

Vertical Ice Machine Installation and Maintenance Instructions

Please read the instructions carefully before using

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Vertical Ice Machine Installation and Maintenance Instructions

Section one: Settlement of the Ice Machine

1. Notes before opening the packing:

- Check machine's model is right
- Check the outer packing is intact
- Check the machine is intact with complete parts after opening the packing

2. Environmental Requirements:

- Indoor use : It is forbidden to put machine in running below freezing temperature
- Environmental temperature: less than 43°C more than 3°C
- Spacing requirements: keep appropriate distance with the surroundings especially for the Air-cooling Model (Water-cooled model can do little adjustments) The reference form as below:

Machine Part	Separation distance (cm)
Side	15
Back	20
Front	30

- Machine level placement: please keep machine leveled in front ,back, left and right directions after installation (**It can be adjusted by the foundation bolt under the bottom of the machine!**)

3. Water System Installation:

- Water supplied for ice machine must meet the standard of local drinking water
- Water supplier for ice machine may be handled or connect the filtration device (It depends on the water quality in local and It is forbidden to use the hot water to connect the ice machine)
- Water supply and drainage series must meet the following conditions:

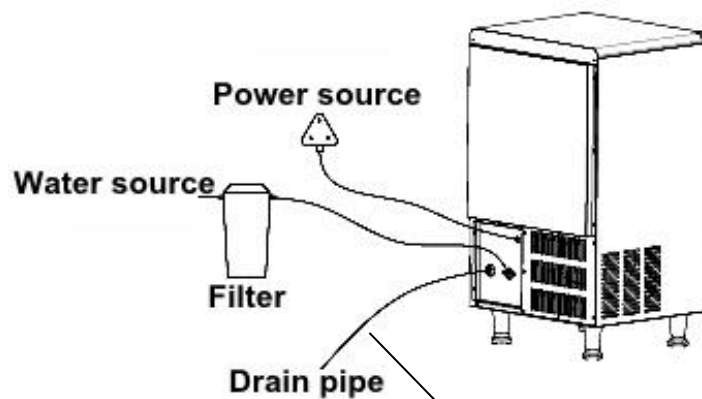
Water temperature (° C)	Water pressure (Mpa)	The water inlet pipe diameter (mm)	Drain pipe diameter (mm)
>0.6	>0.13	>9.5 (3/8")	>15.8 (5/8")
<32	<0.55		Fall/meter>3cm

The installation of drainage must meet the following rules:

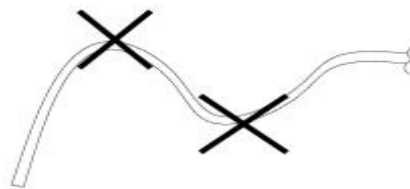
1. Any point in the middle of the drainage pipe shall not be higher than the outfall
2. Any point in the middle of the drain pipe shall not be higher than the previous one

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- Installation diagram



Note: the drain pipe can be the wrong shape like the below picture



4. The power source supply:

- The Voltage, Hz, Ah should be same as the nameplate
- **The ground terminal of the power source, socket or plug must be connected with the external reliable grounding!**
- The power source and wire should meet the national or local requirements standard
- Voltage fluctuation shall not exceed $\pm 10\%$ of the rated voltage

