

SELF-CONTAINED CUBER

IM-240DNE IM-240XNE IM-240DWNE

INSTRUCTION MANUAL



IM-240DNE

HOSHIZAKI EUROPE LIMITED

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IMPORTANT SAFETY INFORMATION

Throughout this manual, notices appear to bring your attention to situations which could result in death, serious injury, or damage to the unit.

▲WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
ACAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates a hazardous situation which, if not avoided, could result in damage to the unit.
AHYGIENE	Indicates important precautions for hygiene and food safety.
IMPORTANT	Indicates important information about the use and care of the unit.

IMPORTANT

This booklet is an integral and essential part of the product and should be kept and preserved by the user.

Please read carefully the guidelines and warnings contained herein as they are intended to provide the installer/user with essential information for the proper installation and the continued safe use and maintenance of the product.

Please preserve this booklet for any further consultation that may be necessary.

AWARNING

This is a commercial icemaker, and should be destined only to be used for the purpose for which it has been expressly designed.

Any other use should be considered improper and therefore dangerous. The manufacturer will not be held liable or responsible for any damage caused by improper, incorrect and unreasonable use.

The installation, and relocation if necessary, must be carried out by qualified personnel, in accordance with current regulations, according to the manufacturer's instructions.

Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.

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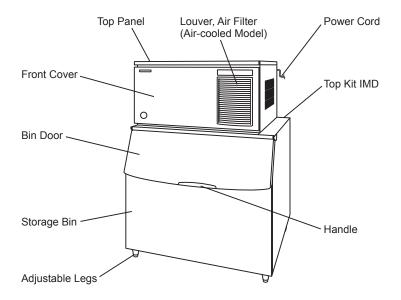
ENGLISH

The use of any electrical appliance involves the observance of some fundamental rules. In particular:

- *Instances of high humidity and moisture increase the risk of electrical short circuits and potential electrical shocks. If in doubt, disconnect the icemaker.
- *Do not damage the power cord or pull it in order to disconnect the icemaker from the electrical supply network.
- *If the supply cord is damaged, it must be replaced by a replacement cord available from Hoshizaki Parts/Service Centres.
- *Do not touch the electrical parts or operate the switches with damp hands.
- *This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, it can however 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 providing they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- *Children shall not play with the appliance.
- *Cleaning and user maintenance shall not be made by children without supervision.
- *Do not attempt to modify the icemaker. Only qualified personnel may disassemble or repair the appliance.

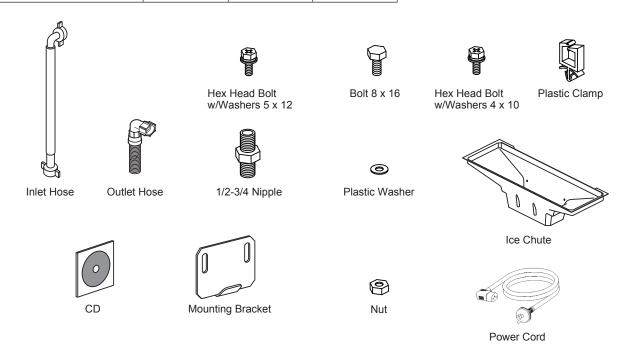
I. INSTALLATION INSTRUCTIONS

1. CONSTRUCTION



2. ACCESSORIES

	IM-240DNE	IM-240XNE	IM-240DWNE
CD	1	1	1
Inlet Hose	1	1	2
Outlet Hose	1	1	2
1/2-3/4 Nipple	-	-	2
Ice Chute	-	1	-
Mounting Bracket	2	-	2
Hex Head Bolt w/Washers 5 x 12	2	-	2
Bolt 8 x 16	2	2	2
Nut	2	2	2
Plastic Washer	4	4	4
Hex Head Bolt w/Washers 4 x 10	-	4	-
Plastic Clamp	-	2	-
Power Cord	1	1	1



3. UNPACKING

AWARNING

Children should not be allowed in reach of the packaging elements (plastic bags and expanded polystyrene) as they are potential sources of danger.

