



User Manual

GELATEC P.C.

Thessaloniki Industrial Area

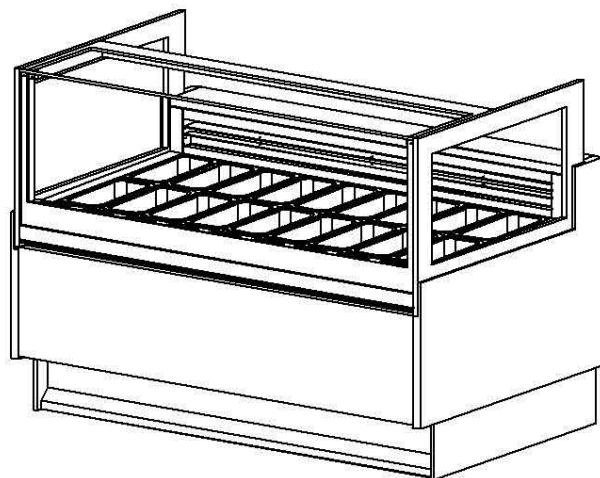
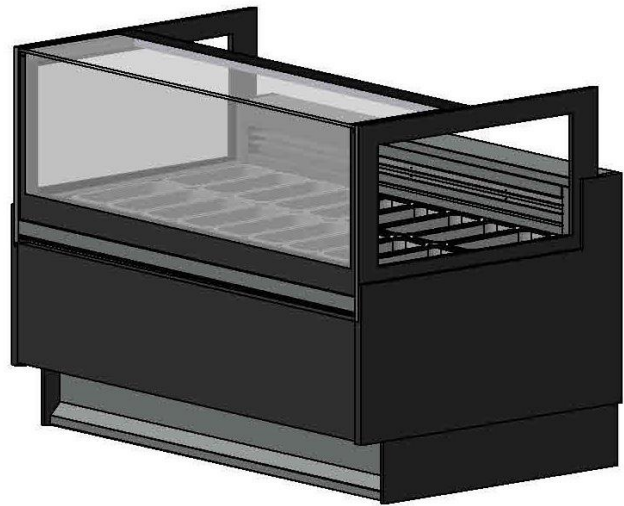
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SERIES PLATINUM

ICE CREAM DISPLAY



1. INTRODUCTION

1.1. PRESENTATION

Dear _____ customer,
 GELATEC PC, pleased to have you among his clients, he is confident that the equipment you purchased fully meets your expectations. For this to happen it is advisable to follow the advice and instructions in this USER AND MAINTENANCE that you should always keep it safe for future reference.

1.2. EQUIPMENT USE

ALLOWED USES

This device is made exclusively for the exposition and sales of pastry and gastronomy products. It is also possible the exposition of packaged milk derivated products and meat positioned in a way to not exceed the limits indicated by the manufacturer.

PROHIBITED USES

It is absolutely forbidden the use of this device to maintain pharmaceutical products.

1.3. RESPECTED RULES

Ref.No.	Title
EN61000-6-1: EN61000-6-3	Electromagnetic compatibility (EMC) Immunity for residential, commercial and light industrial environments
EN60335-1	Safety of household and similar electrical appliances
EN60335-2-89	Safety. Particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant condensing unit or compressor

1.4. RESPONSIBILITY

The manufacturer accepts no responsibility for damage caused to people, animals or the product itself due to:









- Non-compliance with the rules in force;
- Installation not in accordance with the provisions contained in the manual;
- Failure to comply with maintenance recommended in the manual;
- Temporary changes do not agree with the manufacturer;
- Use of the equipment other than that provided.



1.5. WARNING

The manufacturer reserves the right, at any time and without obligation, to immediately update the contents of the manual and / or modify the product in the event that this contributes to improving the quality of the same.

