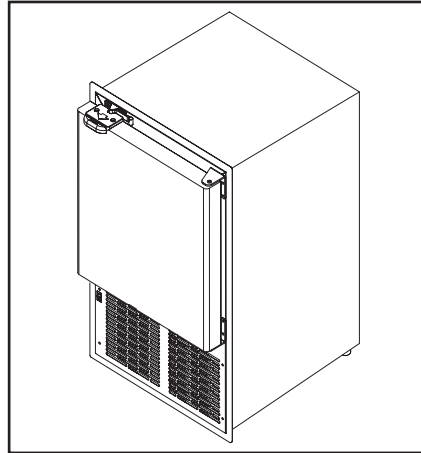


Icerette

AUTOMATIC ICE CUBE MAKER

INSTALLATION, OPERATION, MAINTENANCE AND TROUBLESHOOTING



MODEL 87

Be sure unit is standing upright 24 hours prior to plug-in.

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We reserve the right to make changes in specifications and design without prior notice.

ICE MAKER SAFETY

Your safety and the safety of others are very important.

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the Safety Alert Symbol. This symbol alerts you to potential hazards that can injure or kill you and others.

All safety messages will follow the Safety Alert Symbol and either the words "**DANGER**", "**WARNING**" OR "**CAUTION**".

 **DANGER** 

DANGER means that failure to heed this safety statement may result in severe personal injury or death.

 **WARNING**

WARNING means that failure to heed this safety statement may result in extensive product damage, serious personal injury or death.

CAUTION

CAUTION means that failure to heed this safety statement may result in minor or moderate personal injury, or property or equipment damage.

All safety messages will alert you to what the potential hazard is, tell you how to reduce the chance of injury, and let you know what can happen if the instructions are not followed.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: To reduce the risk of fire, electric shock or injury when using your ice maker, follows these basic precautions:

- Plug into grounded 3-prong outlet for 115VAC or 230VAC.
- Do not remove grounding prong.
- Do not use an adapter.
- Do not use an extension cord.
- Disconnect power before cleaning.
- Disconnect power before servicing.
- Replace all panels before operating.
- Use two or more people to move & install ice maker.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFEGUARDS

Before the ice maker is used, it must be properly positioned and installed as described in this manual, so read the manual carefully. The manufacturer strongly recommends that you have a professional install your new machine. The warranty may be affected or voided by an incorrect installation. To reduce the risk of fire, electrical shock or injury when using the ice maker, follow basic precautions, including the following:

! DANGER !

- Plug into a grounded 3-prong outlet; do not remove grounding prong, do not use an adapter, and do not use an extension cord.
- It is recommended that a separate circuit, serving only for your ice maker, be provided. Use receptacles that cannot be turned off by a switch or pull chain.
- Do not connect or disconnect the electric plug when your hands are wet.
- Never unplug the ice maker by pulling on the power cord. Always grip the plug firmly and pull straight out from the outlet.
- Never clean ice maker parts with flammable fluids. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliances. The fumes can create a fire hazard or explosion.
- Before proceeding with cleaning and maintenance operations, make sure the power line of the unit is disconnected and the water line is shut off.
- Before operating, pull all panels back into place.
- Never allow children to operate, play with or crawl inside the ice maker.
- Do not touch the evaporator with your hand when the machine is operating.
- Unplug the ice maker or disconnect power before cleaning or servicing. Failure to do so can result in electrical shock or death.
- Do not attempt to repair or replace any part of your ice maker unless it is specifically recommended in this manual. All other servicing should be referred to a qualified technician.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning used of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance.

