to MDB here and in EVA-DTS. This setting has no effect on vending machines with selection numbers starting with 1. [starts with 1] (default) The lowest selection number in the vending machine is 1. [starts with 10] The number being transmitted is the one shown as the selection number on the dispense outlet.

[> BANKNOTES]	
[ESCROW]	Only with banknote readers: This function affects the method of refund if a vend fails. The banknote is held so that it can still be returned if necessary. [hold] If a vend fails the last banknote is returned. [stack] This means the banknote is stacked and the value is paid out in coins. Stack means that the cassette is stacked with notes.
[BANKNOTE 1 dis.:HG]	The banknote can be blocked by linking keys 0 and 1. Its value (5.00 corresponds to 5 Euro) and the number of notes is displayed. Meaning of the letters: [H] high security (high level of accuracy) [G] blocked 0T = no coins in the tube 0C = no coins in the cashbox [00] The banknote is always accepted. [10] The banknote is checked with a higher level of accuracy. [01] The banknote is not accepted.

9.10.1 Password request (locking code)

- To prevent unauthorised programming, the menus can be assigned a security code. The security codes are structured hierarchically.
- [CODE A] provides the lowest access level. It unlocks the [COOLING], [TEST VENDS] [SHOW STATISTICS] and [SHOW FULL STAT] menus. Code A is intended for personnel filling the vending machine.
- [CODE B] unlocks the [PROGRAMMING MODE], [SHOW FULL STAT], [PROG.TIME/LOCKS], [INSTALLING MODE] and [SERVICE MODE] menus.
- If you enter [CODE B], even if [CODE A] is requested, all menus can be accessed. The security codes can be freely selected from 0 to 9999.
- If [CODE A] is entered, [CODE B] has to also be entered. However, both codes can be the same.

SECURITY CODE CODE A IS: 0	Security code is set here i.e. programmed
CODE A ----	A menu locked using [CODE A] or [CODE B] requires the relevant code to be entered to obtain access. The digits are not displayed. After entering the code, press [E] to confirm.

9.11 [SERVICE MODE] M8

- [SERVICE MODE] provides support for locating errors and vending machine maintenance.
- Various functions can be tested and the coin mechanism emptied.
- The so-called service numbers are identified in the table below.

Procedure

1. Press [M] [8] [E] one after the other

→ [Serv.Number 0]

2. Press [2] [1] [L] one after the other to display the software version installed.

→ The software version is shown in the display.

3. Press [L] and [M] together.

→ This exits the menu

Service number	Display
1 – 85M	Checking the spiral containers
90M – 99M	Checking the bottle chutes
101 - 103M	Empty individual coins from the tubes of a 3-tube coin mechanism; if there are still coins in the tubes these must be removed using the coin mechanism service keypad. The information about which coin is assigned to which tube is shown on the identification plate on the coin mechanism.
105 - 109M	Empty single coins from the tubes of a 4- or 5-tube coin mechanism
111 – 113M	Empty all coins from the tubes of a 3-tube coin mechanism
115 – 119M	empty all coins from the tubes of a 4- or 5-tube coin mechanism
201M	Checking the chiller unit; Do not carry out this test several times in succession, because the compressor will no longer start against the pressure build-up.
202M	Check heater
203M	Check illumination
204M	Check evaporator fan
214M	Configuration reset; the containers are assigned to the motors in accordance with the vending machine type entered.
1L	Processor voltage display
5L	Check temperature and temperature sensor If a temperature of 99°C is displayed, the sensor or the lead from the control board is faulty. The reason could be a short-circuit or break.
21L	Software version display
22L	Control board run-time display
24L	The compressor run time is displayed in hours and minutes
29L	Display shows password entered
91L	Display shows all active MDB equipment

9.12 [TUBE INVENTORY] M9

In the [TUBE INVENT.] menu the individual tubes in the coin mechanism can be filled in accordance with number of coins set in [LIMIT COINS]. In addition, the coin mechanism can be completely emptied.

Fill tubes to limit

1. Press [M] [9] [E] one after the other

→ [Tubes EUR] [FILL TO LIMIT]

2. Insert coins until the corresponding notification appears

→ The coin mechanism is ready to use

✓ The coin mechanism has been filled.

Empty all tubes

1. Press [M] [9] [E] one after the other

→ [Tubes EUR] [FILL TO LIMIT]

2. Press [M]

→ [EMPTY ALL TUBES]

3. Press [M]

→ [EMPTY ALL TUBES/ARE YOU SURE?]

4. Press [M]

→ The coin mechanism dispenses all coins.

✓ The tubes are empty.

10. Storage, decommissioning, permanent shutdown and disposal

Storage

The vending machine should be stored in a clean and dry location. Use a suitable cover to protect it from dirt, humidity and damage.

Remove products and leave the vending machine door ajar to allow moisture to escape.

Decommissioning

The vending machine can be taken out of operation temporarily.

- Remove the mains plug from the socket.
- Remove the products.
- Leave the vending machine door ajar
- For details of how to put the machine back into operation, see Putting into operation.