2. MARKING DATA

 			
Model 1		Production Date	
Serial No. 2		3	
 4 V / 5 ph / 6 Hz		14	W/A
 Type 7		 15	W
 No. 8		 16	W
Gas 9	10 Kg	 17	W
Pmax 12	psig	Pmin 13	psig

1. Commercial name of the unit	10. Refrigerant weight
2. Identification number	11. Climatic rate (Cl.3 = +25°C/60% U.R.; Cl. 4 = +30°C/55% U.R.)
3. Production date	12. Test pressure – system high pressure side
4. Voltage	13. Test pressure – system low pressure side
5. Phases	14. Nominal power/current absorbed during defrost
6. Frequency	15. Max. power absorbed during defrost
7. Compressor type	16. Nominal power absorbed by heating elements (only if higher than 100W)
8. Number of compressor	17. Lighting nominal power
9. Refrigerant type	

3. OPERATION

Equipment with internal condensing unit

Before delivery to the customer it is essential that the technical staff check the correct operation of all the equipment in order to be able to achieve maximum efficiency.

Device with a remote condensing unit.

Proceed as in the previous point, and do, with particular care, as follows:

- Verify, with equipment not supplied electrically, the absence of refrigerant leaks (it is assumed that a first leak-tightness test has already been made in the process of accurate emptying through vacuum pump).
- Verify the proper refrigerant charge for half the liquid indicator. Perfectly adjust the thermostatic expansion valve.
- Adjust the high and low pressure switches, (where present).
- Check that there is no dripping water isolation of pipes and joints of the same.

4. TECHNICAL FEATURES

PLATINUM ICE CREAM DISPLAY			
	L 1200 - 12 TRAYS	L 1715 - 18 TRAYS	L 2200 - 24 TRAYS
Height	1200	1200	1200
W	1050	1700	2400
Weight (Kg)	180	250	310
Engine	INT/EXT	INT/EXT	INT/EXT
Performance:			
Functioning Temperature	-20		
Product conservation Temperature	-18		
Climatic Class	4		
Compressor Type	semi Hermetic		
Defrost	Reverse cycle		
Refrigerant Gas	R404a		
Electric power supply V/ph/Hz	400/3/50		

5. INSTALLATION

MACHINE HANDLING

The ice cream display cabinet handling, from the truck to the final place, has to be made by any truck-lift, which is proper to its weight. The display cabinet shall be always balanced in order to ensure personnel integrity and machine functionality.

The cabinet can be shipped with or without wood packaging, in case wood crate will be used, will have a pallet base for an easy fork-lift handling. The pallet, however should be handle in the central position.

During the shipment, it is necessary to avoid any crash or/and shake of the display cabinet in order to not damage its frame, especially its glasses.

Do not drag the display cabinet on the floor and do not push it on the upper glasses.

STOCK OF THE DISPLAY CABINET

Whenever the cabinet has to be stoked, follow carefully what suggested before.

Environmental temperature during the cabinet stock can have following range -15°C and +55°C and humidity between 30% and 90%.

The display cabinet has always to be protected by sunrays and raining.

In case the display cabinet has to remain in stock quite long time before its use, keep it with its packaging in order to maintain its protection.



PACKAGING REMOVE

Before getting the display cabinet from the forwarding agent, check its conditions. In case it will be some damages, inform the driver and sign it on shipping documents.

Eventual damages relevant to the shipment and/or to the wrong stock, have not to be ascribed to the manufacturer.

DISPLAY CABINET POSITION

The refrigerated display cabinet needs particular environmental conditions in order to offer the right performance, so that the area where it will be used has to respect following indications

Floor has to be levelled perfectly, on the contrary keep the display cabinet on the horizontal position in order to guarantee a perfect defrosting water drain and avoid boring compressor noises.

The display cabinet has to not be under the sun-rays in order to have its better refrigeration performance, has to remain inside the local or to be sheltered by window curtain. If what described above is not observed, it can determinate an increase of temperature of displayed product and an increasing power consume.

The display cabinet has not to be under air currents due to open doors or windows, or under roof ventilators or under air condition outlets. In case will be not respected the above suggestions it can arise an increasing of temperature of the displayed product and/or an increasing ice phenomena on the evaporator and internal fans, which compromise the correct cold air circulation and product consistence

The display cabinet has not to be placed close any heat source as heaters, ovens, etc

The display cabinet has to have a sufficient place in order to ensure a correct custom service, to make an easy maintenance operation, to guarantee the right air flow necessary to make cold the condenser. Besides the warm air which flows out has to not have any obstacle or to invest other equipments in order to not reduce the correct functions.