ACAUTION

Do not lift or manoeuvre the carton by using the shipping bands.

When moving the unit by hand, remove the panels and hold the unit frame.

Always wear protective gloves when carrying the unit.

When handling the carton or the unpacked unit, work in pairs to prevent injury.

NOTICE

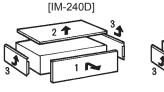
Remove shipping carton, tape(s) and packing. If packing material is left in the icemaker, it will not work properly.

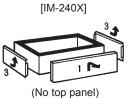
Note: This icemaker needs a storage bin. Hoshizaki recommends the following ice storage bins:

B801SA (Top Kit IMD)----- IM-240D/IM-480D/IM-720D

B700SF ------ IM-240D/IM-480D B800SF (Top Kit 4) ----- IM-480D/IM-720D B900SF (Top Kit 8) ----- IM-480D/IM-720D

- 1) After removing the packaging, make sure that the icemaker and the storage bin are in good condition. If in doubt, please do not use the icemaker but apply to professionally qualified personnel. See the instruction sheet attached to the storage bin for its unpacking and installation guidelines.
- 2) Remove the icemaker panels to gain access to the accessory kit and to assist easier installation.





a) Front Cover: Remove the screw(s). Lift up and pull

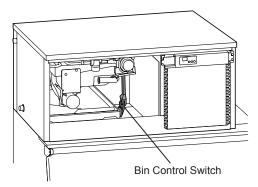
toward you.

b) Top Panel: Remove the screw(s). Simply lift off. c) Side Panel: Remove the screw(s) [IM-240X only]. Slide

forward slightly, and then lift off.

d) Rear Panel: Does not require removal.

- 3) Remove the package of accessories. Check the contents according to "2. ACCESSORIES".
- 4) Remove the shipping tape holding the bin control switch.
- 5) Remove the protective plastic film from the exterior. If the icemaker is exposed to the sun or to heat, remove the film after the icemaker cools.



4. LOCATION

AWARNING

This icemaker is not intended for outdoor use.

The icemaker should not be located next to ovens, grills or other high heat producing equipment.

This appliance is not suitable for installation in an area where a water jet could be used.

ACAUTION

The location should provide a firm and level foundation for the icemaker.

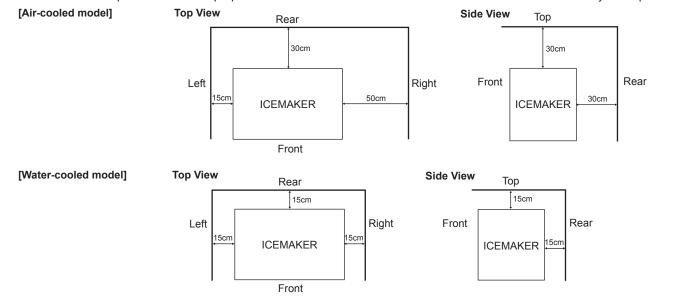
NOTICE

Do not place anything on top of the icemaker or in front of the louver.

IMPORTANT

Normal operating ambient temperature should be within 1°C to 40°C. Water connection is cold water only. Operation of the icemaker, for extended periods, outside of these normal temperature ranges may affect production capacity.

Allow the clearance specified below for proper air circulation and ease of maintenance and/or service should they be required.



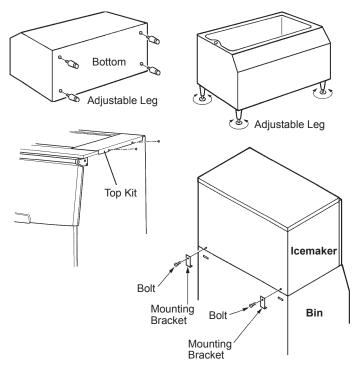
In some high humidity environments, condensation may form inside the machine and drip onto the floor. Do not install where the floor can be affected by water.