! WARNING

- Use two or more people to move and install ice maker. Failure to do so can result in back or other injury.
- To ensure proper ventilation for your ice maker, the front of the unit must be completely unobstructed.
- The ice maker should not be located next to ovens, grills or other sources of high heat.
- The ice maker must be installed with all electrical and water connections in accordance with state and local codes. A standard electrical supply, properly grounded in accordance with the National Electrical Code and local codes and ordinances, is required.
- Do not kink or pinch the power supply cord between the ice maker and cabinet.
- The fuse (or circuit breaker) size should be 15 amperes for 115V and 10 amperes for 230V.
- It is important for the ice maker to be leveled in order to work properly. Otherwise water may not flow properly through the evaporator (ice mold). The ice production will be less than normal. You may need to make several adjustments to level it.
- All installations must be in accordance with local plumbing code requirements.

WARNING

- Make certain that hoses are not pinched, kinked or damaged during installation.
- Check for leaks after water line is connected.
- Although the unit has been tested and cleaned at the factory, due to long-term transit and storage, the first batch of cubes must be discarded.
- Remove the packing materials and clean the ice maker before using.
- Turn on the water supply tap before switching on the ice maker. Never turn the water supply tap off when the ice maker is working.
- Except to take ice from the unit, keep the door closed in order to reduce ice melting and to promote proper ice formation.
- If the ice maker will not be used for a long time, before the next use it must be thoroughly cleaned. Follow carefully any instructions provided for cleaning or use of sanitizing solution. Do not leave any solution inside the ice maker after cleaning.
- Do not touch the condenser fins. They are sharp and can be easily damaged.
- Do not use solvent-based cleaning agents or abrasives on the interior. These cleaners may transmit taste to the ice cubes, or damage or discolor the interior.
- Do not use the apparatus other than for its intended purpose.
- Cleaning and user maintenance shall not be made by children without supervision.

SAVE THESE INSTRUCTIONS

Electrical Connection

Do not, under any circumstances, cut or remove the third (ground) prong from the power cord. For personal safety, this appliance must be properly grounded. The power cord of this appliance is equipped with a 3-prong grounding plug that mates with a standard 3-prong grounding wall outlet to minimize the possibility of electric shock hazard from the appliance. Have the wall outlet and circuit checked by a qualified electrician to make sure the outlet is properly grounded. When a standard 2-prong wall outlet is encountered, it is your responsibility and obligation to have it replaced with a properly grounded 3-prong wall outlet.

The ice maker should always be plugged into its own individual electrical outlet which has a voltage rating that matches the rating label on the appliance. This provides the best performance and also prevents overloading boat wiring circuits which could cause a fire hazard from overheated wires. Never unplug your ice maker by pulling on the power cord. Always grip the plug firmly and pull straight out from the outlet. Repair or replace immediately all power cords that have become frayed or otherwise damaged. Do not use a cord that shows cracks or abrasion damage along its length or at either end. When moving the ice maker, be careful not to damage the power cord.

If the supply card is damaged, it must be replaced by the manufacture, its service agent or similarly qualified persons in order to avoid a hazard.

Extension Cord

Because of potential safety hazards under certain conditions, it is strongly recommended that you do not use an extension cord with this ice maker.

