Contents

IB Series Ice Machine

Installation and Maintenance Manual

This manual contains the following models: IB200A, IB255A, IB320A



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Safety Tips

When you operate and maintain the ice machine, be sure to pay attention to the safety instructions in the manual. Ignoring these tips may cause personal injury and damage to the ice machine.

In this manual, you will see the following safety tips:

! Warning

Failure to install, use, or use machines that have been modified without authorization may cause personal injury.

▲ Notice

The correct installation, usage and maintenance of the ice maker is very important to the output of the ice maker and reduce the failure rate. Please read and understand this manual. which contains valuable information on installation. usage and maintenance. If you encounter problems not covered in this manual, you may contact our company or our service provider at any time.

★Important

The adjustment, maintenance, and cleaning contents in this manual are not covered by the warranty.

Please keep this manual well

The instruction manual is an inseparable and important part of this product, and the user should keep it properly. Please be sure to read the warnings, cautions and important matters described in this manual carefully, because these warnings, cautions and important matters provide installers/users with important information needed for proper installation, continuous and safe use and maintenance of this product. Please keep this manual properly for reference when necessary.

1. Features

- IB series ice maker has a number of patented control systems, simple operation and precise control, suitable for different water quality conditions;
- The key components are all internationally renowned brands to ensure reliable work in harsh environments;
- The parts in contact with water are made of food-grade plastic material, and the shell is made of stainless steel to ensure food safety and excellent rust resistance.

2. Size & Appearance





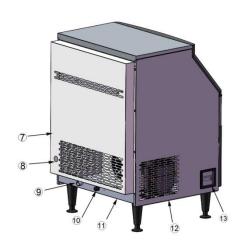
• size list (Unit: cm)

	Α	В	С	D	E	
IB200A	66	84	16	100	70	
IB255A	66	84	16	100	70	
IB320A	66	84	16	100	70	

Appearance



- ① Door
- ② Decorative plates
- 3 Ventilation window
- 4 Top Cover .
- S Right Plate
- 6 Height Adjustable Foot



- (7) Rear Plate
- (8) Drain hole
- Inlet valve
- 10 Power cord plug
- (11) Bottom Plate
- 12) Left Plate
- (13) Monitor

Unpacking

3. Unpacking

- Before unpacking, check whether the anti-tilting signs (if any) are intact, whether the outer packaging of the machine is intact, and whether the model of the machine is consistent with your purchase;
- Open the package to check whether the appearance of the machine is in good condition, take out the accessories and random documents, and check whether it matches the packing list;
- Remove the protective film on the shell (recommended).
- If there is any discrepancy or damage, please contact our company/dealer directly.

4. Installation location

! Warning

The installation of the ice machine should comply with safety standards, and the ice machine should not be installed in the aisles of public buildings.

- This ice maker is not suitable for outdoor use.
 Do not install it near a heat source or direct sunlight;
- The normal working environment temperature is 10°C ~ 38°C, and the water temperature is 5°C ~ 32°C. If the ice maker works outside the above normal temperature range for a long time, it may affect the ice making capacity;
- The ice maker should be installed on a solid, flat ground;
- The ice maker should be placed close to the source of drinking water, and it is recommended to be within one meter of the ice maker;
- Do not block the ventilation windows of the ice machine, and there should be enough air convection space around the ice machine;
- The ice machine cannot work at sub-zero temperatures. In order to prevent the water supply pipeline from malfunctioning, when the

temperature is below zero, please drain the water in the ice maker (see "Preparations for long-term storage of the ice maker").

5. Level Adjustment

▲ Notice

When adjusting the level of the ice machine, do not use the method of putting hard objects under the feet to adjust the level. It is necessary to ensure that the four feet of the ice maker are in stable contact with the ground to prevent the machine from vibration.

- Screw the adjustable parts of the 4 adjusting feet to the end, and then rotate the adjusting feet into the corresponding mounting holes at the four corners of the bottom plate of the ice machine;
- Move the ice maker to the installation location.
 Use a spirit level to level the ice maker.

6. Water Supply/Drainage

6.1 Water Supply

! Warning

The ice maker must be connected to a source of potable water

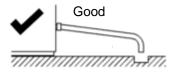
- According to the local water supply, determine whether it is necessary to install a water treatment system to prevent the formation of sediments, filter out impurities, and remove the smell of bleaching powder;
- Please follow the guidelines below to install the water supply pipe:
 - Do not connect the ice maker to a hot water source;

Water Supply/Drainage

- If the water pressure exceeds the maximum allowable water inlet pressure (1~5bar), please purchase a water pressure regulating valve;
- A manual water supply valve must be installed before all water supply pipes of the ice machine.