5. INSTALLATION

ACAUTION

Incorrect installation can cause harm to people, animals or other items, for which the manufacturer cannot be held responsible.

- 1) Lay the storage bin on its rear side carefully to prevent damage. Secure the four adjustable legs (bin accessory) into the four tapped holes on the underside of the bin.
- Position the storage bin in the selected permanent position, and level it in both the left-to-right and front-to-rear directions.
- 3) Use the screws provided on the left or right side of the storage bin to install the top kit.
- 4) Remove the icemaker panels. The rear panel is not required to be removed for installation. See "3. UNPACKING".
- Place the icemaker on the top of the storage bin. Be careful not to damage the icemaker frame and the bin control switch.
- 6) Secure the icemaker to the storage bin at the rear, by using the mounting brackets and bolts provided.
- 7) Replace the icemaker panels in their correct position.



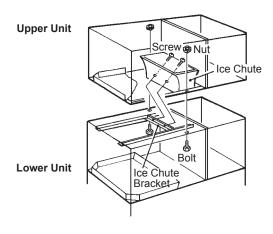
6. STACKING ICEMAKERS

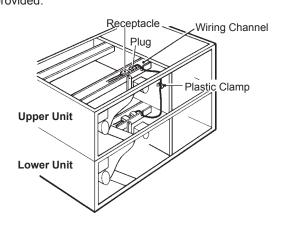
NOTICE

Check the icemaker models. A D-type icemaker and an X-type icemaker will be required for stacking two icemakers. A D-type icemaker and two X-type icemakers will be required when stacking three icemakers. The D-type icemaker is designed for the upper unit, and the X-type for the middle and lower units.

The D-type and X-type icemakers are provided with two different types of bin control switch. Use the bin control switch of the lower (and middle) X-type icemakers when stacking icemakers. The bin control switch must be removed from the upper unit. Misconnection or no connection may cause serious damage to the icemaker units, resulting in failure.

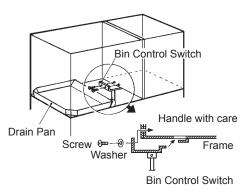
- 1) Prepare and position the storage bin as detailed in 1), 2) and 3) in "5. INSTALLATION".
- Remove the icemaker panels. The rear panel is not required to be removed for installation. See "3. UNPACKING".
- 3) Attach the lower unit (X-type) on the top of the storage bin.
- 4) Secure the lower unit (X-type) to the storage bin at the rear, by using the Drain Pan mounting brackets and bolts provided.
- 5) Remove the shipping tape holding the bin control switch on the drain pan. Attach the bin control switch to the frame located at the left bottom of the condensing unit, and secure it using the two screws and the two washers provided.
- 6) Before stacking, disconnect the bin control switch leads (with three-way plug) from the upper or middle unit. Remove the screws and the bin control switch. When stacking two or three icemakers, the switch for the upper unit will not be required. Keep it after removal.
- 7) Attach the upper or middle unit on the lower unit.
- 8) Secure the two units with the two bolts and the two nuts provided.
- 9) Place the ice chute (lower or middle unit accessory) and secure it to the bracket with the two screws.
- 10) Connect the leads (with three-way plug) located in the lower unit wiring channel to the upper unit receptacle, unplugged in the above step 6). Secure the leads using the plastic clamp provided.

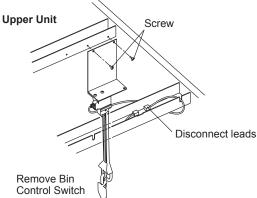




11) Replace the icemaker panels in their correct position.

Note: If stacking three icemakers, repeat the instructions 6) - 11) for the upper unit. Remember, only <u>ONE</u> bin control is needed regardless of configuration. The bin control extension leads are pre-wired with the plug and will be found coiled in the X-type wiring channel.





7. ELECTRICAL CONNECTIONS

AWARNING

THIS APPLIANCE MUST BE EARTHED

To prevent possible severe electrical shock to individuals or extensive damage to the unit, the icemaker must be connected via the flexible supply cord supplied with the icemaker to an appropriate outlet socket installed in accordance with local codes and regulations i.e. AS / NZS 3000.