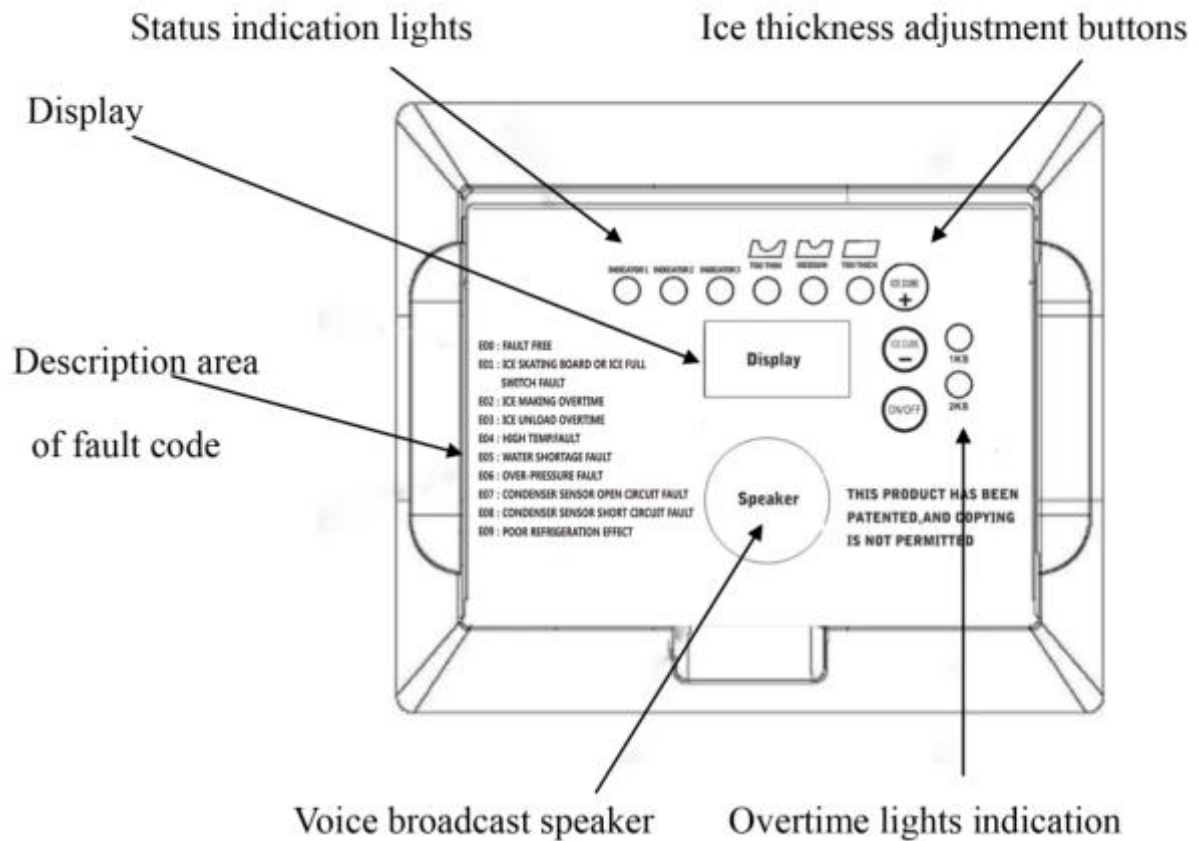
Section two: The operation of the ice machine