Exploded View of Model 87 Icer-ette

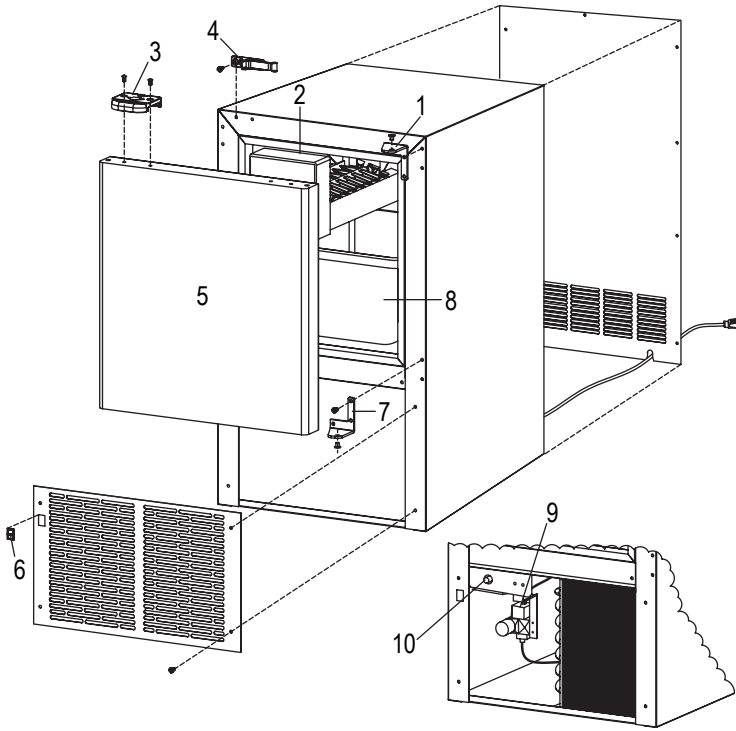


FIG 1

item part # Description

FIG1

- | | | |
|----|--------|-------------------------------------|
| 1 | 87201W | Top and bottom Hinge
Includes(7) |
| 2 | 872021 | Icemaker 115V |
| | 872022 | Icemaker 230V |
| 3 | 87203W | Handle Latch Assy.
Includes(4) |
| 5 | 87205 | S/S Door Assy. |
| 6 | 87206 | Power Switch |
| 8 | 87209 | Ice Bucket |
| 9 | 872111 | Water Valve 120V AC |
| | 872112 | Water Valve 230V AC |
| 10 | 87215 | Cold Control |

Not Shown:

- | | |
|--------|-------------------------|
| 872131 | Compressor w dryer 120V |
| 872132 | Compressor w dryer 230V |
| 872441 | Fan motor 120V |
| 872442 | Fan motor 230V |

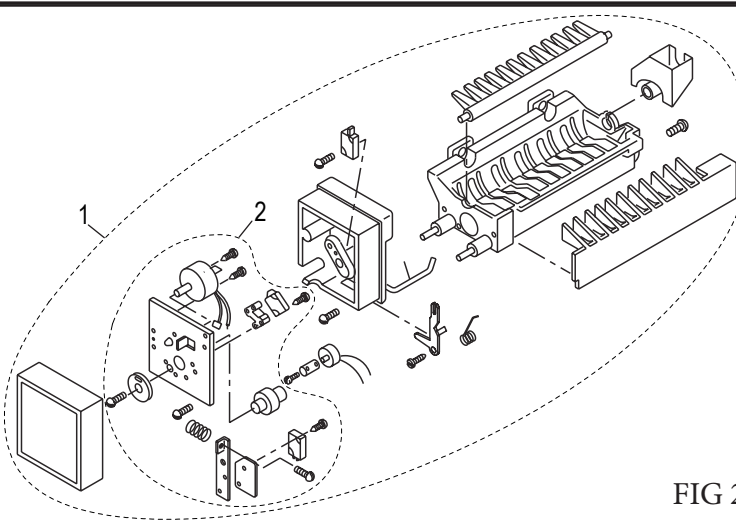


FIG 2

FIG 2

- | | | |
|---|---------|----------------------------|
| 1 | 872021 | Icemaker 115V |
| | 872022 | Icemaker 230V |
| 2 | 872021M | Motor assy. faceplate 115V |
| | 872022M | Motor assy. faceplate 230V |

Unpacking

! **WARNING**

Excessive Weight Hazard
 Use two or more people to move and install ice maker. Failure to do so can result in back or other injury.

Remove packaging materials

IMPORTANT: Do not remove any permanent instruction labels or the data label on your ice maker. Remove tape and glue from your ice maker before using.

- To remove any remaining tape or glue, rub the area briskly with your thumb. Tape or glue residue can also be easily removed by rubbing a small amount of liquid dish soap over the adhesive with your fingers. Wipe with warm water and dry.
- Do not use sharp instruments, rubbing alcohol, flammable fluids, or abrasive cleaners to remove tape or glue. These products can damage the surface of your ice maker.

Cleaning before use

After you remove all of the packaging materials, clean the inside of your ice maker before using it.