6. ROUTINE MAINTENANCE AND PERIODIC CHECKS

- This type of maintenance is the user's responsibility. Where were detected by equipment malfunctions, make sure they are not caused by a lack maintenance, if not require the intervention of qualified personnel.
- Regular and thorough cleaning of the equipment helps prevent crashes always inconvenient, equipment deterioration, alteration of the quality of products, so a loss of profit.
- Proceed to the ordinary maintenance of the equipment as often suggested in the following table.

WARNING! BEFORE MAKING ANY OPERATION MAINTENANCE OR CLEANING, DISCONNECT THE POWER THROUGH THE SWITCH PLACE UPSTREAM OF ALL EQUIPMENT (Figure 1).

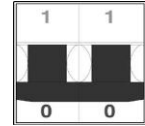


Fig. 1

TABLE MAINTENANCE ORDINARY AND FREQUENCY

MATERIAL	DESCRIPTION	FREQUENCY
STAINLESS STEEL	<ul style="list-style-type: none"> Wash only with lukewarm water and mild soap, rinse well and dry thoroughly with a soft cloth. Do not use abrasive products. 	Weekly
PLASTIC	<ul style="list-style-type: none"> Wash only with lukewarm water and mild soap, rinse well and dry thoroughly with a soft cloth. Never use alcohol, acetone and solvents; aesthetically and structurally deteriorate the material. 	Weekly
GLASS	<ul style="list-style-type: none"> Use products specifically designed for glass cleaning. Do not use water only because of the possibility of filing. 	Daily
WOOD	<ul style="list-style-type: none"> Use only a damp cloth. 	Weekly
DEFROSTING	<ul style="list-style-type: none"> In particular conditions of temperature and high humidity it is possible a high formation of frost on the evaporator resulting deterioration of the performance of the equipment. If these conditions persist over time is necessary the intervention of qualified personnel may change the parameters of the electronic control unit, only awaiting surgery can control one or more additional defrosts during the day (in this case the consistency of the product may be affected). 	Pending the intervention of qualified staff
FROSTING	<ul style="list-style-type: none"> In order to obtain maximum performance from the refrigeration system it is highly recommended one appliance extended defrost. Before that remove the product exposed, always command an additional defrost in order to eliminate the maximum amount of frost or ice from the evaporator, disconnect the main switch for a minimum of 5 hours. Check the complete absence of ice remaining in the refrigerated compartment, dry well and put back into operation. 	Max. 15 days
<p>WARNING! NEVER USE A WATER JET FOR CLEANING EQUIPMENT</p>		

7. EXTRAORDINARY MAINTENANCE

This type of maintenance must be performed by qualified person.

- For extraordinary maintenance is the set of operations not included in the table above

WARNING! Before performing any maintenance and cleaning disconnect the power supply by the main switch located upstream of any equipment. (Figure 1).

- Replacing lamps:
This operation must be performed by qualified personnel.
- Air condenser cleaning:
This operation must be performed by qualified person.
a stationary fan only proceed to the cleaning of the condenser fins with the use of stiff bristle brush, with suction or, even better, with a jet of compressed air. Do not use metal brushes and protect your hands with work gloves (Figure 2).