1. Checking before start:

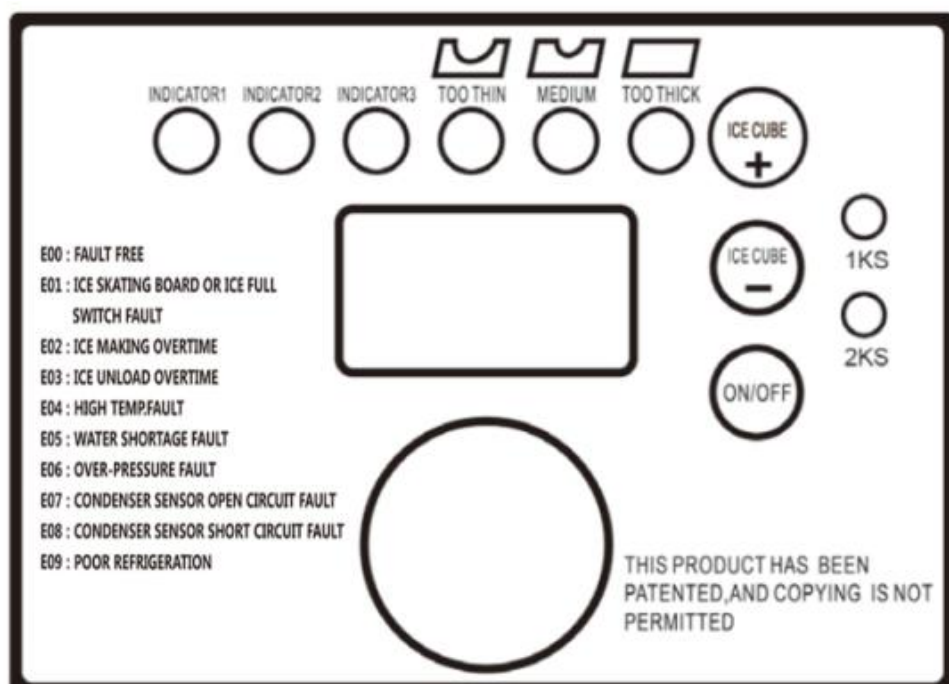
- Please clear up the internal temporary fixing tape of the ice machine!
- Please take out the accessory in the machine!
- Please keep the ice machine level!
- Please check all water pipe connected well!
- Please check the plug connect the power source well!
- **Please check the ice machine connected with the external!**
- Please check the voltage, frequency supplied is same with machine's nameplate!
- Please check the environment temperature and water temperature within the scope as above!

2. Know operation panel:

● Panel



● Panel instruction



3. Operation process and state instruction:

- **Starting up:** After the power supplied and water source is properly connected, the button (switch) in the panel is entered into the normal working condition. In the whole process of the operation of the automatic work, without the need for a person on duty (Note: if there is a thunderstorm or a long time not to use, please turn off the power)
- **Pre-cooling:** the inlet valve will be opened automatically after the power supplied. Then the evaporator will be in pre-cooling for 30 seconds before water pump starting. Meanwhile the compressor starts to work and water pump stops running. the inlet valve will keep open until reaching the specified level (That is water floating ball switch off)
- **Ice-Making:** the water pump start to work after pre-cooling for 30 seconds, continuous water flows through the evaporator smoothly then it becomes cube ice in the ice tray.
- **Ice fall:** when the machine reached the regulation time of ice making, the pump shut down and frost valve opened and hot air into the evaporator. About 1 ~ 2 minutes, the whole ice from evaporator will fall into the ice bin. In order to avoid hurting, **do not put your hands into the ice bin during the ice fall process.** ⚠
- **Shutdown:** In the running, click the button on the panel (switch) then machine stops working.
- **The machine will shutdown automatically when ice bin is full of ice:** in the running with the accumulation of ice in the ice bin, it will reach to a certain height and block other ice fall down. Eventually the full of ice result in sliding board cannot be rebounded and reset. After machine detected it for a few time (30 seconds or so) and confirmed ice bin is full of ice, the machine will stop working automatically. Until removed full of ice, the sliding board will be rebounded and reset again, then machine will work automatically again.
- **Ice thickness adjustment:** in ice making process, if you are not satisfied with ice thickness please adjust it through clicking the button on the touch panel (increase ice thickness +, reduce ice thickness -)

Note: ice making time will extend or shorten one minute for every click.

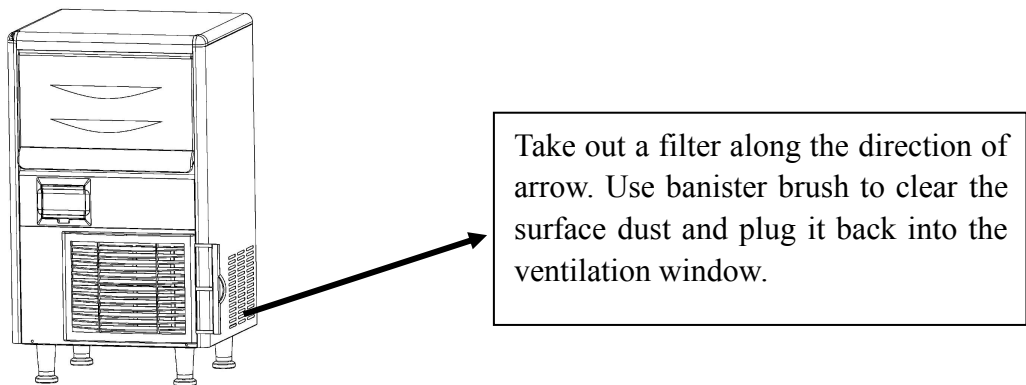
4. Other Special stop working state:

