



SMEVA MARKET

Self-service cabinet

Remote / Plug-in version

Installation & Service Manual

These are the original English instructions

January 2022

Version 22.04

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1. ABOUT THIS MANUAL

1.1 DESCRIPTION OF THE USER

These instructions are intended for installers and maintainers of the Smeva Market. These users can be described as each person who interacts directly with the cabinet while (de)installing or maintaining the cabinet. The user typically includes, but is not limited to:

- ▶ Cleaning and maintenance personnel
- ▶ Installation and dismantling personnel

All use of the Smeva Market shall only be carried out by an authorised, properly qualified, and skilled person of 18 years or older, who:

- ▶ Has read and understood this manual
- ▶ Is familiar with operating similar equipment
- ▶ Knows how to install, control, service and dispose of this cabinet
- ▶ Is aware of all possible dangers and acts accordingly

The required cleaning, maintenance and/or inspection work as stated in this user manual is allowed by the aforementioned persons, unless clearly indicated when this is not allowed.

Personnel responsible for the operation and small maintenance tasks shall refer to the User Manual which forms - together with this Installation & Service Manual - an integral part of the cabinet.

1.2 RETAINING INSTRUCTIONS

Read and understand this manual and its safety instructions before using this product. Failure to do so can result in serious injury or death.

Follow all the instructions. This will avoid fire, explosions, electric shocks or other hazards that may result in damage to property and/or severe or fatal injuries.

The Smeva Market shall only be used by persons who have fully read and understand the contents of this user manual. Ensure that each person who uses the product has read these warnings and instructions and follows them. Keep all safety information and instructions for future reference and pass them on to subsequent users of the product.

This Installation & Service Manual, together with the User Manual, form an integral part of the cabinet. Smeva is not liable for cases of material damage or personal injury caused by incorrect handling or non-compliance with the safety instructions. In such cases, the warranty will be voided.








1.3 CONVENTIONS USED IN THIS MANUAL




The following style conventions are used in this document:

- ▶ **Bold**
Names of product elements
- ▶ *Italic*
Cross-references

1.4 EXPLANATION OF SAFETY SIGNS

The following safety signs are used on the packaging, product and in this document:

Symbol	Meaning
	Danger indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury
	Warning indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
	Caution indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
	Indicates information considered important, but not hazard-related.
	Follow instructions before use.
	Attention / Danger
	Danger: moving parts

Symbol	Meaning
	Danger: hot surface
	Danger: shock hazard
	Spray water prohibited

1.5 SAFETY INFORMATION

⚠ WARNING

- ▶ Read and understand this manual and its safety instructions before using this product. Failure to do so can result in serious injury or death.
- ▶ Installation and commissioning shall be carried out by a properly qualified and skilled installer with due observance of the applicable rules and legislation. The installer is responsible for employing skilled and qualified personnel.
- ▶ All connections to the cabinet, such as electricity, drainage and coolant pipes, must be carried out by qualified engineers. Commissioning should also be done by qualified engineers.

NOTICE

Do not remove any labels attached to the Smeva Market to avoid hazardous situations.

To guarantee optimum performance, personal safety and maximum product shelf life:

- ▶ Do not place any weight on the cabinet, other than on the loading surface;
- ▶ Never exceed the maximum product load;
- ▶ Never use the counter to climb in or on it;
- ▶ Do not lean against or hang on the cabinet;
- ▶ Regularly perform all necessary cleaning and maintenance procedures and instructions.

1.6 DOCUMENTATION AND INFORMATION

The latest version of this Installation & Service Manual, as well as the User Manual, is available at <http://www.smeva.nl>.

For service-related questions, information, technical assistance, ordering user instructions or spare parts, please contact us:


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5555 XC Valkenswaard
The Netherlands

Email: sas-products@smeva.nl
Telephone: +31 (0)40 207 3200
Internet: www.smeva.nl

1.7 PRODUCT IDENTIFICATION

Smeva B.V. J.F. Kennedylaan 27 5555 XC Valkenswaard Nederland	
Identificatienummer	----- Sect.1
Produktiedatum	1-1-2021
Type	Market 9*
Lengte	2.5 m
Koudemiddel	R744 GWP 1
Circuitvolume	8.2 dm3
Ontwerp druk	HP 61.0 Bar(o) LP 61.0 Bar(o)
Ontwerp temperatuur	60.0 °C
Bevat geen gefluoreerde broeikasgassen	
Aggregaat op afstand Hermetisch afgesloten	
Class 2014/68/EU	Art. 4.3
Module	A
Cert.-nummer	

Smeva B.V. J.F. Kennedylaan 27 5555 XC Valkenswaard Nederland	
Identificatienummer	----- Sect.1
Produktiedatum	1-1-2021
Type	Market 9*
Lengte	2.500 m
Spanning	~ 240 V
Frequentie	50 Hz
Electrisch vermogen meubel	0.07 kW
Electrisch vermogen dooling	1.00 kW
Overstroombeveiliging	16 A
Class 2006/42/EG	
Cert.-nummer	



Should information be required concerning a particular component or if a component is defective, copy the information shown on this label and pass it on to your installer. This will ensure rapid rectification of the problem.

2. ABOUT THE SMEVA MARKET

Congratulations on your decision to purchase the Smeva Market. The name Smeva is your guarantee of quality and reliability. The Market is a chilled, self-service cabinet with open service access, available in a variety of designs, based on two versions: a remote version and a plug-in version. The plug-in version has an integrated cooling system. The remote version is connected to a central cooling system for multiple units.

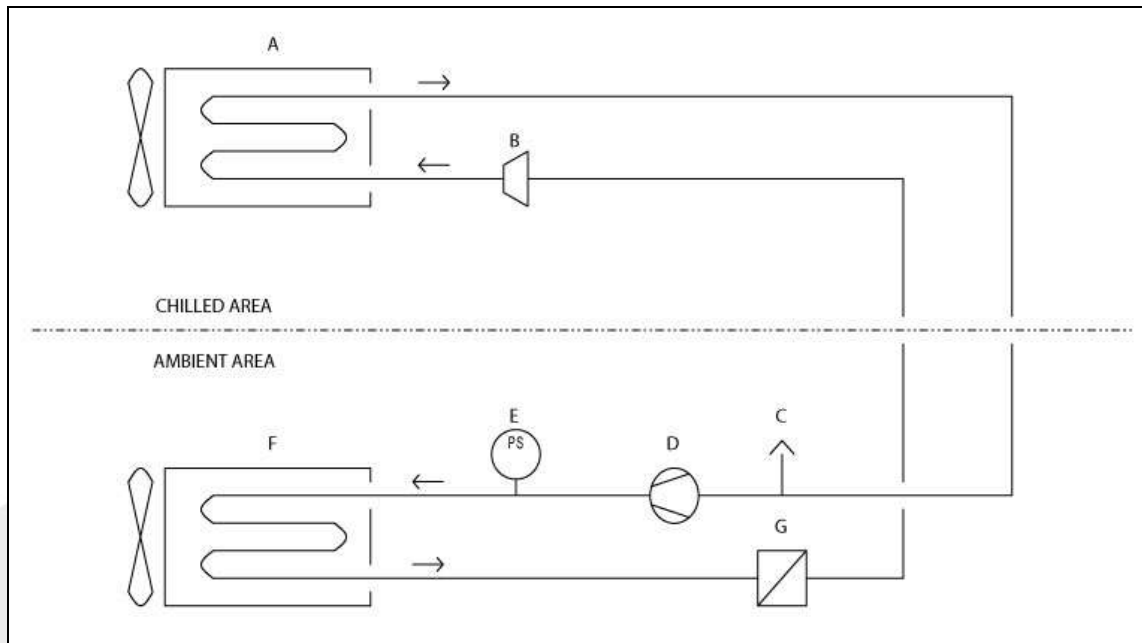
2.1 INTENDED USE AND REASONABLY FORESEEABLE MISUSE

The Market is intended to be used as a display of cold pre-packed goods. The Market is not designed to cool down goods.

The Market is intended for indoor use only and shall only be used with the original accessories and components. The Market shall only be used in accordance with the instructions described in this Installation & Service Manual, and the User Manual. Any use other than those described in these documents is considered as unintended use. Unintended use will invalidate the warranty.

2.2 PROCESS OVERVIEW


The remote version of the Smeva Market is connected to a central cooling system (CCS). The CCS controls and supplies all machines connected to it.