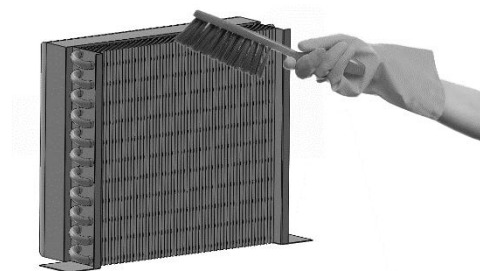


Fig. 2

8. PROBLEMS AND SOLUTIONS

PROBLEM	PROBABLE CAUSE	POSSIBLE REMEDIES
<ul style="list-style-type: none"> The equipment does not work 	<ul style="list-style-type: none"> Circuit breaker tripped 	<ul style="list-style-type: none"> Finding advance the cause of the switch, only after you reinsert it.
	<ul style="list-style-type: none"> Refriger switch open 	<ul style="list-style-type: none"> Close the refrigeration switch.
	<ul style="list-style-type: none"> Local power failure 	<ul style="list-style-type: none"> If the black-out proceedings are protracted, transfer the product in a closed cooler, in order to limit, as far as possible, the heating.
<ul style="list-style-type: none"> The compartment temperature exposure is not sufficiently low. 	<ul style="list-style-type: none"> Evaporator completely blocked by ice. 	<ul style="list-style-type: none"> Provide a complete defrost after transferring all product in a closed refrigerator. Do not re-enter the product in the showcase until after identified the cause of the trouble.
	<ul style="list-style-type: none"> Interior Fans stopped or damaged 	<ul style="list-style-type: none"> Replace the fans are not working Find the electrical problem if fans are intact. Replace damaged fans with new ones with the exact angle of the blades.
	<ul style="list-style-type: none"> Too high internal ventilation 	<ul style="list-style-type: none"> Replace fans, presumably deform incorrect interventions, with new ones with the exact angle of the blades.
	<ul style="list-style-type: none"> Wrong temperature setting on the electronic control unit. 	<ul style="list-style-type: none"> Set the appropriate temperature.
	<ul style="list-style-type: none"> Not efficient electronic control unit. 	<ul style="list-style-type: none"> Replace the electronic control unit, or the temperature probes, until you are sure which of these is inefficient.
	<ul style="list-style-type: none"> Exposure compartment invested from drafts or exposed to direct or reflected sunlight. 	<ul style="list-style-type: none"> Eliminate excessive air currents and avoid in any way direct or reflected rays of the sun.
	<ul style="list-style-type: none"> Air condenser clogged by dust or dirt in general. 	<ul style="list-style-type: none"> Thoroughly clean the condenser.
	<ul style="list-style-type: none"> Insufficient flow of the air condenser cooling air. 	<ul style="list-style-type: none"> Remove everything that is an obstacle to sufficient air circulation through the condenser (sheets of paper, cartons, insufficiently slotted grids, etc.).
	<ul style="list-style-type: none"> Insufficient refrigerant in whole system. 	<ul style="list-style-type: none"> Finding advance the cause of loss of coolant and eliminate it; proceed to the reinstatement of the refrigerant charge possibly preceded by a further emptying of the plant.
<ul style="list-style-type: none"> Insufficient flow rate of the water condenser cooling water. 	<ul style="list-style-type: none"> Check if there is water supply; if it is present, making adjustments, or replacement, of the control valve or pressure switch. 	
<ul style="list-style-type: none"> Place the product on the air is too cold, the inlet is too hot. 	<ul style="list-style-type: none"> Evaporator blocked by frost. 	<ul style="list-style-type: none"> Verify that it is the perfect tightness of the lift glazing gaskets, that the exposure compartment is not invested by air currents, that the pull-down / sliding are always closed to less than the maximum sales periods, that the ventilation of the refrigerated compartment is sufficiently active and that the chilled product does not exceed the load limit. In case positive operate accordingly.