Disconnect the main power supply before any maintenance, repairs or cleaning is undertaken.

- * This appliance requires a separate 220 240VAC, 10A supply. The electrical supply must be protected an appropriate circuit breaker and Residual Current Device. Check the nameplate on the icemaker for the supply requirements.
- * Stacked icemakers should each have a separate receptacle, but they must all be connected in parallel to the same single phase supply or circuit with sufficient ampacity. In addition and to avoid nuisance tripping, individual circuit breakers for each machine should not be used.
- * The main control box fuse is rated at 5A and should only be replaced by a qualified service engineer.
- * The service of a licensed electrician may be required to ensure the installation is in accordance with the local codes and regulations.
- * In accordance with the requirement of the IEC standard, the maximum permissible system impedance (Zmax) at the interface point of the power supply to be connected with this icemaker must be 0.23+j0.23 ohm. Determine in consultation with the supply authority, if necessary, that the icemaker is connected only to a supply of 0.23+j0.23 ohm or less.
- * The wires in the mains lead are coloured in accordance with the following code:

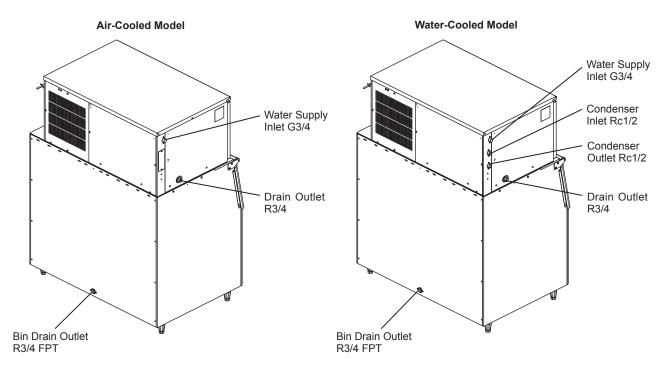
Green & Yellow = Earth Blue = Neutral Brown = Live

8. WATER SUPPLY AND DRAIN CONNECTIONS

AWARNING

Connect to potable cold water supply only.

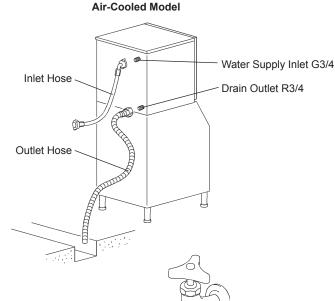
* The service of a licensed plumber may be required to ensure the installation is in accordance with the local codes and regulations.



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[Connection to the water supply]

- * The connections to the mains water supply must be made in accordance with the Plumbing Code of Australia and in accordance with AS / NZS 3500.1 and AS / NZS 3500.2. This appliance incorporates backflow protection complying with AS / NZS 3500.1. No further backflow protection is required for connection to the water supply.
- * Icemaking water must be potable water. Where scaling can be caused by water quality:
 - Installation of an external filter or softener is recommended.
 Contact your local water treatment professional or Hoshizaki service agent.
 - Change to the "full drain flush" mode is recommended. Contact your local Hoshizaki service agent.
- * Water supply pressure should be minimum 0.07 MPa (0.7 bar) and maximum 0.8 MPa (8 bar). If the pressure exceeds 0.8 MPa (8 bar), use a proper pressure reducing valve. Do NOT throttle back the supply tap.



Water Supply Tap

icm air gap

Floor

Drain

Inlet Hose

* Attach the angle end of the inlet hose to the G3/4" water inlet fitting on the rear of the icemaker.

* Be sure to use the new inlet hose-sets supplied with the appliance. Do not reuse any other inlet hose-set.

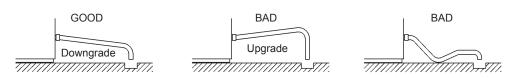
* Ensure rubber tap washers are correctly positioned. Hand tighten the inlet hose sufficiently to provide a leak free joint.