A	Evaporator + Fan	E	High-pressure switch
B	Capillary	F	Condenser vertical
C	Schrader	G	Filter / Drier
D	Compressor		

2.3 TECHNICAL DATA

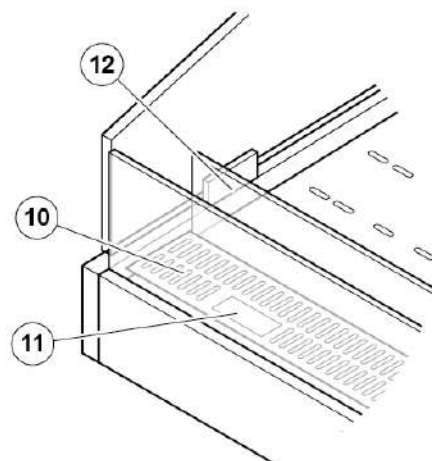
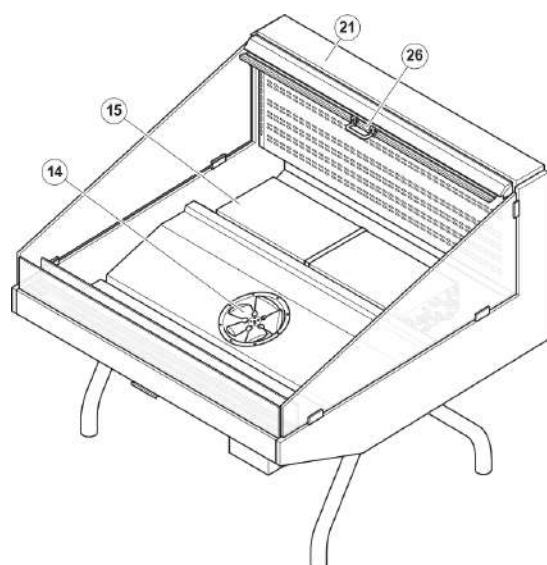
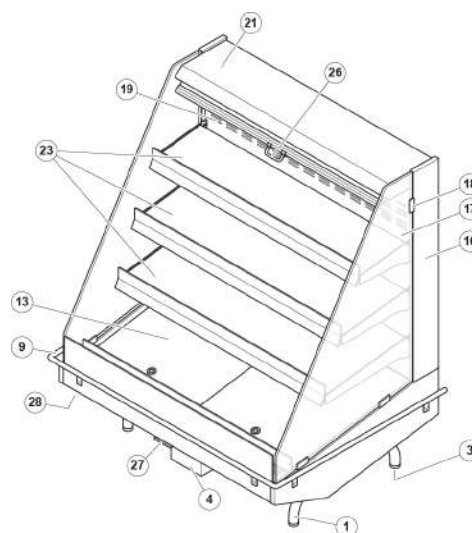
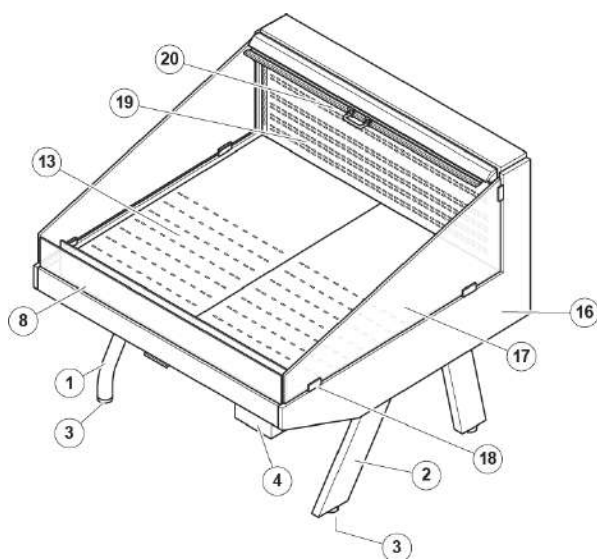
Model	Market
Version	Remote / Plug-in
Weight	190 - 630 kg
Product temperature	(3M1) 25°C - 60% RH - 1 ↓T ↑+5°C
Evaporation temperature	-10°C (at 20°C ambient temperature)
Cooling capacity	880 - 1100 W/m
Length measurements	Minimum 1250 mm to maximum 3750 mm, with a module size of 625 mm.
Presentation depth	730 / 1051mm
Inclination angle(s) of the display platform	2° / 9°
Maximum loading weight shelves	60kg/m, or 90kg/m with reinforcement strips
Inclination angles of the shelves	0° / 7.5° / 15°
Height rear	Maximum 1500 mm
Height front	Minimum 600 mm
Height window	Front window 140 mm
Voltage	230 Volt 50 Hz

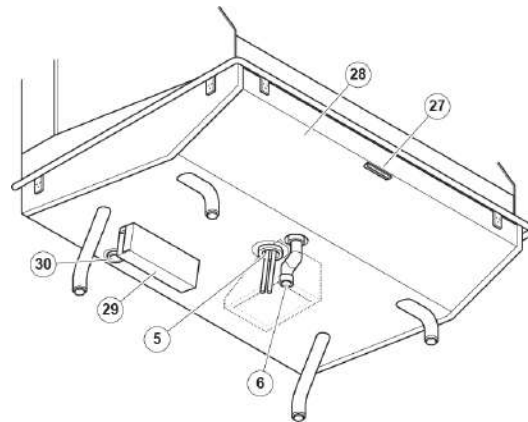
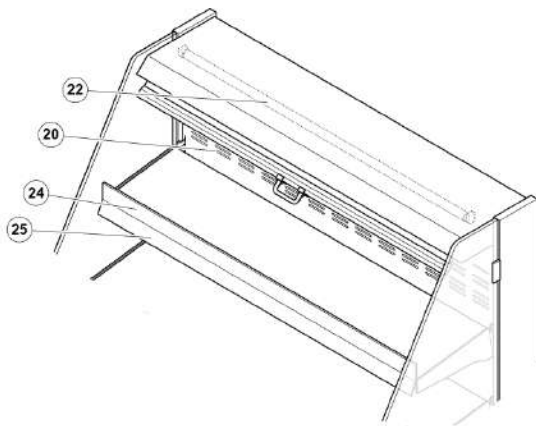
Temperature controller	Carel / Danfoss (variants upon request)
Light source	LED lighting in shelves and/or deck (optional)
Refrigeration technology	Dynamic cooling
Refrigerant	<ul style="list-style-type: none"> ▶ Remote: R744/R448a/R449a/R134a (other refrigerants available upon request) ▶ Plug-in: R 290 / R433a
Materials interior	<ul style="list-style-type: none"> ▶ SAE 304 ▶ Powder-coated galvanised steel ▶ Tempered glass
Materials exterior	<ul style="list-style-type: none"> ▶ SAE 304 ▶ Powder-coated galvanised steel ▶ PVC ▶ HPL ▶ Tempered glass
Energy label	 <p>The information on the energy class (Ecodesign 2019/2024 and Energy Labelling 2019/2018) reported here refers to precise product configurations. Any other different configuration than the one presented on the website may significantly change the energy class information. For more details, please consult the European Product Database for Energy Labelling (EPREL) or contact our Sales Office.</p>

2.4 PRODUCT COMPLIANCE

This product complies with all relevant European Directives. The Declaration of Conformity can be found in *Appendix II - Declaration of Conformity*.

2.5 PRODUCT ELEMENTS





- | | |
|----------------------------------|----------------------------------|
| 1. Supports cylindrical | 16. Gable-end |
| 2. Supports rectangular | 17. Gable-end glass |
| 3. Adjustable feet | 18. Glass holder |
| 4. Pipe cover (optional) | 19. Air-outlet grille |
| 5. Drainage passage | 20. Honeycomb outlet grill |
| 6. Refrigerant piping passage | 21. Canopy |
| 7. Front glass | 22. Canopy lighting |
| 8. Bumper (plastic) | 23. Shelf |
| 9. Bumper rail (stainless steel) | 24. Product stopper |
| 10. Air-inlet grille | 25. Price rail |
| 11. Temperature read-out | 26. Night curtain |
| 12. Product stopper | 27. Night curtain cassette |
| 13. Bottom plate | 28. Product identification label |
| 14. Fan plate | 29. Control panel |
| 15. Evaporator coil | 30. Cable passage |

