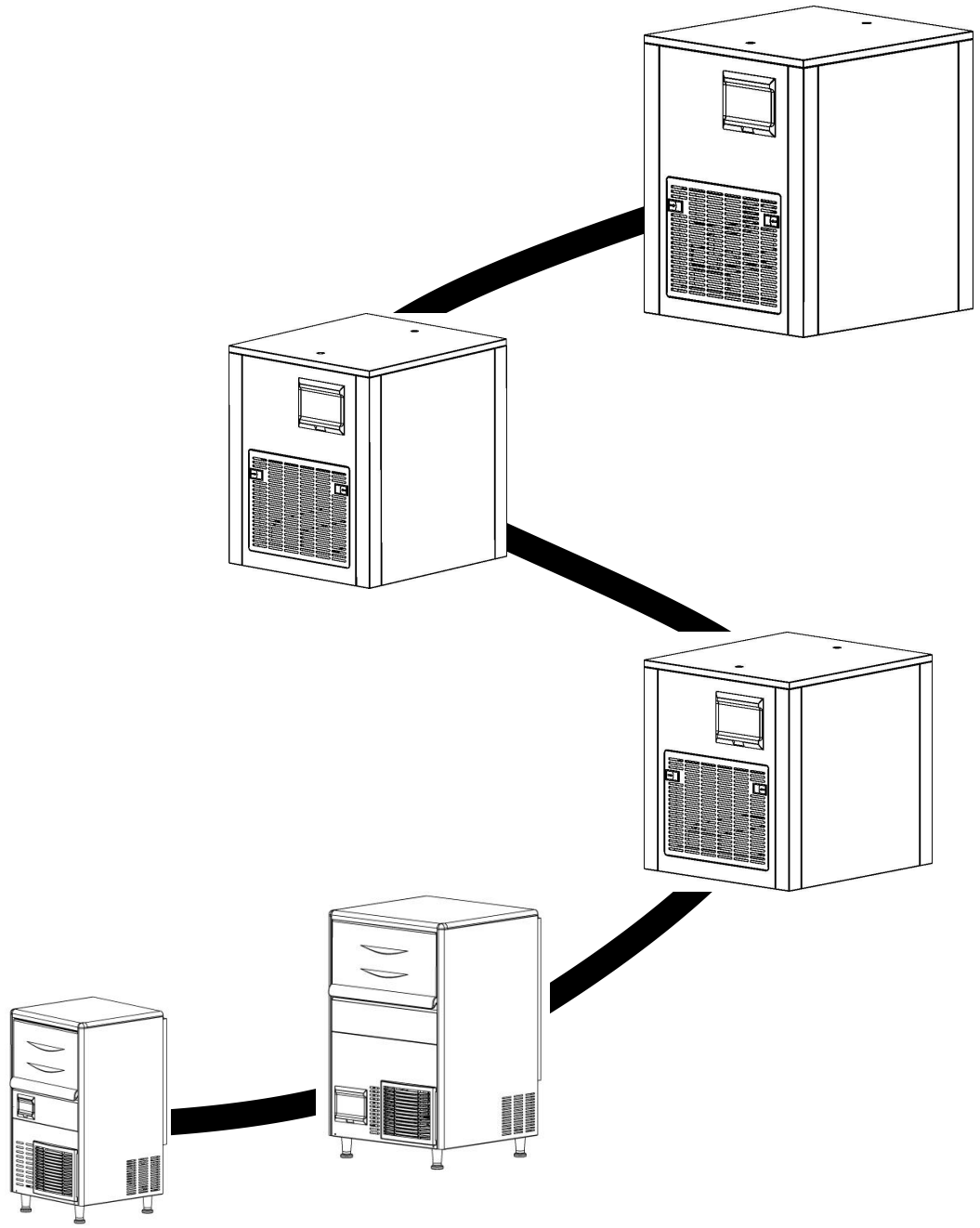


8 Series Granular Ice Machine

Installation, Operation and Maintenance Instructions of Ice Machine

Please carefully read this manual before installation and operation.

09501009-02 Ver.: 2018.7

Contents

Note: The company reserves the right to modify this manual in the subsequent versions, without prior notice.