- Continuous cycle ice making test 3 time without ice falling, this series machine turn to stop automatically.
- When the ambient temperature is higher than described degree, this series machine will stop automatically.
- When water cooling machine runs out of water, this series machine will stop automatically.

Section three: Maintenance instruction and common fault

1. Maintenance:

- **Before maintenance, you must cut off the power.**
- Maintenance must be finished by qualified professionals. ⚠
- Please read the instruction book carefully before maintenance.
- Relates to the consequences of water and sanitation responsibility arising from illegal operations, the machine manufacturers has no responsibility.
- Clear the dust on the surface of machine regularly.
- Clean the filter regularly once a month. As shown by picture:



- Clean the cooling fin regularly at least at every 6 months. Please use the soft brush to work in up-and-down lightly. Don't swipe left-and-right for fear of damaging the cooling fin and influencing the heat dissipation effect.

2. Common fault and troubleshooting:

Fault phenomenon	The possible causes of troubleshooting	Check and eliminate
Ice machine doesn't start	No power supply	Switch , power line
Every time start the ice machine automatically, it will shut down after 3 minutes	High voltage protection	the ambient temperature is too high, condenser is too dirty, high-voltage switch, fan
Every time start the ice machine, it will only make ice one time	Ice full	Sliding board
No fall ice	Ice machine is dirty, the ambient temperature is low	Whether the cleaning and ambient temperature is meet the requirements.
The ice is too thin or incomplete	Tank water level is too low, inlet valve doesn't work, water pressure is not enough 、 waterway is not smooth	Check the water level, inlet valve, water pressure, pipeline
Ice making is too slow	Condenser is dirty, the ambient temperature is high, unventilated	Clear filter and condenser to maintain a predetermined spacing around the machine

3. Without warranty cases:

The following items are not covered by the warranty scope:

- A. Normal maintenance, adjustment and cleaning.
- B. Modify ice machine without authorization or use the non-native parts without prior written permission from manufacture.
- C. Damage caused by improper installation, power supply, water supply, drainage, etc.
- D. Due to increased labor costs such as holidays and overtime, travel time and expense, meaningless repairs, etc. All of these are not covered by the warranty. The additional costs caused by the inconvenient maintenance in the machine installation site, it is also not covered by the warranty.
- E. Damage caused by misuse, abuse, neglect of part, etc.
- F. Damage or troubleshooting caused by not according to the technical requirements of this manual for installation, clean or repair the ice machine
- G. Other man-made damage not included in the above.