2.6 CONTROL PANEL AND CONTROLLER

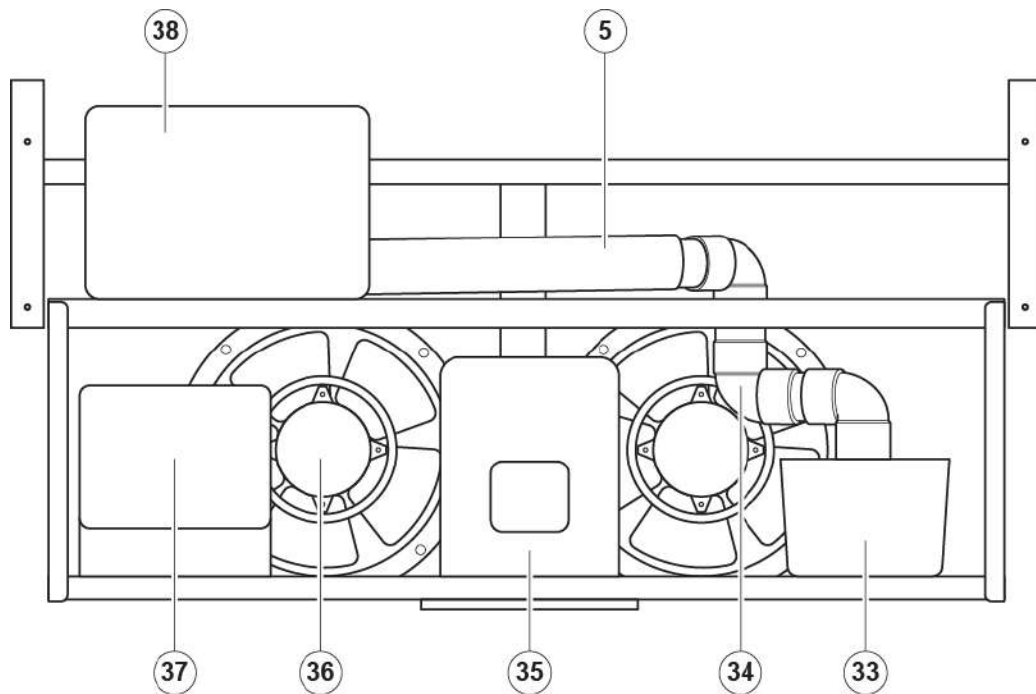
NOTICE

Depending on its version and requirements, The Smeva Market is equipped with a specific controller and user display for each configuration. Full documentation on the specific controller, sensors, and user display can be provided upon request.

The controller is an electronic device that manages all functions of the Smeva Market. The controller is located in the **control panel** ②⑨.



Turn off the power supply before opening the control panel. The control panel and glands are IP66 rated. Make sure the control panel is closed correctly after repair.



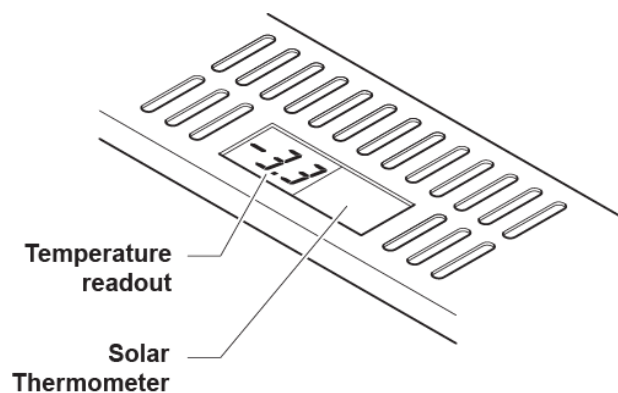
Element	Number
Drainage passage	5
Evaporation tray (drip tray)	33
Condenser	34
Compressor	35

Element	Number
Fan	36
Power relay box	37
Control panel	38

2.7 THE TEMPERATURE READOUT

NOTICE

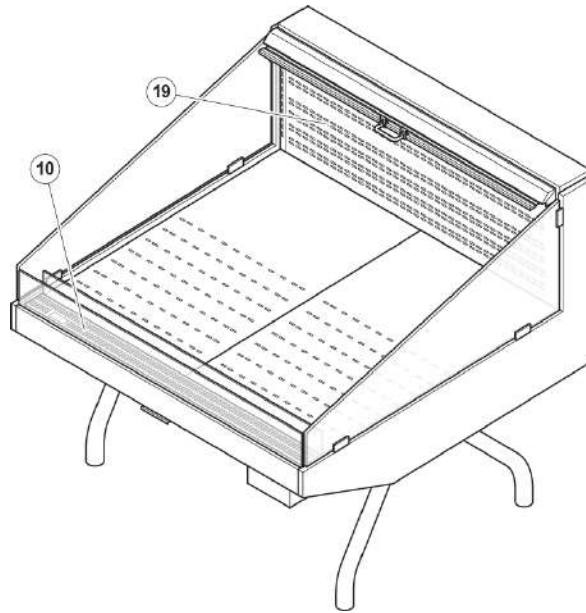
Depending on the version and its requirements, The Smeva Market is equipped with a specific controller and user display for each configuration. Full documentation on the specific controller, sensors, and user display can be provided upon request.



The **temperature readout** ⑪ is located on the **air-inlet grille** ⑩. It can be programmed and serviced by using the provided remote control.

2.8 TEMPERATURE SENSORS

Temperature sensors are located behind the **air-inlet grille** ⑩ and **air-outlet grille** ⑲.



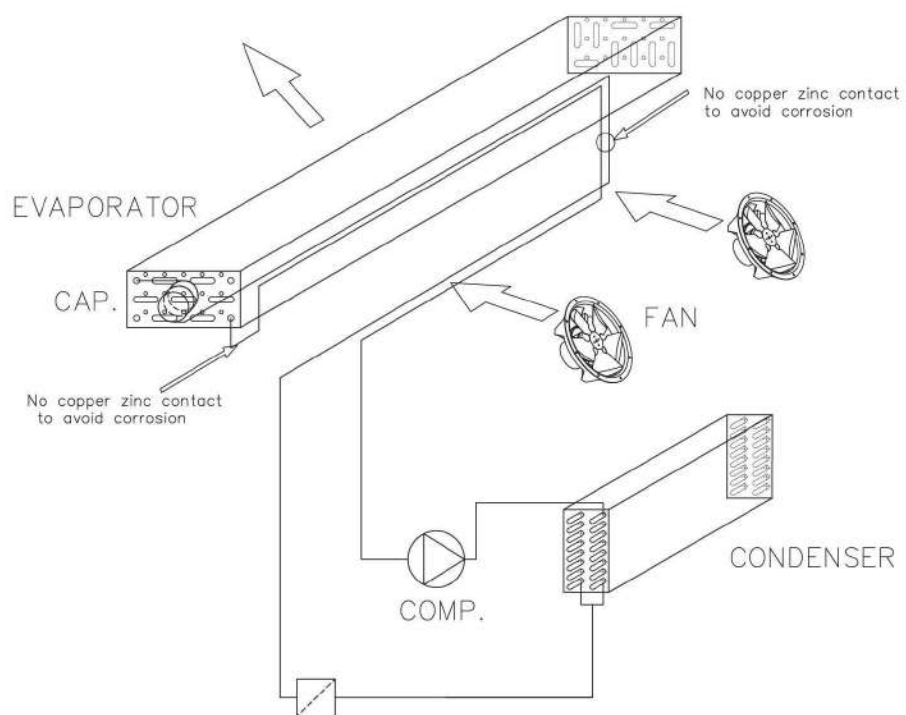
The temperature sensors are connected to the controller inside the **control panel** ③⑧ and measure air intake, air off, and defrost termination temperature from the **evaporator coil** ⑮.

2.9 REFRIGERATION COMPONENTS AND CIRCUIT

NOTICE

The correct type of refrigerant shall be used for each individual circuit, as indicated by the product identification label. Full documentation on the specific components can be found in the Refrigeration Components Datasheet, which is available upon request.

The refrigeration components are interconnected, based on the following circuit.



The cooling circuit is hermetically sealed and pressure tested in the factory at 31 Bar. For service, a Schrader valve is located in the condenser unit compartment.

3. SAFETY INSTRUCTIONS

⚠ WARNING

Read and understand this manual and its safety instructions before installing, servicing, or using the cabinet. Failure to do so can result in serious injury or death.

While transporting, storing, installing, operating, servicing and disposing of the cabinet, the cabinet should be located in a well-ventilated area or a room with a minimum volume as indicated in the table below by referring to the amount of charge as stated on the **product identification label** (28).

R290 / R433A	
Charge (gr.)	Minimum room volume (m ³)
250 - 500	63
500 - 700	88
700 - 900	113
900 - 1100	138
1100 - 1300	163

3.1 SAFETY INFORMATION RELATED TO THE INTENDED USE AND REASONABLY FORESEEABLE MISUSE

- ▶ The cabinet shall only be used for applications as described by the manufacturer. All other applications are unprofessional and considered dangerous. The manufacturer cannot be held liable for damage resulting from errors, unintended or unprofessional use of the cabinet.
- ▶ This cabinet is not intended for use by persons (including children) with restricted physical, sensory or intellectual capability or lack of experience and/or knowledge.
- ▶ Only use the cabinet within the specified performance limits as described in these instructions.
- ▶ Be vigilant at all times, and always be careful what you are doing. Do not use the cabinet if you are lacking in concentration or awareness, or are under the influence of drugs, alcohol or medication. Even a moment of inattentiveness can lead to serious accidents and injuries when working on the cabinet.
- ▶ The cabinet contains moving parts. Always keep a safe distance to prevent jamming.

