



CUBELET ICE DISPENSER
DISTRIBUTEUR DE CUBELETS
CUBELETEISDISPENSER
CUBELET-IJSDISPENSER
DISPENSADOR DE CUBITOS DE HIELO
DISTRIBUTORE DI GHIACCIO IN CUBETTI
DISPENSER TIL ISKLUMPER
ISMASKIN
ISBITMASKIN

**INSTRUCTION MANUAL
NOTICE D'UTILISATION
BEDIENUNGSANLEITUNG
INSTRUCTIEHANDLEIDING
MANUAL DE INSTRUCCIONES
MANUALE DI ISTRUZIONE
BETJENINGSVEJLEDNING
BRUKSANVISNING
BRUKSANVISNING**

DCM-120FE

IMPORTANT

1. 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.
2. This is a commercial ice dispenser, 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.

I. INSTALLATION INSTRUCTIONS

WARNING

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

1. UNPACKING

WARNING

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

CAUTION

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

- 1) After removing the packaging, make sure that the ice dispenser is in good condition. If in doubt, please do not use the equipment but apply to professionally qualified personnel.
- 2) Remove the package of accessories, and check the contents:
 - a) Installation Kit

Inlet Hose	1
Drain Hose	1

- | | |
|------------------------------------|---|
| 1/2-3/4 Nipple | 1 |
| b) Brush (for cleaning Water Pipe) | 1 |

- 3) Check that a 10A spare fuse for the power supply and a 3A spare fuse for the solenoid are provided in the small vinyl bag.
- 4) Remove the protective plastic film from the panels. If the ice dispenser is exposed to the sun or to heat, remove the film after the ice dispenser cools.

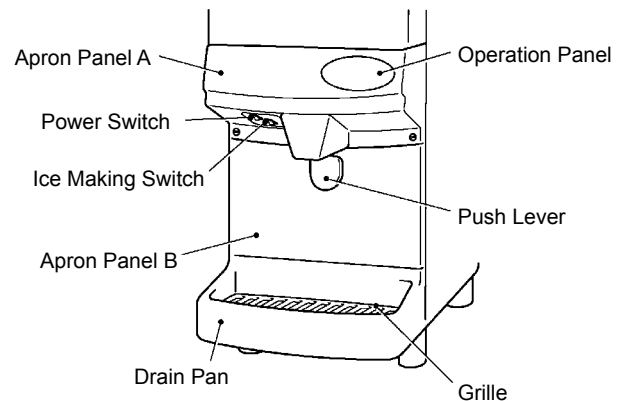


Fig. 1

2. LOCATION

IMPORTANT

1. This ice dispenser is not intended for outdoor use. Normal operating ambient temperature should be within 5°C to 40°C. Normal operating water temperature should be within 5°C to 35°C. Operation of the ice dispenser, for extended periods, outside of these normal temperature ranges may affect production capacity.
2. The ice dispenser should not be located next to ovens, grills or other high heat producing equipment.
3. The location should provide a firm and level foundation for the equipment at normal counter top height.
4. Allow 15 cm clearance on top for proper air circulation and ease of maintenance and/or service should they be required.
5. This appliance is not suitable for installation in an area where a water jet could be used and where dripping is not allowed.
6. Do not place anything on top of the ice dispenser to obstruct the ventilation louver.

ENGLISH

3. INSTALLATION

- * Incorrect installation can cause harm to people, animals or things, for which the manufacturer cannot be held responsible.
- * Place the ice dispenser on a firm level surface at counter top height.

4. ELECTRICAL CONNECTIONS

WARNING

THIS APPLIANCE MUST BE EARTHED

This ice dispenser requires an earth that meets the national and local electrical code requirements. To prevent possible severe electrical shock to individuals or extensive damage to equipment, install a proper earth wire to the ice dispenser. Remove the plug from the mains socket before any maintenance, repairs or cleaning is undertaken.


- * This ice dispenser must have a separate power supply or receptacle of 220 - 240V.
- * The main control box fuse is rated at 10A, and the solenoid fuse provided in another control box is rated at 3A. They should only be replaced by a qualified service engineer.
- * Usually an electrical permit and services of a licensed electrician are required.
- * If the supply cord and the plug should need to be replaced, it should only be done by a qualified service engineer.

