



USE AND MAINTENANCE MANUAL

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RAPID COOLER

INDEX

1. INTRODUCTION

- 1.1 Field of application
- 1.2 Consulting the manual
- 1.3 Warranty

2. CAUTION

- 2.1 General Safety Rules

3. USE OF THE PRODUCT

- 3.1 Using the Product for the First Time
- 3.2 Installation
- 3.3 Commissioning
- 3.4 Control Panel Operation
- 3.5 Plate Loading/Unloading Instructions
- 3.6 Transportation Instructions
- 3.7 Instructions for prolonged non-use

4. MAINTENANCE

- 4.1 Washing Instructions
- 4.2 Routine Maintenance
- 4.3 Troubleshooting

5. DISPOSAL

- 5.1 Packaging
- 5.2 Disposal of the product in the territory of the European Union

6. REFRIGERANT GAS

7. CERTIFICATIONS

1.INTRODUCTION

1.1 Field of application

The rapid conditioning cell has been designed and manufactured for the freezing of the eutectic mixture contained inside Melform eutectic plates. The eutectic plates inserted in the conditioning cell and appropriately positioned inside specific racks, can be correctly conditioned inside the cell, and then used inside the isothermal containers to prolong the thermal maintenance of the transported products.

1.2 Consulting the manual

This manual has been organized in such a way that the user can find all the necessary information for use and maintenance quickly and easily.

Therefore, it must be kept available at all times to maintenance personnel and operators.

The operating instructions must be read carefully before putting the product into service.

1.3 Warranty

This product is covered by a warranty against manufacturing defects for a period of 2 years from the date of purchase, provided that:

- has been used in accordance with the manufacturer's instructions,
- has not been damaged due to improper use.

Accidental damage resulting from transportation, carelessness, misuse, or failure to follow the instructions in this manual are excluded from warranty coverage. The warranty will become void in the event that the product has been repaired or tampered with by unauthorized persons.

Please contact your local distributor or MELFORM customer care@melform.com customer service [for](#) any assistance and for the possible supply of original spare parts.

It should be noted that the RAPID COOLER is an exclusive product of MELFORM. The manufacturer reserves the right to make changes to the characteristics of the models at any time without prior notice. In addition, it is possible that there may be variations in the color shades of the product.

2. CAUTION

The product is manufactured in accordance with the latest state of the art. All the necessary requirements for safe and proper operation of the device have been met.

It is recommended that the manager of the user company train the personnel so that the container is intended only for the uses for which it was designed, using it correctly as indicated in these instructions for use.

2.1 General Safety Rules

- THE USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

The function of the rapid conditioning cell is to freeze Melform eutectic plates. Different functions or modes of use are therefore contraindicated.

- For any repairs, contact only a technical assistance center authorized by the manufacturer and ask for original spare parts.



- THE APPLIANCE RUNS ON ELECTRICITY. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN INJURY FROM AN ELECTRIC SHOCK AND MAY BE LIFE-THREATENING

The use of the product is reserved for adults and trained in its correct use.
Keep out of reach of children.

Caution: Due to continuous use, some parts of the system, such as the compressor, may have high temperatures. Take the appropriate precautions to limit the risks involved during maintenance operations.



IT IS RECOMMENDED TO WEAR PROTECTIVE ATHERMIC GLOVES WHEN HANDLING FROZEN EUTECTIC PLATES.

Attention: there is no opening from the inside of the door, avoid closing people/animals of the rapid conditioning cell.

- The rapid conditioning cell should not be used as a system for fast cooling of food. No hot products should be placed inside the cell.
- It is recommended to use the appliance at an ambient temperature of +10°C to +30°C, in an indoor and ventilated working environment.
We do not recommend the use of this appliance in particularly humid work areas, as condensation caused by moisture on its electrical components could cause short circuits or electric shock when connected.
- It is recommended not to store the container at a temperature below 0°C. Moisture in the air damages the electronics of the container, and the low temperature solidifies the oil in the engine.
- Never exceed the ambient temperature of +45°C: above this temperature, the electronics of the rapid conditioning cell can suffer irreversible damage.
- Only use the rapid air conditioning cell on flat surfaces.
- Switch off the air conditioning cell in the event of a tipping over or sharp tilt. Place the container back on a flat surface and wait at least 24 hours before turning the air conditioning cell back on.
- Periodically check the condition of the appliance.
- Use only the power cord provided by the manufacturer. Do not use the power cord if damaged. Do not place the power cord on wet surfaces.
- Do not operate the rapid air conditioning cell if it has been knocked, dropped or damaged.
- Do not expose the rapid air conditioning cell to splashing water, rain, bad weather or aggressive and polluting atmospheres (fumes, gases).
- Do not install the appliance near sinks or faucets.
- Do not leave the container exposed to direct sunlight.
- Do not install the enclosure near cookers, stoves, or other heat-emitting appliances.
- Do not store flammable liquids in the container.