- ▶ Do not wear loose clothing or jewellery when cleaning or using the cabinet. These can be grabbed by the machine and pinch or tear away parts of the body.
- ▶ Never insert body parts between rotating parts of the cabinet.
- ▶ Do not sit or stand on the cabinet.
- ▶ In case of an accident, stop using the cabinet and consult a doctor if necessary.

3.2 POTENTIAL HEALTH CONSEQUENCES

- ▶ Only engineers who have been trained in the safe handling and use of refrigerants shall work on this cabinet.
- ▶ Smeva units are designed and manufactured for use with refrigerant R433A, a propane – propylene mixture. This refrigerant is flammable and can be hazardous in the event of a leak. R433A has the benefit of carrying a distinctive natural smell that can be noticed in case of a leak.

3.3 PERSONAL PROTECTIVE EQUIPMENT

- ▶ Use a suitable leak detector and place it at a low level near the unit during work on this unit.
- ▶ Always use appropriate personal protective equipment when working with the cabinet, such as gloves, safety shoes (minimum class S3), safety goggles, and protective overalls.

3.4 SAFETY INFORMATION RELATED TO TRANSPORTING AND PLACEMENT

- ▶ The unit should be in a well-ventilated vehicle during transport.
- ▶ Loading and unloading must be carried out with suitable brackets and beams mounted to the legs of the cabinet. Use suitable equipment for this purpose such as a reach truck, forklift, crane, etc.
- ▶ Lifting works shall only be carried out by trained and authorised persons. Always carry out lifting with more than one person, even when using lifting tools.
- ▶ People carrying out these activities should wear personal protective equipment (see 3.3 *Personal Protective Equipment* for more information), and should not stand under the load while the cabinet is being lifted.
- ▶ Consult available construction reports, certificates, etc. to make sure that the total weight of the cabinet, any aids, and the operator, does not exceed the permissible maximum load of the floor.
- ▶ The surface on which the cabinet is being placed should be dry, firm, and level.
- ▶ Do not block the Air intake and discharge grids at the front or rear side.

- ▶ Make sure to leave a gap of 5 cm between the cabinet and an obstacle (like a wall, or another unit), in order for the cabinet to discharge warm condenser air.
- ▶ For the power supply to the unit only use a socket, 230 Volt located at least 1 metre above floor level.
- ▶ When moving the cabinet, use only approved lifting tools with sufficient lifting capacity.

3.5 INSTALLATION SAFETY INFORMATION

- ▶ Installation and commissioning shall be carried out by a properly qualified and skilled installer with due observance of the applicable rules and legislation.
- ▶ The installer is responsible for employing skilled and qualified personnel.
- ▶ The installer should wear personal protective equipment (see *3.3 Personal Protective Equipment* for more information).
- ▶ The work area should be fenced off for unauthorised persons prior to installation. Ensure public safety, depending on the situation.
- ▶ Check the cabinet for damage before installation. If there is any visible damage, do not install the cabinet and contact Smeva.

3.6 ELECTRICAL SAFETY INFORMATION

- ▶ Only a trained and qualified electrician shall carry out the electrical installation and commissioning.
- ▶ Do not disassemble, cut or change the original electrical power supply lead and plug supplied by the manufacturer.
- ▶ Only connect the cabinet to a grounded socket with earth leakage protection that is connected in accordance with the legal guidelines.
- ▶ Power sockets should be located at least 1 metre above floor level, in order to avoid ignition of refrigerants in case of a leak.
- ▶ Check the cabinet and the cables for damage before electrical installation. If there is any visible damage, a strong odour, or excessive heating of components, disconnect the power supply immediately and do not use the cabinet.

3.7 SERVICE SAFETY INFORMATION

- ▶ Always shut off the cabinet according to the LOCK OUT-TAG OUT method before performing any service or repair work.

- ▶ Service shall be carried out by trained and qualified service personnel with relevant refrigerant certifications. To ensure the operational safety of the cabinet, regular maintenance shall be carried out by qualified personnel in accordance with the manufacturer's instructions.
- ▶ During service (in case of flammable refrigerants), make sure there are no sources of ignition (such as flames, sparking electric components, or smoking cigarettes) within 3 metres of the cabinet.
- ▶ The hermetic closed cooling circuit for all hydrocarbon integrals is equipped with a high-pressure safety switch with a manual reset.
- ▶ Cleaning, maintenance and inspection should be done on a frequent basis. If there is any visible damage, a strong odour, or excessive overheating of components stop using the cabinet.

3.8 REPAIR AND MODIFICATION SAFETY INFORMATION

- ▶ Always shut off the cabinet according to the LOCK OUT-TAG OUT method before performing any maintenance or repair work.
- ▶ Only open or repair parts of the cabinet when you know what you are doing. If you have any doubts, contact the manufacturer.
- ▶ Use only original shelves, accessories and spare parts.
- ▶ Alterations to the cabinet and technical modifications are not permitted without the written permission of the manufacturer.

4. TRANSPORT & HANDLING

4.1 DIMENSIONS, MASS, AND CENTRE OF GRAVITY

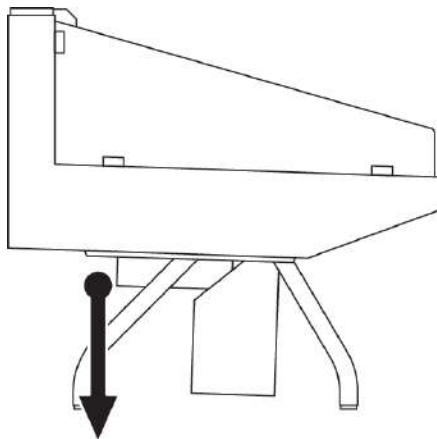
4.1.1 DIMENSIONS AND MASS

Depending on its version and requirements, The Smeva Market has different dimensions, weight, and specifications. Full documentation on your specific version can be provided upon request.

4.1.2 CENTRE OF GRAVITY

⚠ WARNING

RISK OF TILTING! Always use lifting tools when lifting the cabinet. Only lift the cabinet when it is placed on a pallet and securely fastened. The cabinet's centre of gravity is shown in the image below.



4.2 HANDLING, LIFTING AND TRANSPORTING THE CABINET

⚠ WARNING

When lifting, handling and transporting the Smeva Market, make sure to:

- ▶ Use a forklift truck to lift the Smeva Market. Do not stand or walk under the lifted cabinet.
- ▶ Place the cabinet horizontally on a trailer with a flat surface and sufficient capacity.
- ▶ Secure the cabinet against shocks by fixing the cabinet with clamping straps with sufficient strength. Make sure there is no possibility of sudden movements and or instability.
- ▶ Transport the cabinet carefully to the desired location.

4.3 PLACING

⚠ CAUTION

- ▶ Before placing and assembling the cabinet, make sure all environmental conditions are taken into account, as described in *6.1 Operational environment*.
- ▶ Make sure the cabinet is placed on an even and stable surface.
- ▶ Make sure that the cabinet is placed in an indoor environment.
- ▶ Make sure that the surface is clean and dry.
- ▶ Make sure the cables do not cause a trip hazard.

5. INSTALLATION

⚠ WARNING

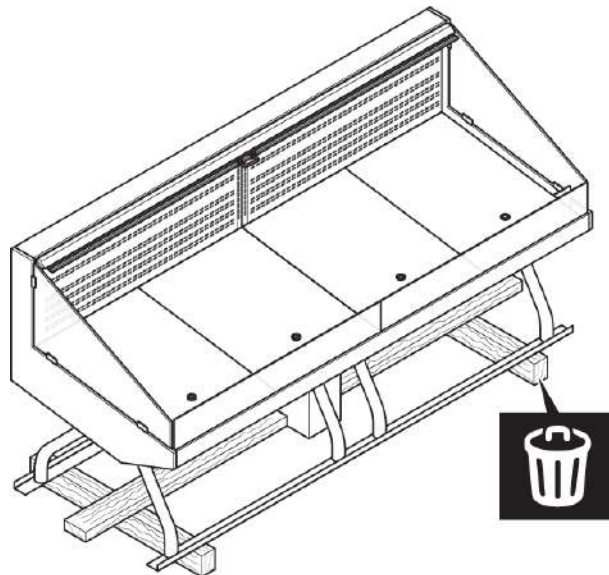
- ▶ Inspect the cabinet for damage before installing or operating the device. If the device is damaged, do not use it. Contact the manufacturer to have the cabinet inspected and repaired.
- ▶ Only use single-phase AC power at 230 V. For more information, see *2.3 Technical data*. Do not use any other voltage.

NOTICE

This section is for the authorised installer of the Smeva Market only.