For the U.K. and the Republic of Ireland only

- * The wires in the mains lead are coloured in accordance with the following code:

Green & Yellow = Earth
Blue = Neutral
Brown = Live

As the colours of the wire in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Green-and-Yellow must be connected to the terminal in the plug which is marked with the letter E or by the symbol  or coloured Green or Green-and-

Yellow. The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black. The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Red.

- * Should the socket outlets in the installation site not be suitable for the plug supplied with your product, the plug must be removed (cut off if it is moulded on plug) and an appropriate plug fitted.

If the non-rewirable plug has been cut from the power supply cord, it must be disposed of. There should be no attempt to reuse it. Inserting such a plug into a socket elsewhere presents a serious risk of electrical shock.

- * The non-rewirable plug must never be used without a fuse cover being fitted.

The correct replacement for the detachable fuse cover is identifiable from the manufacturer's reference number stamped on the plug.

Supply of replacement fuse covers can be obtained from Hoshizaki Parts/Service Centres.

Fuses should be rated at 13A and approved to BS 1362.

5. WATER SUPPLY AND DRAIN CONNECTIONS

(For the U.K. only, the connections must be in accordance with current requirements of the Model Water Byelaws 1986 SI No. 1147)

- * Only potable water should be used for this ice dispenser.

- * To avoid performance reduction or malfunction caused by scaling, the water supply should have a hardness of not more than 50 mg/L and a silica content of not more than 30 mg/L. Otherwise, installation of a proper water treatment device will be required.

- * Water supply pressure should be minimum 0.5 bar and maximum 8 bar. If the pressure exceeds 8 bar, use a pressure reducing valve. Do NOT throttle back the supply tap.

- * A plumbing permit and services of a licensed plumber may be required in some areas.

- * The ice dispenser drain is gravity flow, so ensure drain pipe has an adequate pitch or fall.

* Water should drain into an open trap.

* There should be no backflow in the water circuit.

- 1) By means of a suitable spanner or wrench, tighten the 1/2-3/4 nipple (accessory) into the Rc1/2 fitting at the bottom of the ice dispenser as indicated. P.T.F.E. tape and/or a suitable sealing compound should be used to obtain a leak free joint.

Note: Jointing compounds should be approved and suitable for potable water use.

- 2) Attach the angled end of the white flexible inlet hose (accessory) to free end of 1/2-3/4 nipple ensuring rubber sealing washer is correctly positioned. Hand tighten sufficiently to provide a leak free joint.
- 3) Attach the other end of the inlet hose to the water tap, noting washer is correctly positioned before hand tightening as above.
- 4) Attach the grey flexible drain hose (accessory) to the R3/4 fitting at the bottom of the Drain Pan, confirming fitment of rubber washer before finally hand tightening the joint. P.T.F.E. tape and/or a suitable sealing compound should be used to obtain a leak free joint. The pipe can be cut to length as necessary to suit position of main drain.