[Connection to the drain]

* Hand tighten grey flexible outlet hose (accessory) onto the R3/4 fitting on the rear of the icemaker as indicated, ensuring rubber washer is correctly positioned to obtain a leak free joint. The hose can be cut to length as necessary to suit position of main drain.

* Drain lines should not be installed directly to the sewer system. A vertical air gap of a minimum of 5 cm should be between the end of the drain hoses from the icemaker and storage bin and the floor drain.

* To prevent a backflow into the storage bin, the outlet hose must be laid as shown.



- * On water-cooled model, a back flow preventer may be required in the cooling water circuit.
- * Be sure to use the new hose-sets supplied with the appliance. Do not reuse any old hose-sets.

Water-Cooled Model:

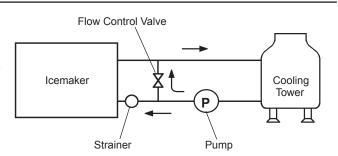
[Connection to the water-cooled condenser]

- * Hoshizaki recommends that the water-cooled condenser should be connected to a closed circuit recirculating type cooling system utilizing a tower, water chiller or similar. Water make up should be via a ball valve/break tank arrangement.
- * The services of a licensed or coded plumber should be used to ensure a correct installation.
- * The connections should be made properly in compliance with the applicable national or local regulations.
- * When selecting a cooling tower, refer to the following peak values of heat flow in the condenser:

Model IM-240AW: 5235 W

* Pipes between the cooling tower and the icemaker should be at least 20 mm DIA to reduce pressure loss, even though the icemaker fittings are 13 mm DIA.

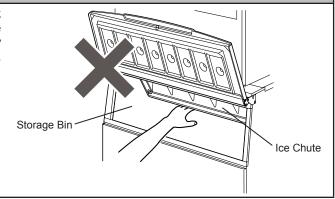
- * Pressure loss in the water circuit inside the unit will be 5 to 6 m when the cooling water flows at the ratio of 4 to 5 lit/min.
- * Select a circulating pump referring to the above values of heat flow.
- * Do not use a cascade pump, or the water regulator will vary the flow and stop it during the defrost cycle.



II. OPERATING INSTRUCTIONS

ACAUTION

Do not step into the storage bin, or put your hands into the back of the storage bin or the ice chute on top of the storage bin. Ice may drop off the icemaker, a hard block of ice may suddenly break down, or the icemaking mechanism may suddenly move, resulting in injury.



NOTICE

All parts are factory-adjusted. Improper adjustments may result in failure.

If the unit is turned off, wait for at least 3 minutes before restarting the icemaker to prevent damage to the compressor.

AHYGIENE

This icemaker is designed to produce edible ice. To keep the icemaker hygienic:

- * Wash your hands before removing ice. Use the plastic scoop provided (accessory).
- * The storage bin is for ice use only. Do not store anything else in the bin nor use other electrical appliances in the bin.
- * Clean the storage bin before use (see "III. 1. CLEANING").
- * Keep the scoop clean. Clean it by using a neutral cleaner and rinse thoroughly.
- Close the door after removing ice to prevent entrance of dirt, dust or insects into the storage bin.

1. START UP

The installer will normally commission the icemaker to start the automatic icemaking process. To ensure continuous operation, make sure that:

- * The water supply tap is on, and
- * The icemaker is connected to the power supply.

2. PREPARING THE ICEMAKER FOR LONG STORAGE

NOTICE

This icemaker will not work at subfreezing temperatures. To prevent damage to the water supply line, drain the icemaker when air temperature is below zero.

AHYGIENE

When shutting down the icemaker for two or more days, drain the icemaker to prevent contamination in the water circuit.

- 1) Unplug the icemaker or disconnect the power supply.
- 2) Close the water supply tap, and remove the inlet hose.

ENGLISH

- 3) Remove all ice from the storage bin, and clean the bin.
- 4) Ask for draining of the icemaker by professional qualified personnel.