6.2 Drainage

- When installing the drain pipe, to prevent water from flowing into the ice machine bin, please follow the following guidelines:
- The main drainage pipe should be able to drain the water in all drainage branches;
 - The drain pipe of the storage refrigerator should be covered with insulation material to prevent condensation;
 - The drain pipe of the water-cooled condenser and the drain pipe of the storage refrigerator should be placed separately;
 - Every additional meter of drain pipe must have a drop of 2.5 cm and no bends.





7. Power Supply

- The power supply voltage, frequency and power supply capacity must be consistent with those marked on the machine nameplate;
- Allowable voltage fluctuation range is ±10% of rated voltage;

! Warning

The power supply must be grounded reliably, and the wiring used must comply with the laws and regulations of the country and region where the ice machine is used.

 The ice machine must be equipped with a circuit breaker separately.

8. Cleaning After Installation

After the ice maker is installed, clean the shell, inner container and ice shovel of the ice maker with a clean damp cloth/sponge;

9. Check After Installation

! Warning

Banana water, oxalic acid, hydrochloric acid and other corrosive detergents are strictly prohibited.

After the ice maker is installed, check the following contents before running

- Is the ice machine even?
- Have all the inner packaging been removed??
- Are all the water and electricity connected? ?
- Does the supply voltage match the rated voltage on the nameplate? ?
- Is the ice machine properly grounded??
- Is there a proper space around the ice machine for air circulation?
- Is the ambient temperature of the ice maker between 10°C and 38°C??
- Is the inlet water temperature at the installation point of the ice maker maintained between 5°C and 32°C??
- Are the ice machine and refrigerator clean?

Operation

10. Operation

10.1 Power on/off

• **Power on :** Connect the water supply and drainage, plug in the power plug, the display screen is all on ;



• **Shut down:** Press "power" key, the ice maker enters the standby state, the digital tube displays "OFF", then pull out the power plug.



10.2 Ice Thickness Adjustment

• Ice thickness adjustment: Press "thick" (or "thin") key for 5 seconds without releasing it, the first two digits of the digital tube will display C1, and the last two digits will start to flash and enter the ice thickness setting state. At this time, every time you press "thick" (or "thin") key, the quality displayed by the digital tube increases (or decreases) by 1, which means that the thickness of the ice cube increases (or decreases) for 1 minute.

The adjustment range is 0~35 minutes. If the button is not pressed within 10 minutes, the digital tube will stop flashing and enter the normal operation state, and the set ice thickness will be saved.

10.3 Forced de-icing

Forced de-icing: In the state of ice making, press"status" key to start forced de-icing.

10.4 Manual cleaning

Press the "cleaning" key at any time to enter the cleaning state, only the pump is working, and the screen displays the timing. After about 30 minutes, the cleaning stops and the protection stops; **Remarks:** depending on the dirt, if you need to clean quickly, you don't need to wait 30, You need to press "cleaning" again every minute to enter the rinsing phase. If you do not need to cycle multiple times, you can press "power" key to stop rinsing and enter the standby state;

Ice Making Workflow

11. Ice Making Workflow

11.1. The display is all on after power on, and all off after 1 second. Displaying C00 means that it is in the water-in state, and it enters the power-on delay state until the water is full, the de-icing indicator flashes, and the digital tube displays the power-on delay time. The hot valve opens, the press opens after 30 seconds, and the hot valve closes after another 5 seconds. After 60 seconds, the water is filled for ice removal.

11.2. During the ice making process, the ice making indicator is on and the digital tube displays the ice making time. If the ice skateboard is continuously opened for more than 4 minutes, it will turn to the ice full state. The compressor continues to open, the hot valve is closed, and the fan is controlled. The water supply valve is controlled 5 minutes before ice making, and it closes after 5 minutes. The water pump opens after 90 seconds. When the water temperature is lower than the set ice-making temperature, start timing, when the ice-making time exceeds the set time, ice-making ends.

11.3 After the ice making is finished, it enters the deicing state, the deicing indicator light is on, and the digital tube displays the deicing time. The compressor continues to open, the hot valve opens, the water pump and fan are closed, and the water supply valve is controlled. The maximum time for deicing is limited to 6 minutes. If the ice does not come off in 5 minutes, turn on the water pump for 1 minute. If the ice is still not taken off, go to ice making, if the ice take off and the skateboard is not closed, go to the ice full state. Three times in a row for more than 6 minutes, switch to de-icing overtime shutdown.