5.1 UNPACKING THE SMEVA MARKET

1. Unpack the Smeva Market. Dispose of the packaging in a correct manner.



2. Remove the wooden transportation frame and dispose of it in a correct manner.
3. Make sure that your delivery contains the correct content, based on your version of the Smeva Market and its specifications.

5.2 INSTALLING THE PLUG-IN VERSION OF THE SMEVA MARKET

Recommended tools: spirit level

1. Remove additional packaging, foamboard protection, and protective film. Dispose of in a correct manner.
2. Make sure the cabinet is turned off and disconnected from the power supply.
3. Perform a simple cleaning routine, as described in *7.4. 1 Simple cleaning routine*.
4. Remove **bottom plate** ⑬, as described in *7.2.4 Removing icing from the evaporator coil*. Check the position of the **fan plate** ⑭ for possible obstructions. Put the **fan plate** and **bottom place** back into place.
5. Level the cabinet.
6. Check the installed glass and level if necessary.
7. Install the **shelves** ⑳, if applicable.
8. Turn on the cabinet by plugging it into the power socket.
9. Check the cabinet temperature and adjust the setpoint accordingly.

5.3 INSTALLING THE REMOTE VERSION OF THE SMEVA MARKET (REMOTE)

Recommend tools: spirit level, vacuum pump, brazing tools

1. Remove additional packaging, foamboard protection and protective film. Dispose of in a correct manner.
2. Make sure the cabinet is turned off and disconnected from the power supply.
3. Perform a simple cleaning routine, as described in *7.4. 1 Simple cleaning routine*.
4. Remove **bottom plate** ⑬, as described in *7.2.4 Removing icing from the evaporator coil*. Check the position of the **fan plate** ⑭ for possible obstructions. Put the **fan plate** and **bottom place** back into place.
5. Connect the cabinet to the draining system.
6. Connect the cabinet to the central cooling system (CCS).
7. Connect the cabinet to the power supply.
8. Level the cabinet.
9. Check the installed glass and level if necessary.
10. Install the **shelves** ⑳, if applicable.
11. When supplied in sections, seal the section connections with the supplied sealant.
12. Turn on the cabinet.
13. Check the cabinet temperature and adjust the setpoint accordingly.

6. OPERATING INSTRUCTIONS

6.1 OPERATIONAL ENVIRONMENT

NOTICE

Make sure operational conditions are in accordance with the requirements stated in this manual. Failure to do so may affect the proper functioning of the cabinet.

- ▶ **Keep the lighting intensity in the space as low as possible.**
Artificial lighting or spotlights should not be directed at the display area to avoid overheating and discolouration of fresh meat and other products.
- ▶ **Air-disturbing factors affect the operation of the cabinet.**
Air-conditioning, inlet grilles, and fans should not be used in the immediate vicinity of the cabinet. Additionally, doors, windows, entrances, and exits can create draughts that negatively affect the performance of the cabinet. Take the necessary measures to prevent draughts.
- ▶ **Do not place the cabinet in direct sunlight.**
Thermal radiation can raise the product temperature to an unacceptable level even when the air temperature display in the cabinet shows the required value.
- ▶ **Do not place heat-emitting equipment in the immediate vicinity of the cabinet.**
Heat sources include but are not limited to radiators, heaters, ovens, heat-emitting equipment, spotlights, and air curtains at entrances.
- ▶ **Keep the work area clean.**
Do not expose the cabinet to dirty or dusty environments. An unclean work area may influence the cabinet's quality, capacity, and life cycle.

6.2 SHELF ARRANGEMENT

⚠ WARNING

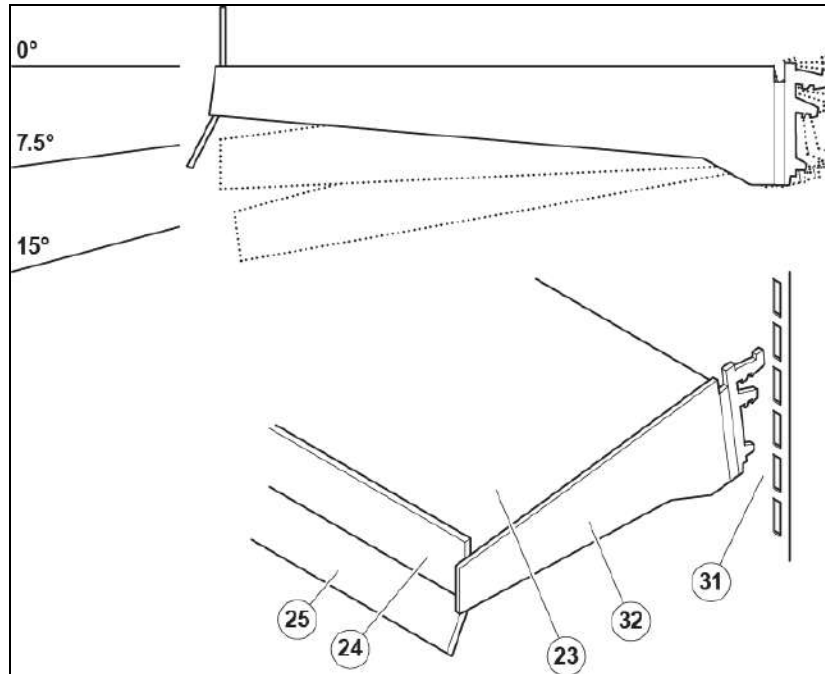
- ▶ Make sure you know where the emergency stop switches are located before operating the cabinet.
- ▶ Make sure that the power is turned off before arranging the shelves.

NOTICE

- ▶ Check the cabinet and shelves for damage before arranging the shelves. If there is any visible damage, contact Smeva for further instructions.

On delivery, **shelves** ②③ are always hung in a horizontal position. The user can adjust the shelves to the desired angle and height. No tools are required.

To guarantee an ideal product temperature, shelves should not be positioned in front of the holes of the **air-outlet grille** ①⑨. **Shelves** can be hung at the desired horizontal angle of 0°, 7.5°, and 15°.



23. Shelf

24. Product stopper

25. Price rail

31. Shelf upright

32. Shelf supports

6.2.1 PREPARATION

To change the **shelf** ②③ position or angle; it needs to be removed. Before removing the **shelf**, take the following steps:

1. Determine the desired **shelf** inclination horizontally 0°/7.5°/15°.
2. Determine the desired height position of the **shelf**.
3. If necessary, empty the **shelf**.
4. Disconnect the **shelf** lighting power plug, if necessary.

6.2.2 REMOVING THE SHELF

⚠ WARNING

All lifting tasks shall always be conducted by a minimum of two authorised persons.

1. Remove the **shelf** ②③ by gently lifting it from the **shelf supports** ③②. If needed, remove the **product stopper** ②④.
2. Place the **shelf** in a clean and safe place in such a way people cannot trip over it.

6.2.3 ADJUSTING THE SHELF HEIGHT

To adjust the shelf height:

1. Lift the **shelf supports** ③② to an upright position and remove them by pulling them out.
2. Put the **shelf supports** to the desired height of the **shelf upright** ③① in an upright position.
3. Lower the **shelf supports** from an upright position to a horizontal position to lock them into position.
4. To adjust the shelf angle, raise the **shelf supports** and tilt them to the correct position.
5. Place the **shelf** ②③ on the **shelf supports**.

WARNING: All lifting tasks shall always be conducted by a minimum of two authorised persons.

6. Connect the shelf lighting power plug.

6.3 LOAD ARRANGEMENT

NOTICE

- ▶ Make sure all products are placed in accordance with the requirements as stated in this manual. Failure to do so may affect the proper functioning of the cabinet and the shelf life of products.
- ▶ The maximum load level of the shelves is 60kg/m, or 90kg/m when using reinforcement strips.

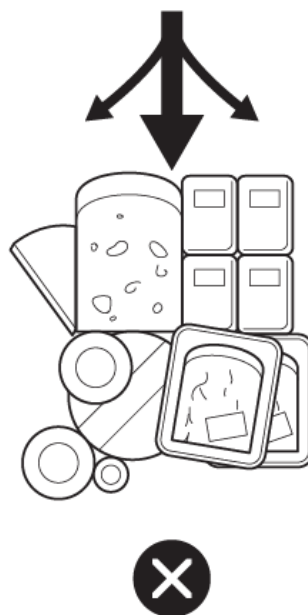
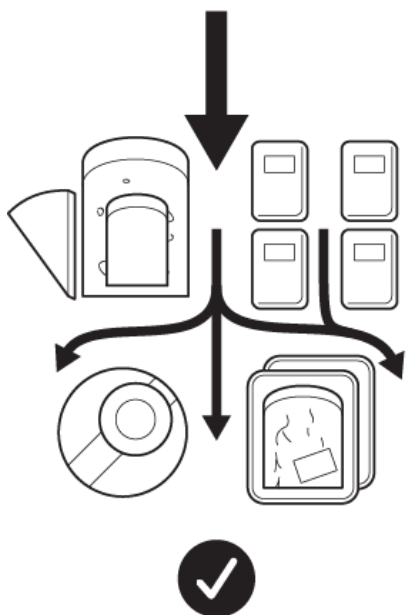
Air circulation and temperature affect the performance of the cabinet. Therefore the cabinet should always be loaded in the correct way.