III. MAINTENANCE

1. CLEANING

AWARNING

Before carrying out any cleaning or maintenance operations, unplug the icemaker from the electrical supply network.

This appliance must not be cleaned by use of a water jet.

ACAUTION

When using a neutral cleaner or sodium hypochlorite, thoroughly read and understand the instructions provided to prevent potential health problems.

NOTICE

Ask a trained service person to clean and sanitise the icemaker water system at least twice a year and to check and clean the condenser at least once a year.

To prevent possible damage, do not clean the plastic parts with water above 40°C or in a dishwasher.

IMPORTANT

For spare parts information, contact your local Hoshizaki service agent.

[a] Machine and Bin Exterior

Wipe the exterior at least once per week with a clean, soft cloth. Use a damp cloth containing a neutral cleaner to wipe off grease or dirt.

[b] Scoop and Storage Bin Handle Cleaning/Sanitisation (Daily)

- 1) Either mix 1 litre of water with 4 ml of 5.25% sodium hypochlorite solution in a suitable container, or the recommended Hoshizaki sanitiser as directed.
- 2) Soak the scoop in the solution for more than 3 minutes. Rinse thoroughly, and shake to remove surplus liquid.

Note: Using a cloth to dry may re-contaminate.

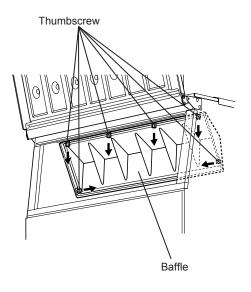
- 3) Use a neutral cleaner to wash the storage bin handle. Rinse thoroughly.
- 4) Soak a clean cloth with the sanitising solution, and wipe the handle. Use fresh water and a clean cloth to rinse/dry.

[c] Storage Bin Interior Cleaning/Sanitisation (Weekly)

1) Open the storage bin door, and remove all ice.

Note: Hoshizaki recommends various types of storage bin for the icemaker which vary in size and design. The following instructions are therefore for general guidance only.

- 2) Remove the thumbscrews securing the baffle.
- 3) Remove the baffle from the bin.
- 4) Wash the bin liner and baffle with a neutral non-abrasive cleaner. Rinse thoroughly.
- 5) Either mix 5 litres of water with 18 ml of 5.25% sodium hypochlorite solution in a suitable container, or the recommended Hoshizaki sanitiser as directed.



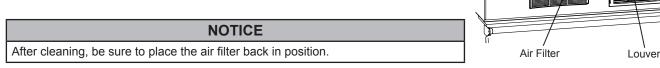
- 6) Soak a clean sponge or cloth with the solution, and wipe the bin liner surfaces and baffle.
- 7) Refit the baffle and thumbscrews. Wipe the surface of the bin door and thumbscrews with the solution. Close the bin door.
- 8) The remaining solution can be used to sanitise utensils.

Note: Do not wipe dry or rinse after sanitising, but allow to air dry.

[d] Air Filter (Air-Cooled Model Only)

Plastic mesh air filters remove dirt or dust from the air, and keep the condenser from getting clogged. If the filters get clogged, the icemaker's performance will be reduced. Remove and clean the air filter(s) at least twice per month:

- 1) Slide the air filter off the louver.
- 2) Clean the air filter by using a vacuum cleaner. When severely clogged, use warm water and a neutral cleaner to wash the air filter.
- 3) Rinse and dry the air filter thoroughly.



2. BEFORE CALLING FOR SERVICE

≜ WARNING
Do not damage the refrigerant circuit.

[a] Error Code Indication

If the error code "E" is indicated on the display, before calling for service, check the following.

Code	Remedy
E1	Freeze error. Unplug unit and plug it back in after 3 minutes. Clean air filter (air-cooled model). Lower ambient temperature or ensure adequate clearance around unit (see "I. 2. LOCATION"). If error persists, call for service.
E2	Defrost error. Unplug unit and plug it back in after 3 minutes. If error persists, call for service.
EE	Other error. Unplug unit and plug it back in after 3 minutes. Clean air filter (air-cooled model). Check for water failure or closed water supply tap. Lower ambient temperature or ensure adequate clearance around unit (see "I. 2. LOCATION"). If error persists, call for service.