Installation, Operation and Maintenance Instructions of

Granular Ice Machine

I. Overview

- 068-128: vertical granular ice machine with an ice bin.
- 258-458: modular granular ice machine to be used with the B105 ice bin.
- The machine must be installed by or under the guidance of professional installation personnel.
- Please carefully read and understand all the contents of this manual before installation.
- If you have any question, contact the local agent or directly call the hotline marked on the machine.

II. Installation of Ice Machine

1. Unpacking Precautions

- Check the model before unpacking.
- Check the outer package before unpacking.
- Check the machine and its accessories after unpacking.

2. Environmental Requirements

- Use the machine indoors, but not below the freezing point.
- Ambient temperature: with the maximum below 40℃ and minimum above 3℃
- Surrounding spacing: keep the appropriate spacing around the machine (properly reduce this distance for the water-cooled model), as show below:

Machine Part	Spacing (cm)
Side	15
Back	20
Front	30

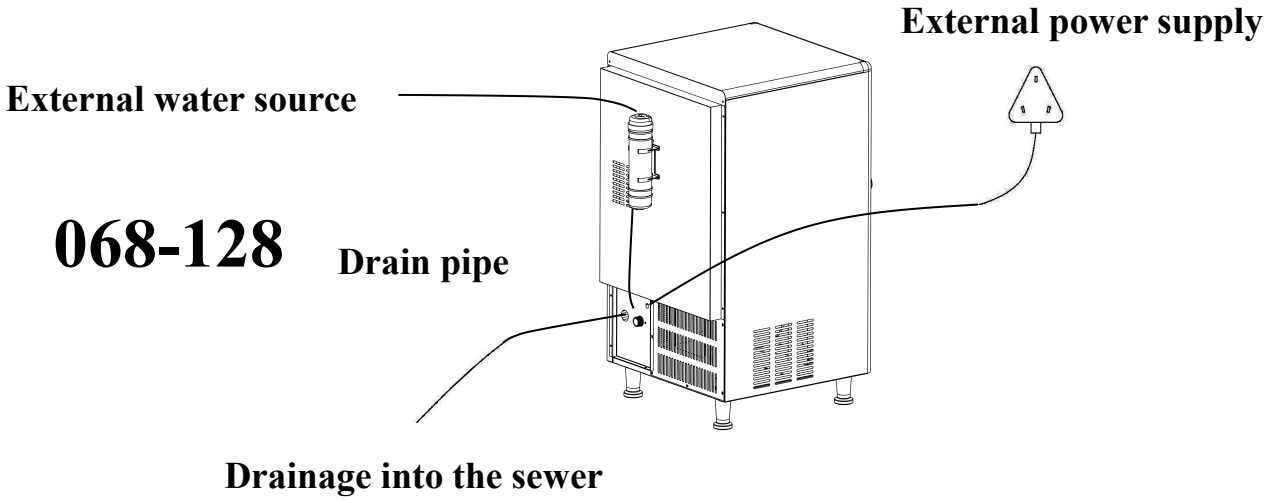
- Keep the front, rear, left and right sides level (via the adjustable feet at the bottom) after installation.