Before loading products into the cabinet, make sure to

- ▶ Fully clean and dry the cabinet and all its elements
- ▶ Let the cabinet reach the correct temperature

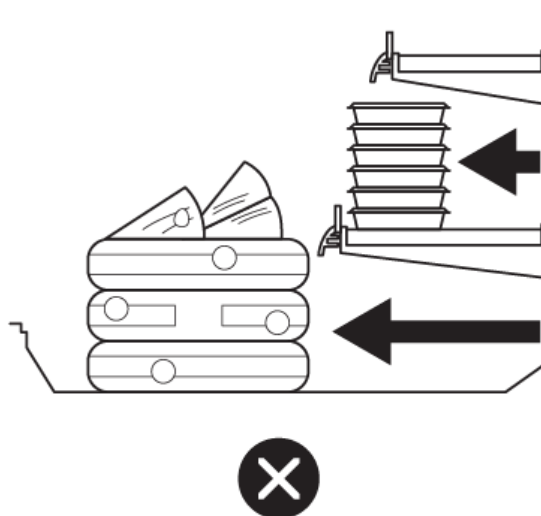
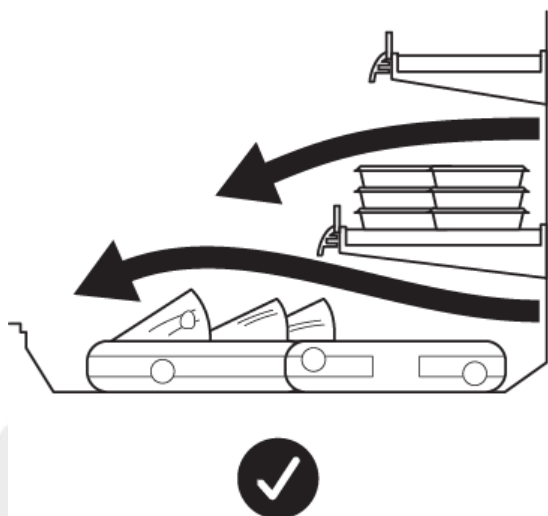
Make sure air circulation is optimal by leaving a sufficient amount of space between products.



Before loading products into the cabinet, make sure to

- ▶ Only put pre-packed goods into the cabinet
- ▶ Only put pre-cooled goods into the cabinet

Respect the maximum load level. Stacking up products too high will affect air circulation.





To secure air circulation and avoid unacceptably high product temperatures, make sure

- ▶ No products are placed against the air-outlet at the back
- ▶ No products are placed on top of the air-inlet in the front
- ▶ The air-inlet grille is not blocked (by e.g. products, doilies, etc.)

6.4 CONTROL PANEL SETTINGS

Depending on its version and requirements, The Smeva Market is equipped with a specific control panel ②⑨ for each configuration.



For detailed information and operation instructions of the control panel, please refer to its user manual.

All control panel models have several common functionalities:

▶ **Temperature settings**

The temperature is controlled by the air off temperature. The factory setpoint is -4°C (differential 2 Kelvin).

▶ **Defrost program**

For low-temperature applications ($< +2^{\circ}\text{C}$), the **evaporator coil** ①⑤ can be fitted with an electric defrosting element for defrosting the coil. For higher temperatures, the ice will cycle off by the fans only (under normal store conditions). The defrost cycle automatically runs at least 4 times each day to defrost the ice on the **evaporator coil**.

▶ **Temperature display**

Displays the air off temperature from the **evaporator coil**. During the defrost cycle, the temperature will rise for a short period. This will not affect the average temperature of the products placed in the cabinet.

6.5 EMERGENCY SITUATIONS



Make sure you know where the emergency stop switches are located before operating the cabinet. Not all versions of the Smeva Market are equipped with an ON/OFF button and must be switched off via the Central Cooling System, or by unplugging the cabinet from the power supply.

In case of an emergency situation:

1. Shut down the cabinet immediately.
2. If needed, care for the victim accordingly.
3. Contact Smeva.

In case of a refrigerant leak:

1. Shut down the cabinet immediately.
2. Avoid any source of ignition within and around the cabinet.
3. Evacuate the space.
4. Contact Smeva.

7. CLEANING AND MAINTENANCE

7.1 GENERAL ADVICE

The Smeva Market cabinet meets the highest market requirements. To make sure the cabinet keeps functioning accordingly, it should be treated, cleaned, and maintained properly.



HACCP and local regulations may require mandatory inspections and maintenance frequently. All local regulations shall be followed. Non-frequent maintenance shortens the activity and life span of the cabinet, the shelf life of products, and voids the warranty.

Smeva recommends a yearly inspection of the cabinet by a qualified engineer to:

- ▶ Check proper functioning of the control panel;
- ▶ Check proper functioning of the cooling equipment;
- ▶ Check proper functioning of the fans;
- ▶ Check leakages in the cooling circuit;
- ▶ Check excessive ice formation at refrigerant tubes and the evaporator;
- ▶ Check the function of the thermostat control and the temperature sensors;
- ▶ Perform technical cleaning and the removal of dust in the evaporator coil and air circulation system;
- ▶ Perform cleaning and inspection of the drainage system.

Please contact your Smeva dealer for more information regarding maintenance inspections.

See www.smeva.nl for more information.

7.2 ANNUAL MAINTENANCE

⚠ WARNING

- ▶ Only qualified, and trained personnel shall repair the cabinet or perform maintenance tasks that are not described in this manual. The operator of the cabinet shall not perform maintenance and inspection tasks other than described in this manual.
- ▶ Always shut off the cabinet according to the LOCK OUT-TAG OUT method before performing any maintenance works or repairs.

Smeva strongly recommends at least one major maintenance a year for the cabinet. This should at least include the tasks as described in the following paragraphs.

Recommended tools and equipment:

- ▶ Soft brush
- ▶ Soft cloth
- ▶ A bucket with lukewarm water
- ▶ An empty bucket
- ▶ Mild soap
- ▶ Leak detector (specific to the used refrigerant)
- ▶ Digital thermometer (for industrial use)



Dress appropriately. Do not wear loose clothing or jewellery. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewellery, or long hair can be caught in moving parts.



Never use a water-spraying hose to clean the cabinet. Water may get into sensitive parts of the cabinet, such as the air filter of the engine. Use a bucket of lukewarm water, mild soap, and a sponge.

7.2.1 CLEANING AND REMOVING DUST FROM COILS AND FANS

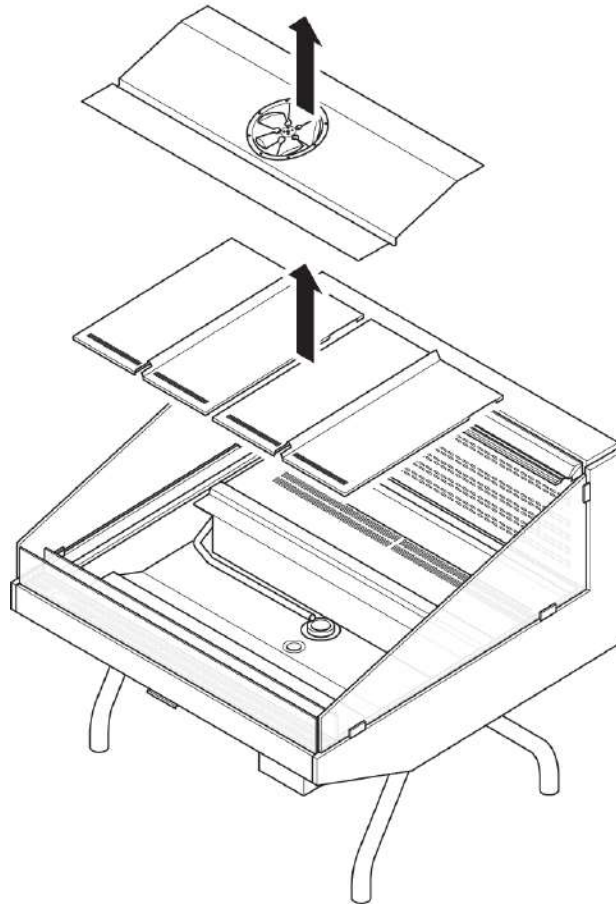
1. Get access to the specific coils and fans
2. With a soft brush, remove all dust; and with a soft cloth, clean the **evaporator coil** ⑮, **condenser** ③④, air ducts, and fans.