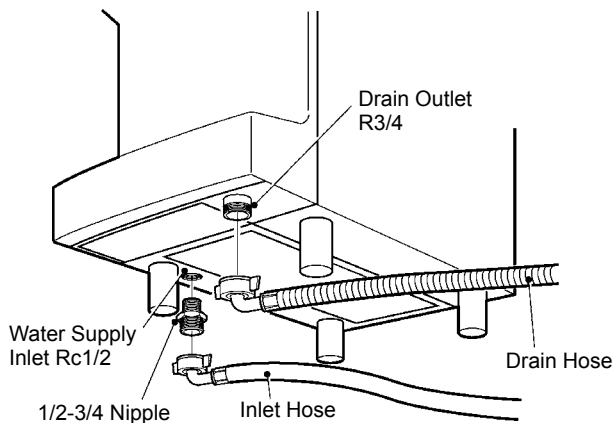


Fig. 2

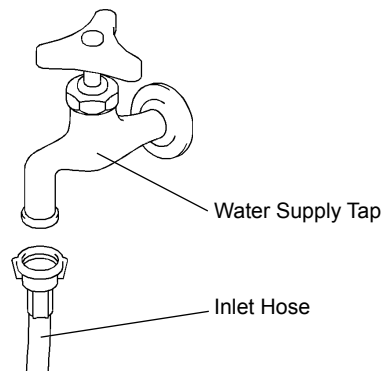


Fig. 3

II. OPERATING INSTRUCTIONS

WARNING

1. This ice dispenser is designed to produce and store edible ice. To keep the ice dispenser hygienic:
 - * Keep the Grille in the Drain Pan clean. Clean it by using a neutral cleaner and rinse thoroughly.
2. The use of any electrical equipment 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 ice dispenser.
 - * Do not pull the power cord in order to disconnect the ice dispenser from the feed network.
 - * This appliance is not suitable for unsupervised use by young children or aged or infirm persons.
3. All parts are factory-adjusted. Improper adjustments may result in failure.
4. If the unit is turned off, wait for at least 3 minutes before restarting the ice dispenser to prevent damage to the Compressor.
5. Periods of 5 to 6 hours without dispensing ice could result in wet ice or an ice bridge forming in the Storage Bin. Always turn off the Ice Making Switch, and remove ice from the Storage Bin within 2 hours. Soggy and sticky ice should be removed continuously as produced.
6. This ice dispenser is programmed to suspend ice dispensing action when the Push Lever is continuously pressed for more than 2 minutes. Also, pressing and releasing the Push Lever repeatedly for extended periods may cause the protector to stop the ice dispenser.

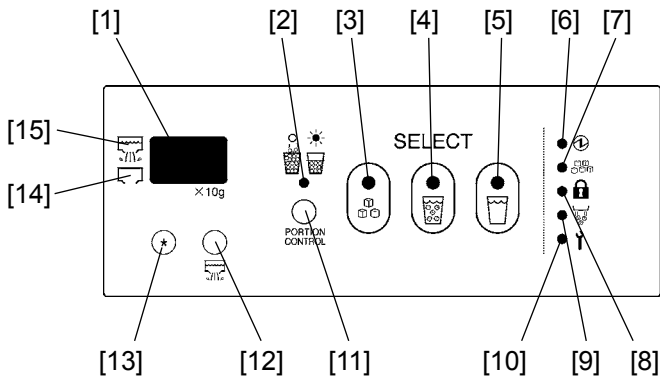
IMPORTANT

1. To prevent ice and/or water from scattering or splashing, use a container with more than a 7 cm opening. Place the container about 1 cm below the Spout when pressing the Push Lever to dispense ice and/or water.
2. Clean out the Storage Bin once a day, or stored ice may melt and refreeze, causing

ENGLISH

mechanical problems. For efficient use of ice, turn off the Ice Making Switch before shutting down the ice dispenser. Ice remains available until the Storage Bin becomes empty, and water is always available.

Operation Panel



- [1] Display
- [2] Portion Control Lamp
- [3] Ice Switch
- [4] Ice & Water Switch
- [5] Water Switch
- [6] Power Lamp
- [7] Ice Making Lamp
- [8] Lock Lamp
- [9] Cleanup Lamp
- [10] Service Call Lamp
- [11] Portion Control Switch
- [12] Drain Switch
- [13] Set Switch
- [14] End of Drain Cycle
- [15] Drain Cycle

Fig. 4

1. OPERATION - How it works

Water flows from the potable water source through the water tap, and enters at the water inlet fitting and on to the Reservoir. The Reservoir functions to maintain a constant water level inside the Freezer Assembly. Water from the Reservoir enters at the bottom of the Freezer. Heat is removed by the refrigeration process and ice forms inside the Freezer.

A stainless steel Auger inside the Freezer is driven by the Gear Motor, and the rotating Auger carries the ice upward to the top of the Auger, where excess water is pressed out of the ice, before being extruded and broken into cubelet ice

(compressed ice) and then pushed out into the Ice Storage Bin.

Moving the Power Switch and the Ice Making Switch, located on the bottom left of the Middle Front Panel, to the "ON" position starts the automatic and continuous ice making process. When the Ice Storage Bin is filled with ice, the Bin Control Switch will shut off the ice making process. As the ice is dispensed from the Storage Bin, the Bin Control Switch will reset automatically and restarts the ice making process.