3. Water System Installation

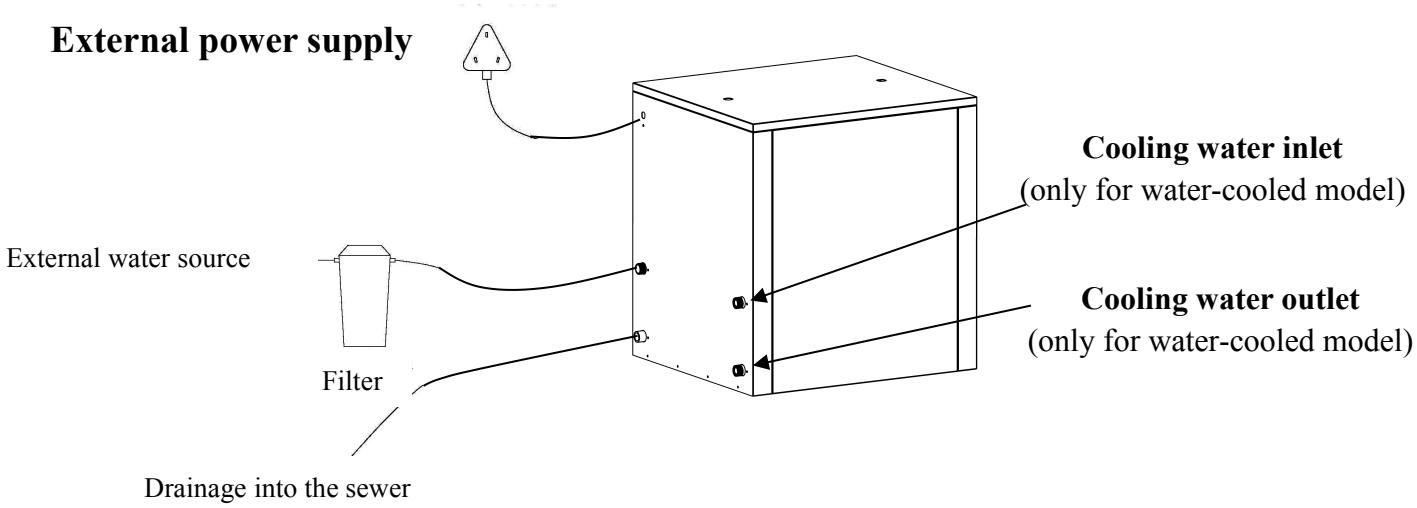
- Water supplied to the ice machine must comply with the local standards of drinking water.
- Pretreatment may be needed for the water supplied to the Ice Machine (depending on the local water quality).
- **Do not use hot water in the ice machine⚠**
- Refer to the table below for the layout of water supply and drainage pipelines:

Water Temperature (℃)	Ice-making Water Pressure (Mpa)	Cooling Water Pressure (Mpa)	Inside Diameter of Water Inlet Pipe (mm)	Inside Diameter of Drain Pipe (mm)
>0.6	>0.13	>0.59	>9.5 (3/8”)	>15.8 (5/8”)
<32	<0.55	<1.17		Head per meter: >3cm

- Installation diagram (for reference only):



258-458

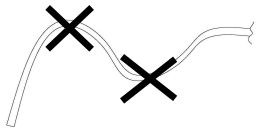


Notes:

a) The cooling water inlet and outlet apply to the water-cooled model only.

b) The external filter is optional.

Precautions for Installation of Drain Pipe!



The drain pipe must be free from parts shown in the left figure.

4. Power supply:

- The power voltage, frequency and capacity must be the same as those marked on the nameplate.
- **The grounding ends of the power supply, socket or plug must be reliably grounded!**⚠
- The power cable supplied must comply with the national or regional standards.
- The power voltage fluctuation must not exceed ±10% of the rated voltage.

III. Operation of Ice Machine

1. Check before startup:

- Check whether the temporary fixing tapes inside the Ice Machine are thoroughly removed!
- Check whether the accessories or other items inside the Ice Machine are

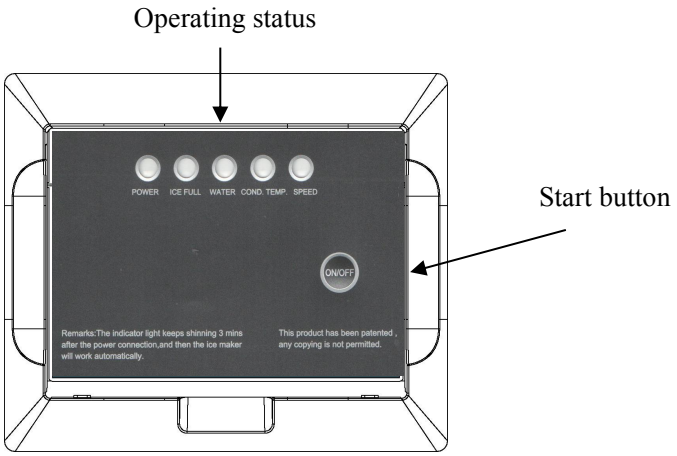
removed!

- Check whether the level of the Ice Machine is adjusted!
- Check whether the water pipes are properly connected, and whether the water pressure is within the normal range, and ensure that ice-making water and cooling water (only for the water-cooled model) are supplied to the machine!
- Check whether the plug is reliably connected to the power supply!
- **Check whether the earth wire of the machine is reliably grounded!** ⚠
- Check whether the power voltage and frequency are the same as those on the nameplate!
- Check whether the ambient temperature and water temperature are within the above ranges!