Location requirements:

Required Cabinet Opening: 14 3/8”(365mm) W x 24 5/8”(626mm) H

FIG 3

WARNING I: This device does not meet Federal requirement for ignition protection. **DON'T** install in spaces containing gasoline engines, fuel tanks or fuel line fittings. Failure to comply could result in accidental injury or death.

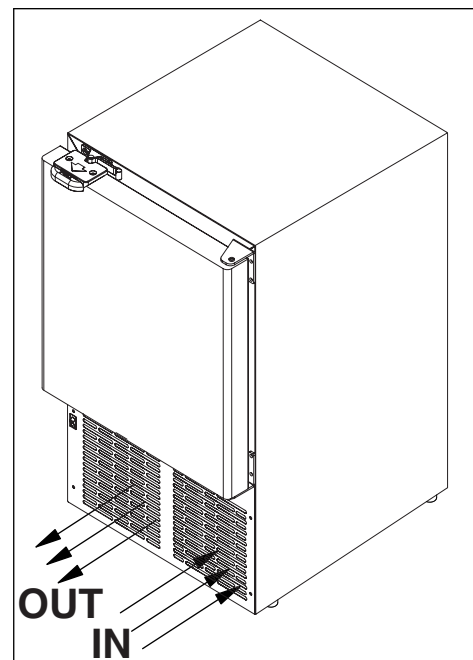
WARNING II: If rubber feet are removed from the bottom of the unit, the mounting screws must be reinstalled into the bottom of the cabinet to avoid damage to components mounted to the base pan.

- If unit is to be built-in, 3/4”(2cm) or more must be allowed behind the unit for water line and plug clearance for proper operation. Built-in units are designed for zero clearance at the top and each side of the unit. Fan-forced condenser cooling is used. This requires air circulation through lower section of unit(see FIG 3).

CAUTION:




1. Air path for exhaust and fresh air intake must be unrestricted! Recirculation between fresh air intake and exhaust air must be prevented.
2. Any restriction of airflow or ventilation will disrupt normal operation of the unit, resulting in damage to components and voids warranty.
3. Connect to potable water supply only.

- Choose a well ventilated area. This unit **MUST** be installed in a location protected from the elements, such rain, water spray or drips.
- The unit should not be located next to ovens, grills or other high heat sources.
- Installation of the ice maker requires a cold water supply inlet of 1/4-in. (6.35mm) tubing with a shut-off valve.
- When installing the unit it should be noted that some servicing requires access to the rear of the unit and that the unit must be readily removable should servicing be necessary.



- Units are designed to operate between 50°F (10°C) and 100°F(38°C). High ambient temperatures (100°F [38°C] or higher) may reduce Ice production rate. For best performance, keep the unit out of direct sunlight and away from heat generating equipment.
- Unit must sit on a secure level surface. Mounting flange must NOT be used to support the unit's weight. It is important for the ice maker to be leveled in order to work properly. If needed, you can adjust the height of the ice maker by revolving the rubber feet.
- When mounting unit within cabinetry, make sure that the door has the desired range of motion. All doors are hinged on the right(facing the unit) but may be reversed in the field.
- When plumbing the unit, 18”(45cm) of water line extends from the back with a 1/4” (6.35mm) plastic female compression fitting. Drains are not required; just a water supply.
- The ice maker must be installed with all electrical and water connections in accordance with all state and local codes. A minimum of 20 psig(0.14MPa) is required for proper operation of the water valve.
- A standard electrical supply, properly grounded in accordance with the National Electrical Code and local codes and ordinances, is required.

Electrical requirements

 DANGER 

<p>Electrical Shock Hazard</p> <p>Plug into a grounded 3- prong outlet. Never remove the ground prong from the plug. Never use an adapter. Never use an extension cord. Failure to follow these instructions can result in fire, electrical shock or death</p>

Before you move your ice maker into its final location, it is important to make sure you have the proper electrical connection:

- A standard electrical supply, properly grounded in accordance with the National Electrical Code and local codes and ordinances, is required. The ice maker should always be plugged into its own individual electrical outlet.
- It is recommended that a separate circuit, serving only your ice maker, be provided. Use a receptacle that cannot be turned off by a switch or pull chain.
- The fuse (or circuit breaker) size should be 15 amperes for 115V and 10 amperes for 230V.