Section four: Accessory

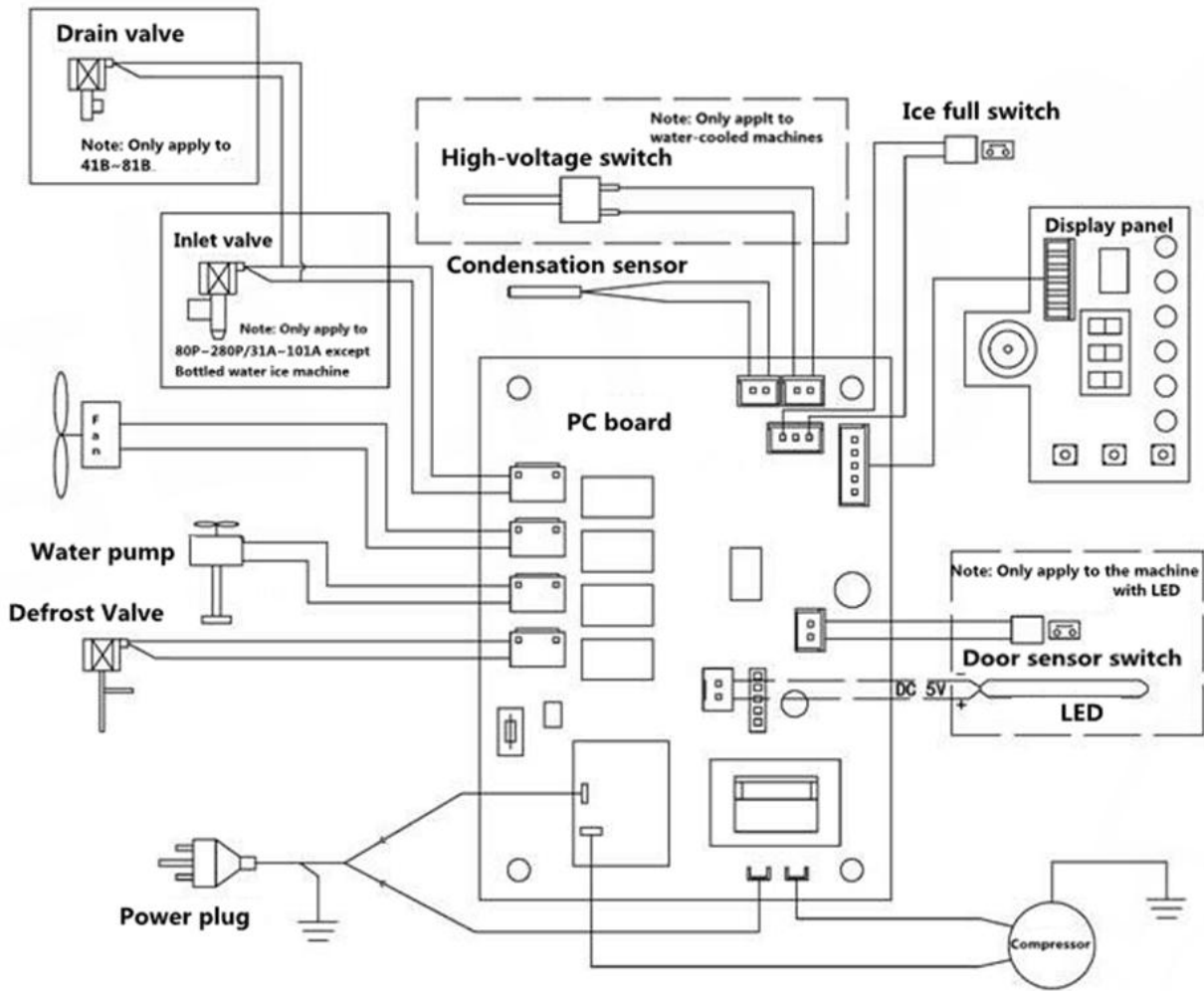
Please see the accessory list.

Section five: Appendix

1. Fault code:

Fault code	Note	Display
E00	Fault free	Operating
E01	Ice skating board or ice full switch fault	Protection shutdown
E02	Ice making overtime	Protection shutdown
E03	Ice unload overtime	Protection shutdown
E04	High temperature fault	Protection shutdown
E05	Water shortage fault	Protection shutdown
E06	Over-pressure fault	Protection shutdown
E07	Condensation sensor open circuit fault (display once every 5 seconds)	Non-stop
E08	Condensation sensor short circuit fault (display once every 5 seconds)	Non-stop
E09	Poor refrigeration effect	Protection shutdown

2. Circuit diagram:



Note: Content of any change of future versions of this manual without prior notice.