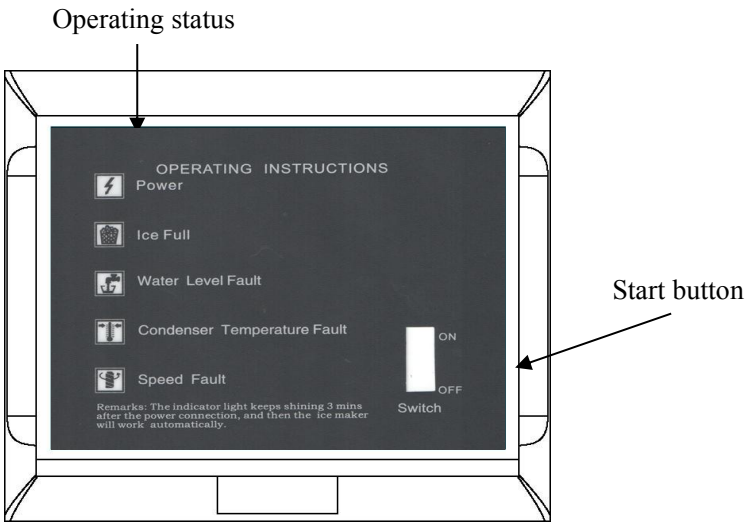
2. Operation panel:

- Function zone:

068-128



258-458



3. Operation process and status description:

- Startup: properly connect the power supply and water source, and press the button (ON/OFF) on the panel to start normal operation. The power indicator will be ON. The machine will automatically operate in an unattended manner (note: shut down the power supply in case of thunderstorm or no use in a long time).
- Shutdown: press the button (ON/OFF) on the panel to stop the operation of the machine.
- Automatic shutdown with full ice: with ice accumulated in the bin to a certain height in the operating process, the full ice switch will be triggered, the machine will confirm that the ice bin is full of ice after some time (about 60s) and then automatically stop operating, and the full ice indicator will be ON. When ice is removed, the full ice switch will be reset, the full ice indicator will be OFF, and the machine will automatically start normal operation.

4. Other special shutdown statuses:

- When water shortage is detected, the machine will automatically stop operating, and the water shortage indicator will be ON. After this fault is eliminated, the water shortage indicator will be OFF, and the machine will

automatically start normal operation.

- When the condenser temperature is too high, the machine will automatically stop operating, and the condenser temperature fault indicator will be ON. After this fault is eliminated, the condenser temperature fault indicator will be OFF, and the machine will automatically start normal operation.
- When the reducer speed is abnormal, the machine will automatically stop operating, and the speed fault indicator will be ON. After this fault is eliminated, the speed fault indicator will be OFF, and the machine will automatically start normal operation.

IV. Maintenance and Common Faults

1. Maintenance:

- **Shut down the power supply before maintenance and repair!** ⚠
- Maintenance and repair must be performed by the qualified professionals.
- Please carefully read this manual before maintenance and repair.
- The manufacturer is exempted from liabilities for consequences related to water sanitation and violations of the operating instructions.
- Regularly clean the dust on the surface of the machine.
- Clean the filter (only for the air-cooled model) on a regular basis (recommendation: once a month).
- Clean the condenser fins on a regular basis (at least once every six months) by gently brushing up and down with a soft brush. Do not brush the fins right and left in order to avoid damage to the fins and influence on cooling effects!

2. Common faults and troubleshooting:

Fault	Possible Cause	Inspection and Troubleshooting
Failure in startup of the ice machine	1. No power supply is available. 2. The bin is full of ice.	1. Check the power switch and cable. 2. Remove ice.

Automatic shutdown about 3 min after each startup	1. The ambient temperature is too high. 2. The condenser is too dirty. 3. The high-voltage switch is damaged. 4. The fan is damaged. 5. There is no cooling water in the water-cooled machine.	1. Reduce the ambient temperature, and keep the specified spacing around the machine. 2. Clean the filter and condenser. 3. Replace the high-voltage switch. 4. Replace the fan. 5. Supply cooling water.
Water shortage	1. There is no water in the external water source. 2. The water level sensor does not send the signal. 3. The water level sensor is damaged.	1. Ensure that there is water in the external water source, and open the corresponding valve. 2. Check the connection and contact of the water level sensor. 3. Replace the water level sensor.
Too high temperature of the condenser or too slow making of ice	1. The condenser is dirty. 2. The ambient temperature is high. 3. Ventilation is in poor conditions.	1. Regularly clean the filter and condenser. 2. Reduce the ambient temperature. 3. Keep the specified spacing around the machine.
Speed fault	1. The speed sensor at the tail end of the motor is in poor conditions. 2. The speed sensor at the tail end of the motor is damaged. 3. The reducer is damaged.	1. Check whether the speed sensor is damaged or and whether the magnet has a significant deviation. 2. Replace the speed sensor. 3. Replace the reducer.