Permanent shutdown

When the vending machine has reached the end of its service life, it is shut down permanently:

- If necessary, delete personal data from the machine.
- Remove the mains plug from the socket.
- Remove the mains cable.
- Remove and dispose of the batteries correctly.

Disposal

For proper disposal of the vending machine, please contact our customer service department on +49 9825 - 18 31 5108.

You can send the vending machine to the manufacturer (Herrieden headquarters, Germany) at your own expense. The manufacturer will ensure that it is disposed of correctly.

If you need to, you can ask the manufacturer to provide details of appropriate waste management companies so that you can arrange its disposal yourself.

This symbol means that the marked product must not be disposed of together with household waste at the end of its life. Instead, it must be separated and taken to a collection point for the relevant type of waste. Details may differ in your country.

11. Maintenance schedule

To keep unplanned vending machine downtime to an absolute minimum, we recommend adhering to the following maintenance schedule. Depending on the ambient conditions at the installation site, it may be necessary to adjust the maintenance intervals.

Every 30,000 vends - at the latest every 12 months

Housing, vending machine door

OK	Component	Additional equipment	Action/procedure
	Secure vending stand		Check
	Vending machine exterior	Cleaning and care products	Clean
	Vending machine door closes properly		Check
	Safety glass	Glass cleaner	Clean
	Bearing studs, vending machine door top and bottom	998 90 023 00	Lubricate
	Door seal, entire circumference		Check, clean and – if necessary – maintain
	Hook bar	998 90 023 00	Lubricate
	Bearing axle, locking pin		Lubricate
	Lock	According to manufacturer specifications	Lubricate
	Product lighting		Check
	Min 2.8V back-up battery for control board	Voltmeter	Check

Drawer

OK	Component	Additional equipment	Action/procedure
	Price/selection sign legibility		Check
	Interior of the drawer	Rinse water	Clean
	Snap-in function of the drawer		Check

Payment system

OK	Component	Additional equipment	Action/procedure
	Coin mechanism (optional)		According to manufacturer specifications
	Card reader (optional)		According to manufacturer specifications
	Banknote reader (optional)		According to manufacturer specifications

Dispense outlet

OK	Component	Additional equipment	Action/procedure
	Dispense outlet flap, freedom of movement		Check

Refrigeration unit

OK	Component	Additional equipment	Action/procedure
	Compressor	Brush, compressed air	Clean
	Condenser	Brush, compressed air	Clean
	Base plate ventilation slots		Clean
	Seals and sealing strips		Check
	Plugs and connections		Check
	Fan	Brush, compressed air	Clean
	Gas sensor (no damage visible)		Check
	Gas inlet on the gas sensor: Dust, dirt, moisture deposits	Brush, cloth	Clean
	Activate self-test		Check
	Test gas sensor with test gas	Test gas	Check

On request

OK	Component	Additional equipment	Action/procedure
	Electrical routine check in accordance with VDE 0701		Carry out

12. Index

EU/EC Declaration of Conformity for Machines

Sielaff GmbH & Co. KG
Automatenbau Herrieden
Münchener Str. 20
D-91567 Herrieden

We, the manufacturer, hereby confirm that the vending machine type specified below complies to the EC directive for machinery and the EU directive to electromagnetic compatibility in its design and manufacture relating to health and safety requirements as well as in conformity on the ecodesign requirements for energy-related products and on restriction of the use of certain hazardous substances in electrical and electronic equipment.

Any modification without our prior written consent to the machine specified herein, will automatically invalidate this Declaration.

Description: Confectionery machine
Machine Type: SÜ ... / FS … / SN ….

Aufkleber für Seriennummer

Aufkleber für Typenschild

EU/EC directives applicable:

EC machinery directive: 2006/42/EC
The following standards also apply:
EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A14:2019 + A2:2019

EU directive to electromagnetic compatibility: 2014/30/EU
The following standards also apply:
EN 55011:2016 + A1:2017 + A11:2020
EN 55014-1:2017 + A11:2020
EN 55014-2:2015
EN 61000-3-2:2014
EN 61000-3-3:2013
EN 62233:2008

EC directive ecodesign: 2009/125/EC

EU directive RoHS: 2011/65/EU

The objectives of the low voltage directive 2014/35/EU will be fulfilled in accordance with Appendix I, no. 1.5.1 of machine directive 2006/42/EC.

Authorised representative responsible for the documentation:
Mr. Dipl.-Ing. Manfred Murr, Head of Development, Sielaff GmbH & Co. KG, Münchener Str. 20, D-91567 Herrieden.

Herrieden, 02.01.2024			SIELAFF GMBH & CO. KG AUTOMATENBAU Postfach 20 91565 Herrieden Münchener Straße 20 91567 Herrieden ☎ 0 98 25 / 18-0 Fax 0 98 25 / 1 81 55
Place, Date	Mr. Robert Zahn Managing Director	Mr. Dipl.-Ing. Manfred Murr Head of Development	Company stamp

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