[b] No Error Code Indication

If the icemaker does not work properly or does not work at all and no error code is indicated on the display, before calling for service, check that:

- * The power is supplied to the unit.
- * The water is turned on.
- * The air filter is clean (air-cooled model).
- * The cooling water circuit has a proper flow (water-cooled model).

For further assistance or advice, contact your local Hoshizaki service agent.

3. DISPOSAL

Comply with local regulations regarding disposal of this appliance and its refrigerant gas. Before you scrap the appliance, take off the door to prevent children trapped.

Correct disposal of this product:

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.



4. WARRANTY

Hoshizaki warrants to the original owner/user that all Hoshizaki branded products shall be free of defects in material and/or workmanship for the duration of the "warranty period". The warranty shall be effective for two years from the date of installation. Hoshizaki's liability under the terms of the warranty are limited and shall exclude routine servicing, cleaning, essential maintenance and/or repairs occasioned by misuse and installations not in accordance with Hoshizaki guidelines.

Warranty repairs should be completed by an approved Hoshizaki dealer or service agency using genuine Hoshizaki components.

To obtain full details of your warranty and approved service agency, please contact your dealer/supplier, or the nearest Hoshizaki Service office:

Hoshizaki Lancer TEL: +61 8 8268 1388 FAX: +61 8 8268 1978 info@hoshizaki.com.au http://www.hoshizaki.com.au To register your product for warranty with Hoshizaki, visit http://www.hoshizaki.com.au/warranty-registration or scan the QR code.



SPECIFICATIONS

Model	IM-240DNE	IM-240XNE
Туре	Air-cooled, cube ice	Air-cooled, cube ice
Power Supply	1 phase 220 - 240V 50Hz	1 phase 220 - 240V 50Hz
Electric Consumption	1330W	1330W
Ice Production per 24h	230kg (5mm) / 240kg (15mm) (ambient temp 10°C, water temp 10°C)	230kg (5mm) / 240kg (15mm) (ambient temp 10°C, water temp 10°C)
Dimensions	1084mm(W) x 700mm(D) x 500mm(H)	1082mm(W) x 697mm(D) x 485mm(H)
Refrigerant	R404A, 0.48kg (GWP: 3920, CO2: 1.882t)	R404A, 0.48kg (GWP: 3920, CO2: 1.882t)
Insulation Foam Blowing Agent	N/A	N/A
Weight	Net: 88kg (Gross: 106kg)	Net: 84kg (Gross: 102kg)
Ambient Temp	1 - 40°C	1 - 40°C
Water Supply Temp	5 - 35°C	5 - 35°C
Water Supply Pressure	0.07 - 0.78 MPa (0.7 - 8 bar)	0.07 - 0.78 MPa (0.7 - 8 bar)
Voltage Range	Rated voltage ± 6%	Rated voltage ± 6%

Model	IM-240DWNE
Туре	Water-cooled, cube ice
Power Supply	1 phase 220 - 240V 50Hz
Electric Consumption	1300W
Ice Production per 24h	230kg (5mm) / 240kg (15mm) (ambient temp 10°C, water temp 10°C)
Dimensions	1084mm(W) x 700mm(D) x 500mm(H)
Refrigerant	R404A, 0.45kg (GWP: 3920, CO2: 1.764t)
Insulation Foam Blowing Agent	N/A
Weight	Net: 87kg (Gross: 105kg)
Ambient Temp	1 - 40°C
Water Supply Temp	5 - 35°C
Water Supply Pressure	0.07 - 0.78 MPa (0.7 - 8 bar)
Voltage Range	Rated voltage ± 6%

Note: The above specifications are for the representative models.

This product includes a hermetically sealed refrigeration system that contains fluorinated greenhouse gases.