Recommended grounding method:

For your personal safety, this appliance must be grounded. This appliance is equipped with a power supply cord having a 3-prong grounding plug. To minimize possible shock hazard, the cord must be plugged into a mating 3-pronged and grounding-type wall receptacle, grounded in accordance with the National Electrical Code and local codes and ordinances. If a mating wall receptacle is not available, it is the personal responsibility of the customer to have a properly grounded, 3-prong wall receptacle installed by a qualified electrician.

OPERATION

Final Check List before Operation

1. Have all packing materials and tape been removed from the interior and exterior of the ice maker?
2. Did you clean the ice storage bin?
3. Have the installation instructions been followed, including connecting the machine to water and electricity?
4. Has the machine been leveled?
5. Is icemaker in location where ambient temperature is higher than 100°F [38°C] (see page 6)?
6. Has the water supply pressure been checked to ensure a minimum of 20 psig (0.14MPa) with a static pressure not to exceed 120 psig (0.82MPa)?
7. Is there a clearance of at least 3/4" (2cm) at the rear?
8. Has the power supply voltage been checked or tested against the nameplate rating? And has proper grounding been installed in the ice maker?
9. Is the ice maker plugged in?
10. Have you turned on the main water supply and tap?
11. Have you checked for leaks at all water supply connections?

Operating method

The ice maker's on-off switch is just beneath the door. A unit begins to produce ice within 60 minutes after start-up. Ice production stops automatically when the bucket is full enough to interfere with the wire shut-off arm. The unit should not be turned "off" with the door closed and ice or water inside.

NOTES:

1. Due to fast freezing, ice cubes may appear "cloudy". This is trapped air in the water and does not affect the taste or quality of the ice.
2. "Hollow" ice cubes may result from fast-freezing under certain climatic conditions such as high humidity, etc. and is not an indication of a problem with the icemaker.

IMPORTANT:

- Although the unit has been tested and cleaned at the factory, due to long-term transit and storage, the first batch of cubes must be discarded.
- Never turn the water supply tap off when the ice maker is working.
- Never touch evaporator when unit is running!
- Except to take ice from the unit, keep the door closed to reduce melting and insure proper ice formation.

CLEANING AND MAINTENANCE

Periodic cleaning and proper maintenance will ensure efficiency, top performance, and long life. The maintenance intervals listed are based on normal conditions. You may want to shorten the intervals if you have pets, or there are other special considerations.

- Periodically vacuum dust and dirt from the condenser, locate behind the grille at the bottom front of the unit.
- Regularly inspect plumbing connections to insure that no leaks are present.

What shouldn't be done:

Never keep anything in the ice storage bin that is not ice: objects like wine and beer bottles are not sanitary.

IMPORTANT:

- Do not touch the power plug when your hands are wet.
- Never unplug the unit by pulling on the cord. Grasp the plug and pull out firmly.

Exterior cleaning

The door and cabinet may be cleaned with a mild detergent and warm water solution such as 1 oz.(28g) of dishwashing liquid mixed with 2 gallons(9L)of warm water. Do not use solvent-based or abrasive cleaners. Use a soft sponge and rinse with clean water. Wipe with a soft clean towel to prevent water spotting.

If the door panel is stainless steel, stainless steel can discolor when exposed to chlorine gas and moisture. Clean stainless steel with a mild detergent and warm water solution and a damp cloth. Never use an abrasive cleaning agent.

Interior cleaning

When necessary, defrost and thoroughly clean the inside of the unit with mild soap and water. Do not use electrical heating devices, sharp or pointed tools when defrosting.

When defrosting or leaving open the unit turned off, prop and leave the door open using door prop.