11.4 After the ice is taken off, if the ice in the refrigerator is not full, it will enter the ice making state and start a new cycle. If the ice bin in the refrigerator is full, it will enter the ice full shutdown state, and the ice full indicator will be on. The water pump, compressor, hot valve, water supply valve and fan are all closed. If the ice is taken away, the

ice full indicator will flash within less than 180 seconds after the press has been shut down. If the press has been shut down for 180 seconds, switch to power on and start a new cycle. If the ice is not taken away, it will always be full of ice.

12. Operation Inspection

- Make sure the water inlet tap is turned on
- Confirm that the water inlet valve has been opened
- The ice machine is powered on
- Check all water pipes and pipe joints to ensure that there are no leaks

▲ Notice

The ice machine has been tested and debugged at the factory before shipment. Generally speaking, the newly installed machine does not need any debugging. In order to ensure the normal operation of the ice machine, an operation inspection is required under the following conditions;

- Initial start
- Restart after long downtime
- After cleaning and disinfection

13. Routine Cleaning

▲ Notice

- It is strictly forbidden to flush the ice maker with a water jet. Do not use any alcohol-containing liquid to clean or disinfect the ice machine, otherwise it may cause cracks in the plastic parts;
- Remove the top plate and back plate, but should be disassembled by maintenance personnel with appropriate knowledge;
- Do not put plastic parts in water or dishwasher with a temperature of over 40°C to avoid damage to the parts.

Clean environment: clean the surroundings of the ice machine frequently to keep the environment clean and make the equipment operate efficiently.

Routine Cleaning

Shell cleaning: Use a sponge dipped in neutral cleaning fluid to clean the ice machine and dry it with a clean soft cloth. Stainless steel cleaner can be used when necessary.

 Air filter cleaning: The filter can filter out dirt or dust in the air and prevent the condenser from clogging. If the filter is clogged, the performance of the ice maker will decrease. It is recommended to clean the air filter once or twice a month:

13.1 Remove the top cover and back

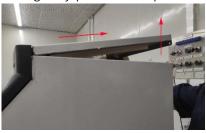
panel

Remove the top cover of the ice maker.

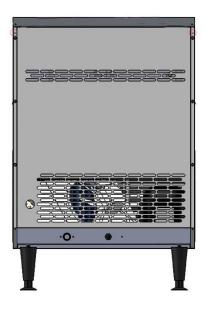
There are two screws on the top cover and the back of the ice maker. Use a Phillips screwdriver to remove them.,



Lift the top cover slightly upwards first, and then gently pull back to pull out the top cover



 Remove the back plate of the ice machine. Use a Phillips screwdriver to remove the two screws on the upper part of the back plate. Lift the back plate upwards slightly to remove the back plate (Note: the drain pipe is placed on the back plate, gently pull Backboard, placement);



★Important

If cleaning of some parts is necessary, it is not recommended to remove the top cover, please have the corresponding knowledge or under the guidance of professionals.

13.2 Evaporator cleaning

 Use a brush or sponge dipped in descaling agent or vinegar to scrub the surface of the evaporator;



Use nylon brush dipped in descaling agent or vinegar to scrub the plastic parts around the

Routine Cleaning

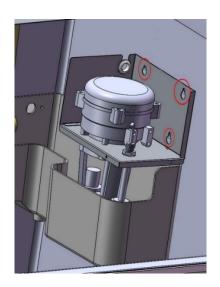
evaporator;



13.3 Sink cleaning

Press "power" key to be in standby mode, the screen displays "OFF", unplug the power plug, use a screwdriver to remove the two screws on the water pump box, loosen the three screws on the inner wall of the ice storage bucket, remove the clamp, The connectors at the lower and upper water pipes, water pump and float can be removed and cleaned;





Use a soft material such as a brush or sponge dipped in descaling agent or vinegar to scrub the sink.



! Warning

To clean the condenser, the ice maker must be disconnected from the power supply. The edge of the condenser is sharp, so be careful of cuts when cleaning.

★Important

Dirty condensers will block the air circulation, causing the ice maker to operate at an excessively high temperature, reducing ice production and shortening the service life of parts.

13.4 Condenser cleaning

It is recommended to clean the condenser every six months, and follow the steps below: Use Phillips screws to remove the screws on the left and right sides under the ventilation window and remove the ventilation window;



Pull the filter on the ventilation window upwards



Use a nylon brush to remove dust from the filter;



Brush the condenser fins with a nylon brush in the up and down direction to remove dust;

★Important

After cleaning, please reinstall the top cover and install it correctly.



14. Cleaning and Disinfection

▲ Notice

- Do not mix disinfectant and cleaning solution;
- Do not use sharp objects to clean the surface of the evaporator;
- It is recommended to perform this process once at least within 3 months.