Pushing one of the Select Switches, located on the right side of the Middle Front Panel, gives the user convenient 3-way dispensing - Ice, Ice & Water, or Water.

Pushing the Portion Control Switch, located on the right side of the Middle Front Panel, and illuminating the Portion Control Lamp will activate the preset portion control for ice dispensing. If adjustment is desired, see "3. ADJUSTMENT OF ICE PORTION CONTROL".

An agitator mechanism in the Storage Bin functions to give a smooth ice flow and to prevent making an ice block.

2. START UP

- 1) Plug in the ice dispenser.
- 2) Open the water tap.
- 3) Move the Power Switch, located on the bottom left of the Middle Front Panel, to the "ON" position. The Power Lamp lights up.
- 4) Move the Ice Making Switch, located on the bottom left of the Middle Front Panel, to the "ON" position. The Ice Making Lamp lights up, and the ice dispenser starts the automatic ice making process.
- 5) Check the water supply and drain connections for water leaks.
- 6) The initial ice making process will be completed within 10 minutes of the Ice Making Switch being moved to the "ON" position.
- 7) Push the Ice Switch on the Operation Panel.
- 8) Press the Push Lever, and check for proper ice dispensing action.

- 9) Select your dispensing choice by pushing one of the Select Switches - Ice, Ice & Water, or Water (factory adjusted to the Ice & Water mode). The lamp of the selected mode lights up.
- 10) The ice dispenser stops the ice making process automatically in 1 hour or so when the Storage Bin is filled with ice, and restarts when ice is used.
- 11) To activate the preset ice portion control, press the Portion Control Switch (factory adjusted to the no control mode). To reset the portion control, press the switch again. See "3. ADJUSTMENT OF ICE PORTION CONTROL" for adjustment of the setting.
- 12) To lock the selected operation modes, keep pressing the illuminated Select Switch for 5 seconds until it starts flashing. Press the Portion Control Switch to illuminate the Lock Lamp. To unlock, press the three Select Switches together until the Lock Lamp goes out.

3. ADJUSTMENT OF ICE PORTION CONTROL

The preset portion control for ice dispensing is adjustable as follows (factory adjusted to 40 g, or 4.0 on the Display). The actual ice dispensing amount depends on the water quality and the amount of ice remaining in the Storage Bin.

- 1) Remove the Apron Panel A by turning the two screws on both sides counterclockwise with a coin and pulling the panel toward you.
- 2) Press the Set Switch. The Display flashes "4.0". The ice dispensing amount is ten times the value on the Display and adjustable from 20 g (2.0) to 990 g (99) while the Display is flashing.
- 3) To decrease the ice dispensing amount, push the Ice Switch. To increase, push the Ice & Water Switch. One push of either switch will change the amount by 5 g (0.5).
- 4) With the desired value on the Display, press the Set Switch. The set value stops flashing and remains on.
- 5) Replace the Apron Panel A in its correct position, and turn the two screws clockwise with a coin.

4. CLEANUP TIME REMINDER

To prevent stored ice from melting and refreezing, the Storage Bin must be cleaned up once a day. The following procedure enables/disables the Cleanup Lamp to flash every 24 hours after startup and remind the user of the cleanup time.

- 1) Remove the Apron Panel A. See "3. ADJUSTMENT OF ICE PORTION CONTROL".
- 2) Keep pressing the Set Switch and Portion Control Switch together for 3 seconds until the Display shows "oF" or "on" (factory adjusted to "oF").
- 3) Push the Ice Switch or Ice & Water Switch. The Display shows "on" or "oF".
- 4) Press the Set Switch.
- 5) Replace the Apron Panel A in its correct position.
- 6) The cleanup time changes after power failure or when the Power Switch is turned off during service hours. To set the cleanup time, turn off the Power Switch and turn it back on at the desired time. The Cleanup Lamp starts flashing every 24 hours at that same time and goes out after the Push Lever is pressed for more than 5 seconds.