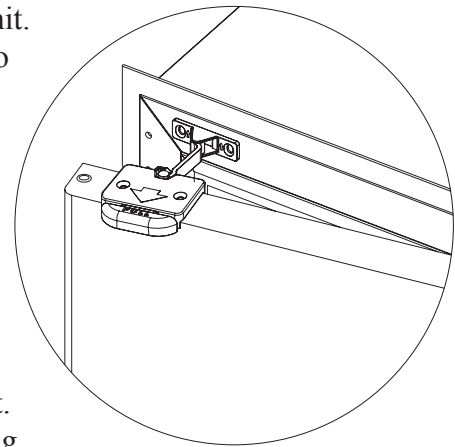
This allows air to dry the inside of the cabinet, reducing the chance for mildew and damage to the mold mechanism's components.

Winterizing

WARNING: Disconnect power at source before working on the unit.

Do not winterize this unit with ANY type of anti-freeze; damage to the mold coating will occur, invalidating product's Limited Warranty and creating potential health hazard.

1. Shut off the water supply to the unit.
2. Disconnect water supply connector behind front grille at solenoid valve. Remove white plastic tubing and nut from bottom of solenoid valve.
3. Turn power on. Allow unit to run for an hour. Remove any cubes that may have been ejected during this period. Turn off power and prop door open to allow the inside to defrost. After it has defrosted, wipe it dry and leave door open using door prop.



Recommissioning

Connect water supply lines, turn on water, check for leaks, then restore power to the unit. After initial cool down of 45-60 minutes, the unit will cycle approximately every 40 minutes.

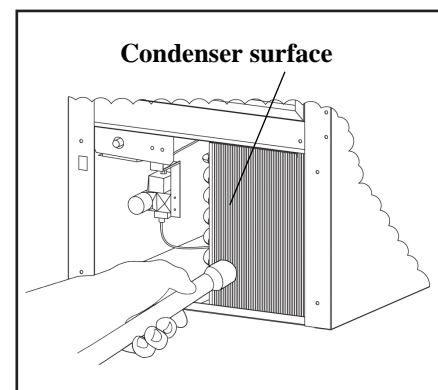
Start-up

Turn on water, check for leaks and then turn on power. Turn on switch(located just below the door). Fan and compressor will normally turn on immediately, resulting in air circulation through the grille and a faint hum from the compressor. If machine was shut off while in ice harvesting cycle, it will have to complete the cycle before compressor and fan turn on(approximately 5 minutes). Interior temperature will drop below freezing. First harvest of ice should occur within 60 minutes of start-up. After lines are purged of air, normal harvesting and refilling occur every 40 minutes or less, under normal conditions.

Condenser cleaning

A dirty or clogged condenser prevents proper airflow, reduces ice making capacity, and causes higher than recommended operating temperatures that may lead to component failure. Have the condenser cleaned at least once every six months.

1. Unplug the ice maker or disconnect power.
2. Remove the 4 screws on the front cover and gently pull it off.
3. Remove dirt and lint from the condenser and the unit compartment with the brush attachment of a vacuum cleaner.
4. Reassemble the front cover.
5. Plug in the ice maker or reconnect power.



TROUBLESHOOTING

WARNING: DO NOT touch the condenser. They are sharp and can be easily damaged.

TROUBLESHOOTING:

Before Calling for Service

If the unit appears to be malfunctioning, read through the OPERATION section of this manual first. If the problem persists, check the Troubleshooting Guide on the following pages. Some of the problems mentioned in the Guide can be solved easily without a service call.