7.2.2 CHECKING THE EVAPORATOR AND CONDENSER FANS

1. Examine the **evaporator coil** ⑮ and **condenser** ③④ fans.
2. Check if the fans are functioning correctly, are well-balanced, and spinning freely without any resistance. Make sure the blades of the fans are fixed, and the motor is mounted correctly to the baffle plate.

7.2.3 CLEANING THE COOLING CIRCUIT

1. Remove the **bottom plate** ⑬.



2. Push the **fan plate** ⑭ upwards and remove the evaporator plate underneath it.
3. Check for leaking refrigerant by using a leak detector. Check the complete circuit, components, and piping for wear, tear, corrosion and vibration. Make sure all brackets are fixed and that the high-pressure switch and Schraeder caps are tightly secured to avoid any leakage.
4. If needed, remove dust with a soft brush; and clean with a soft cloth.

7.2.4 REMOVING ICING FROM THE EVAPORATOR COIL

1. Check for excessive ice formation on the **evaporator coil** ⑮. If the **evaporator coil** is not de-iced completely, a manual defrost can be initiated from the **controller** ⑳.
2. When large amounts of ice are built up, remove the icing by pouring lukewarm water (max. 40°C) over the **evaporator coil**. Make sure to direct the **drainage passage** ⑤ from the **evaporation tray (drip tray)** ㉓ to an empty bucket before pouring.
3. Remove the **evaporation tray (drip tray)** from the cabinet and clean with soap and lukewarm water.
4. Dry all wetted parts with a clean, dry, soft cloth.
5. Place the **evaporation tray (drip tray)** back to its original position and reconnect the **drainage passage** accordingly.

7.2.5 CLEANING THE DRAINAGE SYSTEM

1. Plug-in version: Make sure to direct the **drainage passage** ⑤ from the **evaporation tray (drip tray)** ③③ to an empty bucket before inspecting and flushing the drainage system.
2. Flush the drainage system by pouring a large amount of lukewarm fresh water into the drain of the cabinet. The drain is located at the centre of the evaporator plate, underneath the **fan plate** ⑭.



In the event of a blocked system, do not use solvents that are aggressive for the materials used in the cabinet, like copper, aluminium, steel, Poly Vinyl Chloride (PVC), or Polyurethane (PU).

3. Plug-in version: remove the **evaporation tray (drip tray)** ③③ from the cabinet and clean with lukewarm water and mild soap.
4. Dry all wetted parts with a clean, dry, soft cloth.
5. Plug-in version: Place the **evaporation tray (drip tray)** back to its original position and reconnect the **drainage passage** ⑤ accordingly.

7.2.6 CHECKING THE CONTROLLER AND TEMPERATURE SENSORS

Check if the **controller** ③② and the temperature sensors are functioning correctly by using a **digital thermometer** to identify possible deviations between the registered temperature and the temperatures as detected at the positions in the table below.

Position	Reference value	Variation
Room temperature	23°C	-
Air in temperature condenser	23°C	+/- 5 K
Air off temperature condenser	31°C	+/- 5 K
Air temperature in the counter	2°C	+/- 3 K
Air in temperature evaporator coil	5°C	+/- 3 K
Air off temperature evaporator coil	-3°C	+/- 3 K
Evaporation temperature	-10°C	+/- 2 K
Superheat temperature	-2°C	+/- 4 K



Do not change the safety-related pressure settings for the compressor control.

7.3 COMPONENT REPLACEMENT SCHEME

System	Replacement parts	Frequency
Control box	Controller and sensors	Check functioning once a year.
Electrical parts	Fan motors condenser (plug-in version)	Replace every 3 years.
	Fan motors evaporator	Replace every 3 years.
	Drip tray heating cartridges (plug-in version)	Clean the drip tray and cartridges once a year. Check functioning empty and filled with clean water once a year.
Refrigeration System	Hermetic compressor (plug-in version)	Check visual vibration and sound once a year. Check brackets and dampers.
	Condenser and evaporator	Clean and inspect bruising, dents, or corrosion once a year. Replace if the copper tubes are damaged.
	Capillary tube	Clean and inspect on bruising, dents, or corrosion once a year. Replace if the copper tubes are damaged.
	High-pressure safety switch (plug-in version)	Check functioning once a year.
	Insulation material	Check if the insulation is still intact (no damage, gaps, or missing insulation) to prevent condensation, moisture intrusion,

System	Replacement parts	Frequency
		and loss of thermal efficiency.

7.4 CLEANING

⚠ DANGER

Make sure the cabinet is switched off before performing extensive cleaning or maintenance activities. This will avoid fire, explosions, electric shocks, or other hazards that may result in damage to property and severe or fatal injuries.

NOTICE

Keep the work area clean. Do not expose the cabinet to dirty or dusty environments. An unclean work area may influence the quality, capacity, and life cycle of the cabinet.

Following the principles of good practice, it is advised to carry out simple cleaning routines as much as necessary. For example, remove stains, finger marks, or dust once detected.



Always clean the cabinet with a soft cloth and mild cleaning agent. Do not use abrasive and aggressive cleaning agents, such as hydrofluoric acid and chlorine, as they shorten the life of components considerably.

If products show signs of leakage, immediately clean the cabinet as soon as possible. If any liquid has run under the **bottom plate** ⑬, clean the cabinet as instructed in *7.4.2 Extensive cleaning routine*.

7.4.1 SIMPLE CLEANING ROUTINE

A simple cleaning routine should be performed at least once a week. While doing so, the power does not have to be switched off.

To perform a simple cleaning routine:

1. Clean all surfaces of the cabinet with a slightly damp cloth.
2. Clean the outside of the cabinet with a slightly damp cloth.
3. Dry all surfaces and the outside of the cabinet with a soft, dry, and clean cloth.

7.4.2 EXTENSIVE CLEANING ROUTINE

⚠ DANGER

Make sure the cabinet is switched off before performing an extensive cleaning routine. This will avoid fire, explosions, electric shocks, or other hazards that may result in property damage and severe or fatal injuries.

An extensive cleaning routine should be performed at least every other month. This includes, but is not limited to, the cleaning of the elements mentioned below. While doing so, the power has to be switched off.



Dress appropriately. Do not wear loose clothing or jewellery. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewellery, or long hair can be caught in moving parts.

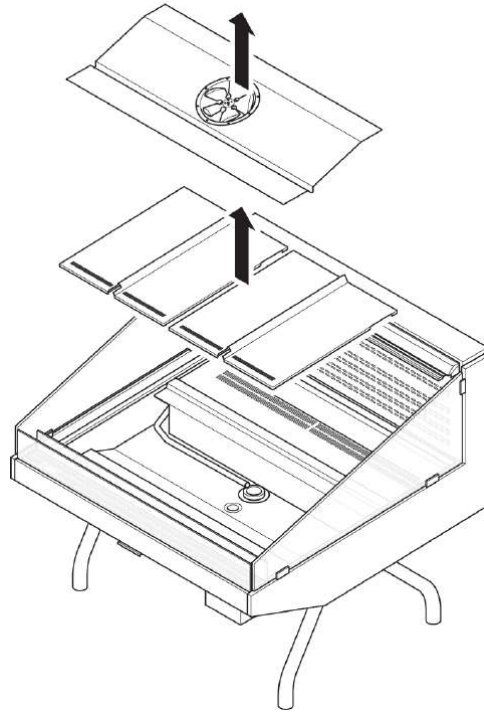
To perform an extensive cleaning routine:

1. Make sure the power of the cabinet is switched off.
2. Remove all products from the **bottom plate** ⑬.
3. Remove the **bottom plate**.



Never use a water-spraying hose to clean the cabinet. Water may get into sensitive parts of the cabinet, such as the air filter of the engine. Use a bucket of lukewarm water, mild soap, and a sponge.

4. Clean the **bottom plate** ⑬.
5. Clean the **air-outlet grille** ⑲.
6. Clean the **fan plate** ⑭.



7. Lift the **fan plate** ⑭ and clean the evaporator plate underneath it.
8. Clean the **air-inlet grille** ⑩.
9. Clean all glass panels.
10. Dry all wetted parts with a clean, dry, and soft cloth.
11. Lower the **fan plate** back into the correct position.
12. Place the **bottom plate** ⑬ back into the cabinet.
13. Switch the power of the cabinet back on.
14. Place all products back into the cabinet.

7.5 DEFROSTING

For low-temperature applications ($< +2^{\circ}\text{C}$), the **evaporator coil** ⑮ can be fitted with an electric defrosting element for defrosting the coil. The ice will cycle off by the fans for higher temperatures only (under normal store conditions).