5. SHUT DOWN

This ice dispenser must be shut down and drained every day at the end of service hours, in accordance with the following procedure:

- 1) Close the water tap.
- 2) Move the Ice Making Switch, located on the bottom left of the Middle Front Panel, to the "OFF" position.
- 3) Place a large container right under the Spout, and keep pressing the Push Lever until no ice is dispensed.
- 4) Remove the Apron Panel A. See "3. ADJUSTMENT OF ICE PORTION CONTROL".
- 5) Press the Drain Switch. The Display illuminates the Drain Cycle sign when a drain cycle starts, and illuminates the End of Drain

ENGLISH

Cycle sign when the cycle completes. The drain cycle may not begin immediately after the Drain Switch is pressed.

- 6) Replace the Apron Panel A in its correct position. See "3. ADJUSTMENT OF ICE PORTION CONTROL".
- 7) Move the Power Switch, located on the bottom left of the Middle Front Panel, to the "OFF" position.
- 8) When preparing the ice dispenser for long storage or subfreezing conditions, wipe the Drain Pan and Grille dry, and unplug the ice dispenser.

III. MAINTENANCE

1. CLEANING

WARNING

1. Before carrying out any cleaning or maintenance operations, unplug the ice dispenser from the electrical supply network.
2. Ask a trained service person to clean and sanitize the ice dispenser water system at least twice a year and to check and clean the Condenser at least once a year.
3. This appliance must not be cleaned by use of a water jet.

[1] 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.

[2] Grille, Apron Panel A, Water Pipe, Spout

Wipe these parts with a clean, soft cloth. To remove the Grille, lift it up and pull it toward you. To remove the Apron Panel A, turn the two screws on both sides with a coin, and pull the panel toward you. Then remove the Water Pipe by releasing the Clip, and remove the Spout by pulling it toward you. Use a damp cloth containing a neutral cleaner to wipe off grease or dirt.

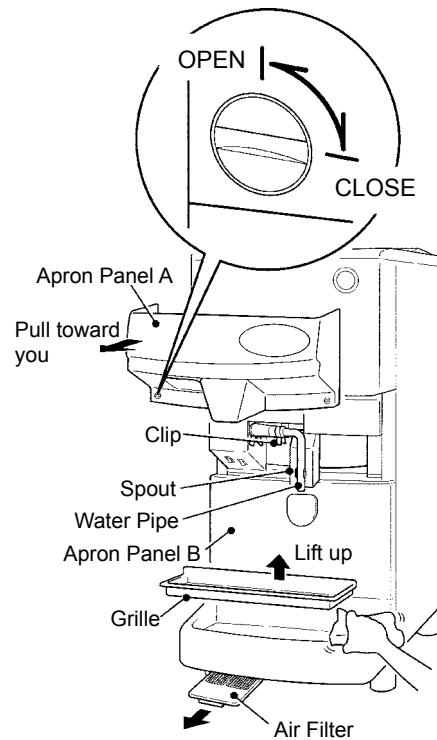


Fig. 5

Spout

To reinstall the Spout, fit the Hook into the Lower Slot on the Apron Panel B, then push the Tab into the Upper Slot.

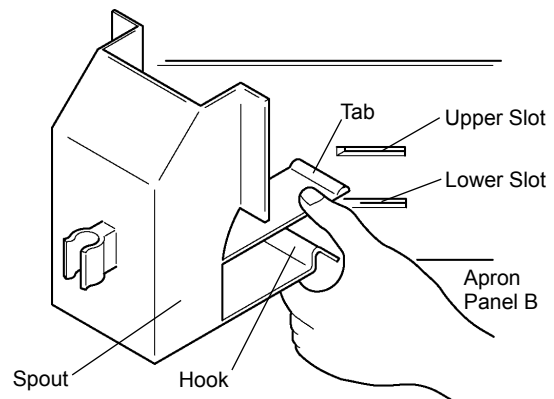


Fig. 6

Water Pipe Installation

To prevent dripping after water dispensing, do not slant the Water Pipe as shown below. Keep the Water Pipe upright when installing it on the Spout.