! Warning

- Before cleaning and disinfecting operations, please wear protective equipment, such as rubber gloves, masks and protective glasses;
- Removal and installation of cleaned parts must be carried out under power-off conditions;
- Ice cubes during cleaning and disinfection must be discarded.

In order to make the operation of the ice maker stable and efficient, the user is responsible for operating in accordance with the requirements of cleaning and disinfection (the operation of cleaning and disinfection is not covered by the warranty). If the ice machine

needs frequent cleaning and disinfection, please check whether the water source is suitable, whether the use environment is clean or use an inappropriate water filter device.

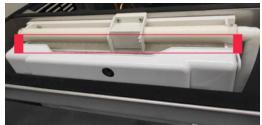
14.1 Cleaning process

1. Open the door of the ice maker and check if the ice maker evaporator is making ice. If ice is being made, the forced de-icing procedure can be executed (see the above operating instructions "10.3 Forced De-icing") to stop the ice maker from making ice, press the "power" key to be in the standby state, the screen will display "OFF";



- **2.** Take out all ice cubes in the refrigerator with an ice scoop;
- **3.** Press the "cleaning" button, the ice maker enters the cleaning state, at this time only the water pump is working, and the screen display starts timing.





4. When water starts to flow on the evaporator, add 2 packs of cleaning agent (KAY DELIMER, 56.7g/pack) or mixed cleaning liquid into the ice maker tank. The water from the tank to the evaporator has been circulated for cleaning. After 30 minutes, the cleaning stops and the water in the sink is drained manually;



- **5.** Press the "cleaning" button to enter the automatic rinsing phase. After the rinsing process is recirculated 5 times, the entire cleaning process ends, the screen displays "OFF" and enters the standby state. The entire process takes about 37 minutes;
- **6.** Unplug the power plug. Remove the water pipe, the water baffle, and take out the water pump, float ball and ice shovel (refer to the parts removal/installation process for the removal method).
- 7. Mix 8 heating water (45 ~ 50C°) and 4 packages of cleaning agent (KAY DELIMER, 56.7g/package) into a cleaning solution (the amount of cleaning solution needs to be adjusted appropriately for the amount of parts to be cleaned).
- **8.** Soak the parts in the cleaning solution for more than 5 minutes (in the case of heavy scale, it is recommended to soak for more than 10 minutes)



9. While soaking the parts, use a nylon brush or a soft cloth dipped in cleaning fluid to wipe the surfaces of parts that are in contact with water and ice, such as evaporator ice trays, ice shields, ice storage buckets, etc. (the dead corners can be dipped in A damp cloth with detergent is wrapped with disposable chopsticks to clean). Then rinse with clean water (rinse 5 times)



Scrubbing the ice guard



Scrub the refrigerator



Brush the water pipe core rod



Brush the bottom of the water pump



Brush the plastic parts around the evaporator



Brush evaporator



Brush the sink



Flush the evaporator



Rinse the sprinkler pipe and core rod

10. Take out the soaked parts and rinse them with clean water (rinse 5 times).

14.2 Disinfection process

- 1. Mix 8 warming water (45 ~ 50°C) and 2 packages of disinfectant **(KAY5, 28.4/package)** into a disinfectant (the amount of disinfectant should be adjusted according to the amount of parts to be cleaned).
- 2. Soak the cleaned parts in the prepared disinfectant.



While soaking the parts, use a spray can to evenly and completely spray the disinfectant on the surface of the parts that are in contact with the ice, such as the evaporator ice tray, ice shield, ice storage bucket, etc. (the dead corners can be wetted with disinfectant Disposable chopsticks wrapped in a rag to clean).



After 20 minutes, take out the soaked parts and rinse the sterilized parts with clean water. Install the removed parts back to their original

positions (refer to 14.3 Parts removal/installation process for installation methods) and perform this step strictly as required.

- 3. Use 1 liter of water and 1/2 package of disinfectant (KAY5, 28.4/package) to make a disinfectant.
- 4. Plug in the power plug, and then press the "power" key to make the ice maker in standby state, the screen displays "OFF"; press the "cleaning" button, the ice maker enters the cleaning phase, at this time only the water pump is working, the screen The display starts timing. When water starts to flow on the evaporator, add the disinfectant solution that has been prepared into the ice machine sink. At the same time, use a watering can filled with disinfectant to spray the outer surface of the water tank to the evaporator. After 30 minutes, the washing stops and the water in the sink is drained manually;



- 5. Press the "cleaning" button again to enter the automatic rinsing phase. After the tap water rinsing process is cycled 2 times, the pure water rinsing cycle 3 times, the entire cleaning process is over, the screen displays "OFF", about 37 minutes later the entire After the cleaning process is over, the screen displays "OFF", enters the standby state, and then unplug the power supply.
- 6. Note: Ice making starts after cleaning and disinfection, the first 5 plates of ice are discarded and do not eat.