The cabinet automatically runs six defrosting cycles every 24 hours (factory settings) to defrost the ice on the **evaporator coil** ⑮. An electrical defrost cycle is 30 minutes with a $+8^{\circ}\text{C}$ defrost termination temperature. A defrosting cycle is 45 minutes with a $+6^{\circ}\text{C}$ defrost termination temperature. The defrost termination probe located in the coil will start up the cooling again if the maximum defrosting termination temperature is reached before the end of the set defrost length.

7.6 PLANNED CLEANING AND MAINTENANCE

Cleaning and maintenance tasks shall be done on a regular basis. Accumulated dirt and dust may affect the functionality and lifespan of the cabinet.

Cleaning tasks shall be done according to the following plan:

Task	Frequency
Visual inspection / targeted cleaning	Daily / as much as needed
Simple cleaning routine	Every week
Extensive cleaning routine	<ul style="list-style-type: none">▶ Every other month (6 times a year)▶ In case of leaking products

Maintenance tasks shall be done according to the following plan:

Task	Frequency
Inspection / general maintenance by an authorised and trained mechanic.	Every 12 months

7.7 PLANNED INSPECTION

Regular visual inspections shall be done on a regular basis. Unnoticed damages and malfunctions may shorten the lifespan of the cabinet and the shelf-life of products.

Inspection tasks shall be done according to the following plan:

Task	Frequency	Action
Check if the temperature is set correctly.	Daily	If needed, contact Smeva or an authorised mechanic for assistance.
Check if the exterior is clean and undamaged.	Daily	Clean if needed. If damaged, contact Smeva or an authorised

Task	Frequency	Action
		mechanic for assistance.
Check if the interior is clean and undamaged.	Daily	Clean if needed. If damaged, contact Smeva or an authorised mechanic for assistance.
Check if the glass panels are clean and undamaged	Daily	Clean if needed. If damaged, contact Smeva or an authorised mechanic for assistance.
Check if the air vent is clean and not blocked.	Daily	Clean if needed. Unblock if needed.

8. TROUBLESHOOTING & REPAIR

⚠ DANGER

Do not open the control panel. It is live even when the main switch is in the OFF position.

⚠ WARNING

Make sure the cabinet is switched off before performing an inspection or any cleaning or maintenance activities. This will avoid fire, explosions, electric shocks, or other hazards that may result in property damage and severe or fatal injuries.

NOTICE

If you cannot find a cause or solution for the error, please contact Smeva.

8.1 TROUBLESHOOTING

Problem	Cause	Solution
The cabinet does not function at all	The power plug is not connected	Connect the power plug to the electrical outlet.
	The fuse in the group box to which the cabinet is connected has blown	Replace the fuse, or put the fuse switch to the ON position.
	The earth leakage circuit breaker in the group box is switched on	Put the earth leakage circuit breaker in the group box to the correct position.
The temperature of the cabinet is too high.	The evaporator is blocked with ice	Switch off the cabinet for several hours until the evaporator is entirely free of ice. Make sure the cabinet is emptied since the set cooling temperature cannot be ensured. Contact your installer or a qualified service engineer if the problem keeps occurring.
	The fans are not working	Check the cabling and power input of the fans. Contact your installer

Problem	Cause	Solution
		or a qualified service engineer.
	The inlet or outlet airflow is locked	Check the inlet and outlet airflow of the cabinet. Check for blockages due to overloading of products or contamination of air inlet/outlet.
	Alarm on display	Check the controller manual and contact your installer or a qualified service engineer.
	Setpoint too high	Lower the setpoint of the cabinet. Contact your installer or a qualified service engineer if the problem keeps occurring.
The temperature of the cabinet is too low	Setpoint too low	Increase the setpoint of the display cabinet. If the problem keeps occurring, contact your installer or a qualified service engineer if the problem keeps occurring.

8.2 SERVICE & CONTACT

For questions or malfunctions, please contact the Smeva installation partner who supplied your Market counter.

No maintenance contract? No problem. We're always here to help. For more information about our service, visit <https://smeva.com/> or call the Smeva service centre at +31(0)88-0124040.

9. DEINSTALLATION & DISPOSAL

9.1 DEINSTALLATION

Remove and dispose of the Smeva Market in accordance with applicable local disposal regulations. Removal is the reverse of the installation procedure.

9.2 DISPOSAL OF ELECTRONIC EQUIPMENT



The symbol on the cabinet, accessories, or packaging indicates that this machine shall not be treated as unsorted municipal waste but shall be collected separately! Dispose of the cabinet via a collection point for the recycling of waste for electrical and electronic equipment if you live within the EU and in other European countries that operate separate collection systems for waste electrical and electronic equipment. Always obey local and national waste regulations. By disposing of the materials in the proper manner, you help to avoid possible hazards for the environment and public health that could otherwise be caused by improper treatment of waste equipment. The recycling of materials contributes to the conservation of natural resources.

9.3 DISPOSAL OF (COOLING) LIQUIDS

The disposal of (cooling) liquids must be handled by specialised companies authorised for the treatment of hazardous wastes. If certain chemicals have been used for cleaning, you should dispose of them in an environmentally friendly way. Also, think of clothes and other materials that have become filthy with lubrication agents or oil. Consult the instructions or datasheets for the chemicals for more information.

9.4 DISPOSAL OF PACKAGING WASTE

The packaging is made of recyclable materials, which may be disposed of through your local recycling facilities. By disposing of the packaging and packaging waste in the proper manner, you help to avoid possible hazards for the environment and public health. The symbol on the packaging indicates that the packaging is made of PAP.

APPENDIX I - INSTALLATION CHECKLIST

COMMISSIONING CHECKLIST

Placement furniture	Check
Check/Adjust the level of the cabinet	<input type="checkbox"/>
Check/Adjust glass	<input type="checkbox"/>
Seal seams	<input type="checkbox"/>
Check connections	Check
Refrigeration (Soldering/extortion/evacuation/fill)	<input type="checkbox"/>
Electric (Including coupling connectors on the seam)	<input type="checkbox"/>
Drain	<input type="checkbox"/>
Check controller	Check
Check alarms, see manual controller	<input type="checkbox"/>
Time (real-time clock) on the controls (date, time)	<input type="checkbox"/>
Check the type of refrigerant setting (controller)	<input type="checkbox"/>
Check temperature value sensors (controller)	<input type="checkbox"/>
Check fans (all fans run smoothly and are balanced)	<input type="checkbox"/>
Check lighting	<input type="checkbox"/>
Start cooling	Check
With a thermostatic expansion valve, set and check superheating (pressure/temperature measurement). Solenoid valve present in the suction line, check function.	<input type="checkbox"/>
Temperatures in the counter to stabilise	<input type="checkbox"/>
Check temperatures air-on and air-off, the temperature at the front	<input type="checkbox"/>

Loading under load line, no blockage of the air-outlet	<input type="checkbox"/>
Setpoint is reached in about 10 minutes / stop time 10 minutes	<input type="checkbox"/>
Check on/off switching of the compressor in combination with the counter cooling demand.	<input type="checkbox"/>
Minimum compressor capacity must correspond to smallest cooling demand	<input type="checkbox"/>

After 1 week	Check
Check defrosts, no ice on the evaporator coil	<input type="checkbox"/>
Check the operation of fans	<input type="checkbox"/>
Check air-on, air-off temperatures (readout via menu display)	<input type="checkbox"/>
Check for freezing of products on the evaporator side (if necessary, increase the setpoint by steps of 0.5°C)	<input type="checkbox"/>
Check for water leakage	<input type="checkbox"/>

CUSTOMER TRANSFER CHECKLIST

Action	Check
Explain how to clean the counter	<input type="checkbox"/>
Recommend to weekly defrost the counter thoroughly	<input type="checkbox"/>
Explain how the setpoint can be adjusted on the controller	<input type="checkbox"/>
Hand over Installation & Service manual	<input type="checkbox"/>
Hand over User manual	<input type="checkbox"/>
Service contact details	<input type="checkbox"/>

APPENDIX II – DECLARATION OF CONFORMITY



Verklaring van overeenstemming

Smeva BV
J.F. Kennedylaan 27
5555 XC Valkenswaard
Nederland

Verklaart hierbij dat onderstaande producten:

VISION MKII
FJORDA
GLACIER
PERFORMER
GEKOELDE BUFFETKAST
MARKET

Voldoen aan de toepasselijke bepalingen van de volgende richtlijnen:

Machinerichtlijn 2006/42/EC

Richtlijn drukapparatuur 2014/68/EU, artikel 4 paragraaf 3

EMC richtlijn 2014/30/EU

Laagspanningsrichtlijn 2014/35/EU

De volgende geharmoniseerde normen zijn zover van toepassing gehanteerd:

Koelvitрины NEN-EN-ISO 23953-2:2015

Plaats: Valkenswaard

Datum: 1-10-2019

Naam: Charles Smets

Functie: Algemeen Directeur

blad 1 van 1



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