Troubleshooting Guide

Problem	Possible cause	Probable Correction
The machine doesn't operate.	The ice maker is unplugged. The breaker is tripped The ice maker power button is set at OFF. The ice storage bin is full of ice.	Plug the ice maker in, Check Breaker. If it happens again, call for service to check for a short circuit in the unit. Switch the ice maker power button to ON. Remove some ice cubes. Be sure the ice-full probe is free of ice.
The water doesn't feed in after the machine starts.	The water supply tap is turned off. The water supply pipe is not properly connected.	Turn on the water supply tap. Reconnect the water supply pipe.
Machine makes ice, but at a very slow rate	The condenser may be dirty. The air flow to the ice maker may be obstructed. The ambient temperature is high, air flow is obstructed or unit is near some heat source.	Clean the condenser. Check the installation. Check the installation.
Water is leaking out of the unit.	Water supply connection is leaking.	Tighten fitting.
The unit frosts up inside and has to be defrosted often.	Door left open.	Defrost as needed. Closed the door.
Cubes are partially formed.	Not enough water in the water trough.	Check if the water supply pressure is below 20 psig.(0.14MPa) Check water supply or filter may be restricted.
Noise during operation	Unit may not be leveled and locked	Level and secure the unit.

TECHNICAL INFORMATION

SPECIFICATIONS:

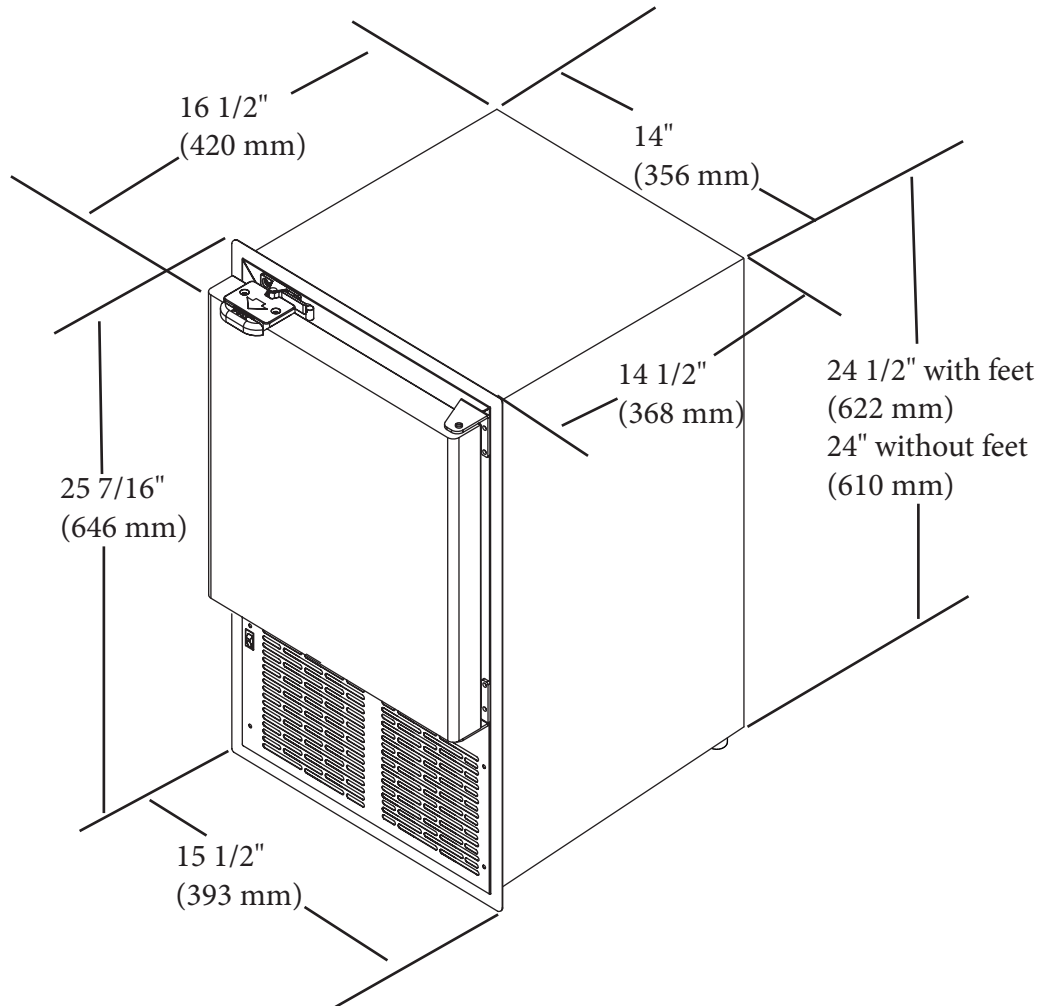
Model:	87
Electrical power:	115VAC ~ 60Hz or 230V AC~50Hz
Ice-making /-harvest rated current:	1.8A/1.5A (115V) 1.0A/0.75A (230V)
Refrigerant:	R134a, 2.65 oz.(75g)
High/Low side pressure:	380 psig(2.6MPa)/130 psig(0.9MPa)
Width x depth x height(mm):	14"(356) x 16 1/2"(420) x 24 1/2"(622)**
Unit weight:	51 lbs (23 KG)
Maximum ice storage:	11 lbs (4.9 KG)
Ice-making capacity:	21 lbs (9.5 KG)/day*
Ice shape:	crescent
Ice cube dimensions(mm):	1/2"(12)x3/4"(20)x2-1/2"(60)