3. Conditions excluded from warranty:

The following conditions and items are excluded from the warranty of the ice machine:

A. Normal maintenance, adjustment and cleaning.

B. Modification or use of non-original parts without the written approval of the company.

C. Damage caused by improper installation, power supply, water supply and drainage.

D. Labor costs increased for work on holidays or overtime, travel time, travel expenses, non-meaningful request for repair, additional costs arising from inconveniences in maintenance on the installation site.

E. Damage caused by misuse, abuse or negligence.

F. Damage or failure caused by installation, cleaning or maintenance nonconforming to the technical requirements of this manual.

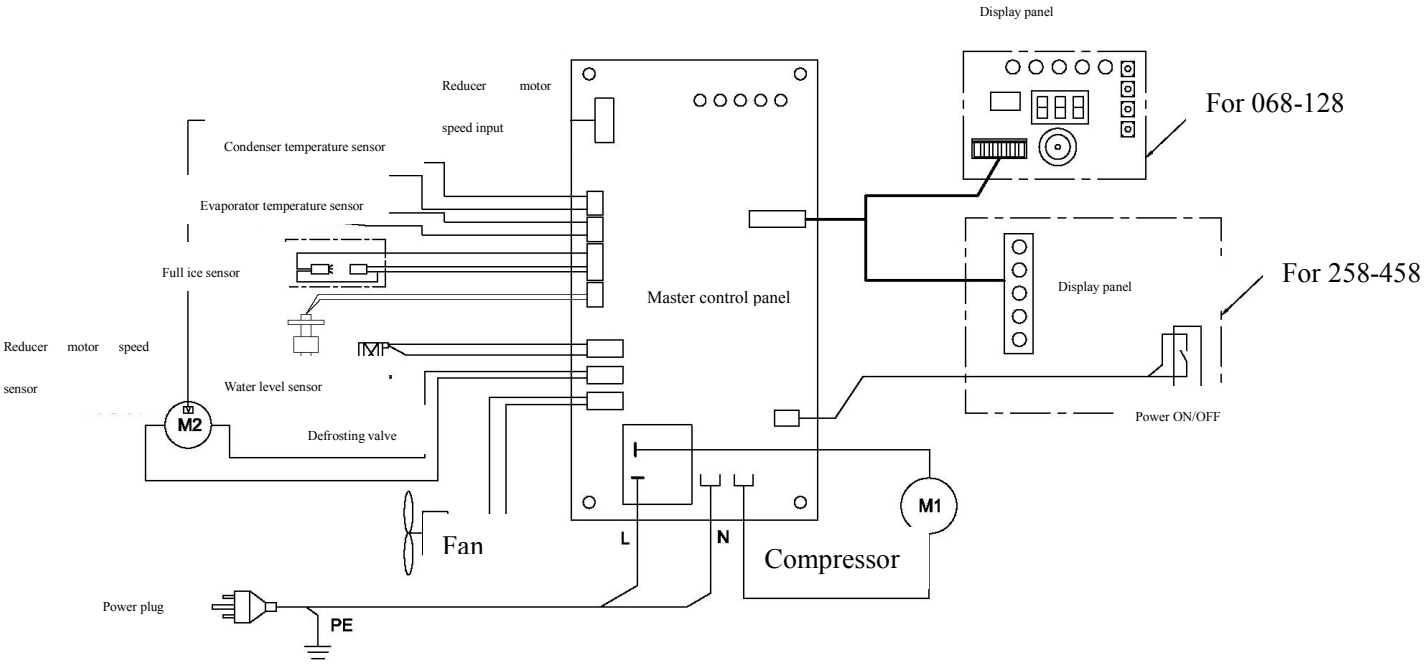
G. Other damage caused by human factors.

V. Accessories

See the attached list.

VI. Appendix

Circuit diagram:



This manual may be modified in the following versions without prior notice!