- Do not touch the evaporator with wet hands.
- To avoid the risk of pinching when closing the blast chiller door, it is prescribed to use special personal protective equipment such as gloves and to carry out the operation by keeping your hands on the appropriate handles as prescribed on the adhesive label on the door.
- Before carrying out any cleaning, maintenance, repair or any other operation on the equipment, switch off the power supply.
- Do not wash the rapid air conditioning room with steam jet or pressurized appliances.
- Do not cover the ventilation grilles. Leave a clearance of at least 20cm around the ventilation grilles.
- Do not touch the cooling unit on the roof of the container with wet hands.
- Do not bring the container into contact with pointed, sharp surfaces or direct heat sources (electric plates, open flames, etc.).
- After use, disconnect the cable from the power supply. To disconnect the appliance from the power supply, grasp and pull only by the plug and not by the cord.
- In the event that the power supply fails during operation, disconnect the appliance from the power supply
- Any modification not expressly authorized by the manufacturer made after purchase on the rapid air conditioning cell will void its warranty.

IMPORTANT:

The manufacturer would like to emphasize that it declines all responsibility in the event that the user company does not comply with the accident prevention regulations in force. Please scrupulously take all required safety measures while using the product, in order to ensure a safe working environment for the personnel involved. Compliance with accident prevention regulations is essential to prevent accidents and protect the health and well-being of all operators.

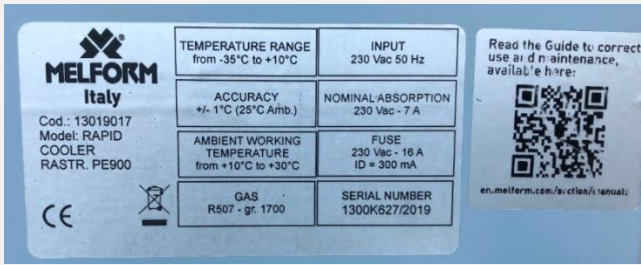
3. USE OF THE PRODUCT

3.1 Using the Product for the First Time

The rapid air conditioning cell was cleaned before being shipped from the factory. Before any use of the container, however, it is recommended to wash it in accordance with the procedures described in paragraph 4.1 "Washing instructions".

3.2 Installation

For information on the technical data of the rapid air conditioning cell (power supply, absorption, protection fuses) refer to the data on the plate on the unit (see photo), to the information in this manual and to the product sheet published on www.melform.com.



The rapid conditioning cell must be supplied with a mains voltage of 230Vvac. 50Hz, by means of a blue IEC309 plug (2 poles + earth 230V 16A).

Connection to the 230Vvac 50Hz main power:

- check that the plug of the power cord is suitable for the socket of the electrical system
- **Make sure that the socket is provided with an efficient earth contact and has an adequate capacity.** The electrical safety of the appliance is ensured only when correctly connected to an efficient earthing system; systems that do not comply with current regulations could cause damage to property and people;
- Do not use AC/DC transformers/inverters to power the Rapid Air Conditioning Cell. In case of special needs of use, contact the supplier;
- Do not use the appliance if the power cord is damaged; Use only the original mains cable.

3.3 Commissioning



Picture 1 - Differential circuit breaker for the protection and disconnection of the refrigeration unit




Picture 2 - Control panel of the refrigeration unit



Picture 3 - IEC309 blue plug (2 poles + 230V 16A ground) for connection to 230Vvac 50-Hz power supply

To switch on the rapid air conditioning cell, proceed as follows:

- Connect the blue IEC309 plug (2 poles + ground 230V 16A, Drawing 3) to the 230Vac 50-Hz power supply
- Lift the door of the circuit breaker (Photo 1) on the left side of the control panel of the refrigeration unit
- Lift the RCD circuit breaker
- Close the circuit breaker door
- Turn on the control panel (Photo 2) by pressing the Stand by button  at the top right. This allows the rapid conditioning cell to work.

To switch off the air conditioning cell, proceed in the opposite direction.




The rapid conditioning cell is factory set to work at a working temperature of -35°C, if you want to operate at a different temperature contact the manufacturer.

It is recommended to precondition the conditioning cell before inserting the eutectic plates.


3.4 Control Panel Operation

The control panel (Photo 2) is programmed by default to a predefined set-point value of -35°C (minimum operating temperature).

If you want to set the set-point to a higher temperature, proceed as follows:

- Press the button 
- Continuing to press the previous button, set the temperature to the desired value by pressing the buttons  . Once the limit temperature of -35°C has been reached, the refrigeration unit will no longer drop in temperature

DEFROST INSTRUCTIONS

A 30-minute automatic defrost cycle (25 minutes defrost + 5 minutes drip) is already programmed every 8 hours of operation of the rapid air conditioning cell. The condensate water is drained through the pipe located at the back of the container. If necessary, provide a water collection tank under the drain hose. If it is necessary to defrost manually, you can do so by pressing the defrost button  present on the control panel of the refrigeration unit.

Periodically check that no ice forms inside the drain pipe.

Check that the ice does not block the rotation of the fan.

In order to optimize heat exchanges, it is advisable to periodically defrost the cold room completely, turning off the control panel and leaving the container open for a period of 24/48 hours.