The technical data and performance index listed above should be used for reference only. They are subject to change.

**The height include 1/2"(12mm) rubber feet.

*The actual quantity of ice produced per day can vary with room and water conditions.

Model 87 with flange:



SAVE THESE INSTRUCTIONS

Should a problem arise, please feel free to contact Raritan Technical Support at either the Millville, NJ or Fort Lauderdale, FL office.

LIMITED WARRANTY

Raritan Engineering Company warrants to the original purchaser that this product is free of defects in materials or workmanship for a period of one year from the product's date of purchase. Should this product prove defective by reason of improper workmanship and/or materials within the warranty period, Raritan shall, at its sole option, repair or replace the product.

1. TO OBTAIN WARRANTY SERVICE, Consumer must deliver the product prepaid, together with a detailed description of the problem, to Raritan at 530 Orange St., Millville, N.J. 08332, or 3101 SW 2nd Ave. Ft. Lauderdale, FL 33315. When requesting warranty service, purchaser must present a sales slip or other document which establishes proof of purchase. **THE RETURN OF THE OWNER REGISTRATION CARD IS NOT A CONDITION PRECEDENT OF WARRANTY COVERAGE.** However, please complete and return the owner Registration Card so that Raritan can contact you should a question of safety arise which could affect you.
2. THIS WARRANTY DOES NOT COVER defects caused by modifications, alterations, repairs or service of this product by anyone other than Raritan; defects in materials or workmanship supplied by others in the process of installation of this product; defects caused by installation of this product other than in accordance with the manufacturer's recommended installation instructions or standard industry procedures; physical abuse to, or misuse of, this product. This warranty also does not cover damages to equipment caused by fire, flood, external water, excessive corrosion or Act of God.
3. ANY EXPRESS WARRANTY NOT PROVIDED HEREIN, AND ANY REMEDY FOR BREACH OF CONTRACT WHICH BUT FOR THIS PROVISION MIGHT ARISE BY IMPLICATION OR OPERATION OF LAW, IS HEREBY EXCLUDED AND DISCLAIMED. ALL IMPLIED WARRANTIES SUCH AS THOSE OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE, IF APPLICABLE, AS WELL AS ANY IMPLIED WARRANTIES WHICH MIGHT ARISE BY IMPLICATION OF LAW, ARE EXPRESSLY LIMITED TO A TERM OF ONE YEAR. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG A LIMITED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.
4. UNDER NO CIRCUMSTANCES SHALL RARITAN BE LIABLE TO PURCHASER OR ANY OTHER PERSONS FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES, WHETHER ARISING OUT OF BREACH OF WARRANTY, BREACH OF CONTRACT, OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.
5. No other person or entity is authorized to make any express warranty, promise or affirmation of fact or to assume any other liability on behalf of Raritan in connection with its products except as specifically set forth in this warranty.
6. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



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