<ul style="list-style-type: none"> The compressor will not operate or work for very short periods. 	<ul style="list-style-type: none"> Absence of equipment power supply. 	<ul style="list-style-type: none"> Check if this blackout. Closing the various switches on the power line.
	<ul style="list-style-type: none"> Voltage too low. 	<ul style="list-style-type: none"> Check that the compressor terminals is present a rated voltage of 220 V .; It is still admitted to a value between 198 and 242 V to 198 V lower voltage can cause starting problems in the compressor.
	<ul style="list-style-type: none"> Temperature set on the thermostat too high. 	<ul style="list-style-type: none"> If the set temperature is higher than that of air in the compartment facing the compressor does not work. Set the most suitable temperature if the current one is not low enough.
<ul style="list-style-type: none"> The compressor will not operate or work for very short periods (below) 	<ul style="list-style-type: none"> The maximum pressure switch intervention (where present). 	<ul style="list-style-type: none"> Check the cause of the continuous interventions of the maximum pressure switch such as a clogged air condenser, fan to stop air condenser, excessively high ambient temperature, lack of water condenser cooling water, rupture of the pressure switch. Proceed to the elimination of the problem.
<ul style="list-style-type: none"> The compressor runs for periods too long or continuously. 	<ul style="list-style-type: none"> Room temperature too high sales. 	<ul style="list-style-type: none"> In the case where the apparatus proper-mind functions and it is not possible to decrease the temperature of the room (with aeration plant or condition-ing) the compressor can also be operated continuously; in this case the refrigeration plant has reached the maximum limit of its performance.
	<ul style="list-style-type: none"> Room temperature too high compressor (remote condensing units) 	<ul style="list-style-type: none"> Investigate the cause of the raising of the temperature of the compressor room and proceed accordingly. If, as mentioned above, it is not possible to decrease the temperature of the room, the compressor can also operate continuously.
	<ul style="list-style-type: none"> Air condenser obstructed. 	<ul style="list-style-type: none"> Clean the condenser.
	<ul style="list-style-type: none"> Flow of the condenser water to insufficient cooling air. 	<ul style="list-style-type: none"> Control the opening of the taps, the efficiency of the regulator valve (replace if necessary).
	<ul style="list-style-type: none"> Lack of refrigerant in the circuit. 	<ul style="list-style-type: none"> Identify the cause of coolant loss and only then proceed to charge reinstatement.
	<ul style="list-style-type: none"> Very poor indoor ventilation. 	<ul style="list-style-type: none"> Restore the correct ventilation eliminating any obstacles, substituting, if necessary, the fans or the sun fans.
	<ul style="list-style-type: none"> Evaporator blocked exceedingly. 	<ul style="list-style-type: none"> Proceed to complete defrosting of the evaporator and then investigate the possible cause of obstruction and operate accordingly.
	<ul style="list-style-type: none"> Thermostat set to too low a temperature. 	<ul style="list-style-type: none"> Set the thermostat to the right temperature.
<ul style="list-style-type: none"> Absence of indication of the temperature on the digital thermometer. 	<ul style="list-style-type: none"> Stack of exhausted power. 	<ul style="list-style-type: none"> Insert a stack identical to that present.
	<ul style="list-style-type: none"> Inefficient probe or broken wire. 	<ul style="list-style-type: none"> Replace all the digital thermometer.
	<ul style="list-style-type: none"> Inefficient electronics. 	<ul style="list-style-type: none"> Replace all the digital thermometer.
<ul style="list-style-type: none"> Absence of defrost water. 	<ul style="list-style-type: none"> Clogged water discharge pipe. 	<ul style="list-style-type: none"> Restoring the flow of water through the tube.

	<ul style="list-style-type: none"> • Defrosting absent or inefficient. 	<ul style="list-style-type: none"> • Intervene on the controls and defrost control (control unit, sensors, solenoid valve, etc.) and / or defrost termination probe position.
	<ul style="list-style-type: none"> • Showcase uncapped. 	<ul style="list-style-type: none"> • Proceed to the perfect leveling of the display case.
<ul style="list-style-type: none"> • Excessive noise. 	<ul style="list-style-type: none"> • Vibration of the inner sheets of the showcase. 	<ul style="list-style-type: none"> • Tighten all screws.
	<ul style="list-style-type: none"> • internal fans not secure. 	<ul style="list-style-type: none"> • Tighten all screws.
	<ul style="list-style-type: none"> • Blades of internal fans in contact with parts of the same. 	<ul style="list-style-type: none"> • Replace fans with other perfectly adjusted.
	<ul style="list-style-type: none"> • Piping in contact with other parts of the equipment. 	<ul style="list-style-type: none"> • Avoid touching the pipes to vibrate other parts of the plant; the constant rubbing can also cause breakage of pipes and refrigerant leak.
	<ul style="list-style-type: none"> • Failure of the equipment leveling 	<ul style="list-style-type: none"> • Leveling the equipment perfectly.