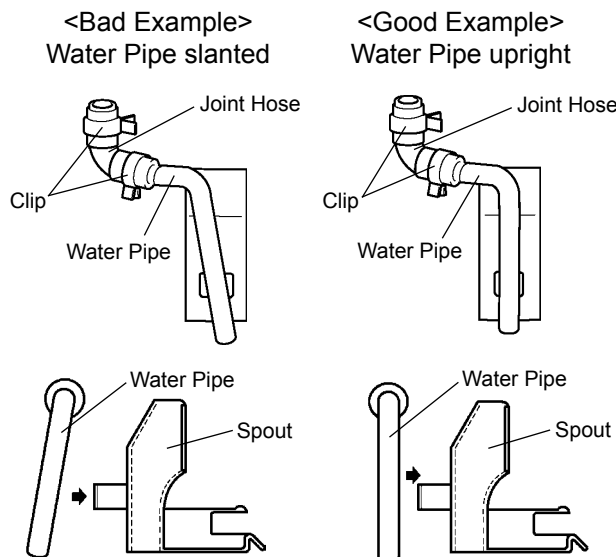


Fig. 7

[3] Air Filter

A plastic mesh Air Filter removes dirt or dust from the air and keeps the Condenser from getting clogged. As the Filter gets clogged, the ice dispenser's performance will be reduced. Pull out the Air Filter from the bottom and clean it at least twice per month by using a vacuum cleaner. When severely clogged, use warm water and a neutral cleaner to wash the Air Filter. Rinse and dry the Air Filter thoroughly before returning it to its correct position.

2. BEFORE CALLING A SERVICE AGENT

If the ice dispenser does not work properly or does not work at all, before calling for service, check that:

- * The power is supplied to the unit.
- * The water is turned on.
- * The Air Filter is clean.

For further assistance or advice, or when the Service Call Lamp on the Operation Panel illuminates, contact your local Hoshizaki service agent.

3. 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 in Europe:

U.K./Ireland - Hoshizaki UK
 TEL: +44 (0)845 456 0585
 FAX: +44 (0)1462 499080

Holland - Hoshizaki Europe
 TEL: +31 (0)20 6918499
 FAX: +31 (0)20 6918768

Belgium/Luxemburg - Hoshizaki Belgium
 TEL: +32 (0)2 7123030
 FAX: +32 (0)2 7123031

Germany/Switzerland/Austria - Hoshizaki Deutschland
 TEL: +49 (0)2154 92810
 FAX: +49 (0)2154 928128

France - Hoshizaki France
 TEL: +33 (0)1 48639380
 FAX: +33 (0)1 48639388

Other countries - Hoshizaki Europe
 TEL: +31 (0)20 6918499 or +44 (0)845 456 0585
 FAX: +31 (0)20 6918768 or +44 (0)1462 499080

This product includes a hermetically sealed refrigeration system that contains fluorinated greenhouse gases covered by the Kyoto Protocol:
DCM-120FE R134a / GWP 1300 / 0.26kg

This product is insulated with foam blown with fluorinated greenhouse gases.

EC DECLARATION OF CONFORMITY

Manufacturer: Hoshizaki Electric Co., Ltd.

Address: 3-16 Minamiyakata, Sakae, Toyoake-shi,
Aichi 470-1194 Japan

We hereby declare that the machine(s) listed below and manufactured by us meet the essential health and safety requirements demanded by the following EC regulations:

EC Regulations: EMC Directive (89/336/EEC, 92/31/EC, 93/68/EEC,
2004/108/EC)
Low Voltage Directive (2006/95/EC)

Harmonised European Standards applied: EN 55014-1 (EMC)
EN 55014-2 (EMC)
EN 61000-3-2 (EMC)
EN 61000-3-3 (EMC)
EN 61000-4-2 (EMC)
EN 61000-4-3 (EMC)
EN 61000-4-4 (EMC)
EN 61000-4-5 (EMC)
EN 61000-4-6 (EMC)
EN 61000-4-11 (EMC)
EN 60335-1 (LVD)
EN 60335-2-24 (LVD)
EN 50366 (EMF)

CE Marking first affixed: 1998

Product Description: Hoshizaki Ice Maker

Model(s): DCM-120FE

Name: Chikai Aoi

Position: Vice President

This declaration will no longer be valid if any alterations are made to the machine(s) without our approval.