3.5 Plate Loading/Unloading Instructions

To load the plates, proceed as shown below:

- Open the container using the handle.
- The insertion of the plates into the rack must be done in the shortest possible time, as well as the extraction. To insert, simply slide the plates into the appropriate guides, inserting them vertically, resting on a long side. The number of plates that can be inserted for each model is indicated on the data sheet
- Once the operation is complete, close the container with the appropriate handle

To unload the plates, proceed as shown below:

- Open the container using the handle.
- Remove the plates as follows: the extraction of the first row of plates can be done manually, with gloves, by grasping the plates by the appropriate handle. The extraction of the row of plates positioned on the bottom of the rack must be done using the special rod, supplied on request with the conditioning cell.



Use the rod with handle on one side and L-bend on the opposite side to pull out the plates located on the bottom of the rack.

CAUTION: Do not pull out the plates by trying to grasp them with your hands. Risk of hitting the rack rails.

3.6 Transportation Instructions

- Before handling the container, make sure the door is closed.
- The loaded container can reach a considerable weight; It is therefore always advisable to lift or handle it with caution, possibly equipping yourself with forklifts suitable for use driven exclusively by qualified personnel and with particular caution
- Move the container equipped with wheels by acting on the appropriate handles
- When handling the container, take the utmost care to avoid collisions with the rack guides
- **CAUTION:** slippery bottom of the container

3.7 Instructions for prolonged non-use

In case the container is not going to be used for an extended period, do the following:

- Remove all the products from the container and wipe off any condensation
- Turn off the refrigeration unit
- Pull the mains plug out of the appliance. Store the power cord in a safe place and protect it from moisture
- Clean the container as indicated in paragraph 4.1 "Washing instructions"
- Leave the door open to prevent the formation of unpleasant odours.

4. MAINTENANCE

4.1 Washing Instructions

Clean the container regularly inside and out, following the instructions:

- Before cleaning the container, turn off the refrigeration unit. Pull out the mains plug. Store the power cord in a safe place and protect it from moisture.
- Clean the container with a cloth soaked in warm water; For hygienic use, always dry the container with disposable cloths or paper (never reusable cloths).
- Do not use metal or synthetic scouring pads, use only soft brushes with plastic or natural bristles.
- Do not use abrasive powders, ammonia, acids or solvents.
- It is possible to use soapy solutions.
- Do not use steam-powered or pressurized appliances.
- Make sure that water does not get into the switch-on and control controls, the ventilation grilles or the appliance socket.
- For more information on the substances suitable for cleaning the same, refer to the technical data sheets or contact the supplier

ROUTINE MAINTENANCE

PRODUCT	PERIODICITY	CONTROL TYPE
Connection cable and mains plug	6 months	Check that they are not damaged or too aged. If not, replace it.
Gasket	6 months	Check the conservative status. Replace it if it is broken or deteriorated.
Frost formation on the evaporator surface	Weekly	If the thickness of the frost exceeds 3 mm, proceed defrosting (follow the instructions given in the following manual "Defrosting Instructions")

4.3 Troubleshooting

If the appliance does not drop in temperature, carry out a 24/48 defrost cycle in order to remove any ice films that may prevent it from working properly.

If the appliance does not work as a result of this work, contact the supplier.

5.1 Packaging

The packaging material (cardboard, polyethylene film) is 100% recyclable. Disposal is the responsibility of the user and must be carried out in compliance with local regulations.

5.2 Disposal of the product in the territory of the European Union



The product is a piece of equipment that falls within the scope of application relating to the use of electrical and electronic substances and equipment subject to specific disposal. The legislation stipulates that discarded equipment is not disposed of in the normal municipal solid waste stream.

The crossed-out wheeled bin symbol, present on the product or on its packaging, indicates that the equipment (refrigeration unit, temperature controller) must be collected separately, in order to optimize the recovery and recycling rate of the materials that compose it and prevent potential damage to health and the environment.

It is the user's responsibility to dispose of the product by handing it over to a designated collection point for the recycling and disposal of electrical and electronic equipment.

Please note that the body of the container and the door are made of recyclable material, and can therefore be disposed of in an environmentally friendly way. The materials that make up the body and the door are:

- Polyethylene (Inner and outer walls of container and door)
- Polyurethane (Insulating material between the walls of the enclosure and door)

For more information on proper disposal, please contact your local waste disposal authority.

6. REFRIGERANT GAS

The refrigerant gas (HFC/HFO R452A) complies with European HFC reduction regulations.

The refrigerant circuit is hermetic, with no possibility of refrigerant escaping under normal operating and use conditions.

7. CERTIFICATIONS

The container has undergone rigorous certification processes that confirm its high quality and safety. The following certifications attest to the compliance of the RAPID COOLER container with the highest standards:

1. HACCP certification: RAPID COOLERS are suitable for use in HACCP environments, ensuring food risk control and maximum hygiene safety.

These certifications confirm that the RAPID COOLER container is designed and manufactured in such a way as to guarantee the highest quality and safety.

Thank you for choosing a MELFORM product!



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