14.3 Parts removal/installation process

a. When removing the water pipe, please remove the "pull out the "clamp" and the "up water pipe" (as shown in the picture)):

Unplug the water pipe



Unplug the water pipe



b. Remove the two screws



Unscrew the plastic cover and take out the plastic core rod



Note: When assembling the flow pipe, the hole position of the flow pipe should be opposite to the direction of the core rod hole position, and must not be in the same direction. The correct diagram is as follows:



■ Disassembly and assembly of the water baffle: Grasp the middle position of the water baffle, and use a flat-head screwdriver to apply force from one side to the other until one side of the water baffle comes out of the pin hole.



Deactivation/Overwintering Of Ice Machine

15. Deactivation/Overwintering Of Ice Machine

If the ice maker is out of service for a long time or is exposed to an environment of 0°C or below, special protective measures are required. Please follow the steps below:

▲ Notice

In an environment below 0°C, if water is left in the machine, it may cause serious damage to the machine parts. Failures caused by this reason are not covered by the warranty.

- Disconnect power to the ice maker
- Disconnect the water source of the ice maker
- Empty the water in the sink。
- Disconnect the water inlet pipe from the back of the ice maker to empty the water in the water inlet pipe
- Ensure that no water remains in the water inlet pipe, drain pipe, or water distribution pipe

16. Maintenance

! Warning

Danger-There is a risk of fire or explosion. The refrigerant is a flammable refrigerant. Do not use mechanical equipment to disassemble the ice maker, and do not damage the refrigeration pipelines.

! Warning

Danger-There is a risk of fire or explosion. The refrigerant is a flammable refrigerant. Only trained service personnel can carry out repair work. Do not damage the refrigeration piping.

! Warning

Danger-There is a risk of fire or explosion. The refrigerant is a flammable refrigerant. Please read the service manual before using this product. All safety measures must be taken.

! Warning

Warning-there is a risk of fire or explosion. Properly dispose of in accordance with federal or local regulations. The refrigerant is a flammable refrigerant.

! Warning

Warning-There is a risk of fire or explosion if the pipeline is damaged. Follow the instructions carefully. The refrigerant is a flammable refrigerant.

Maintenance

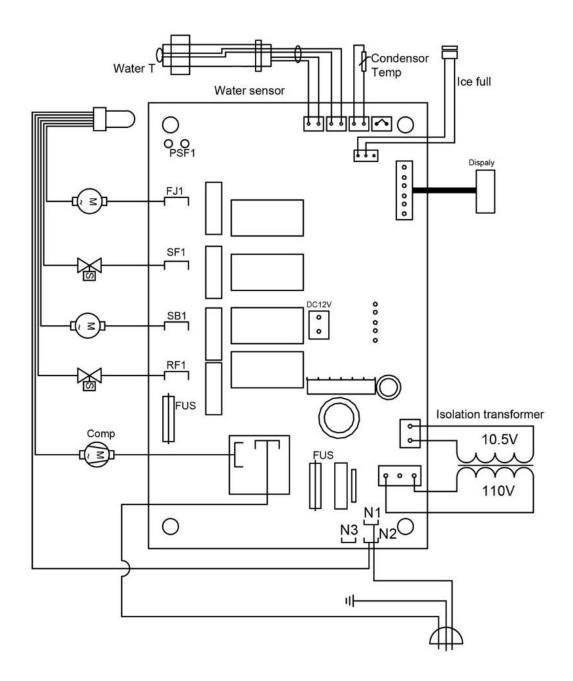
Before reporting for repairs, please consider the following aspects in order to quickly determine and improve the efficiency of machine recovery.

- a). Whether the water supply is normal, including whether the faucet is open, whether the inlet valve is blocked, and whether the water pressure is too low or too high.
- b). Whether the power supply is normal, including whether the voltage is too low, whether the switch is turned on, whether the fuse is burned out, and whether the plug is pulled out.
- c). Whether the ambient temperature is too high or too low (the working environment temperature range of the ice maker is 10° C ~ 38° C), and whether the water temperature is too high or too low (the water temperature range is 5° C ~ 32° C).
 - d). Whether the storage refrigerator is full and whether it can work after cleaning.

Write down the machine number and computer board number, and call the toll-free number on the service label.

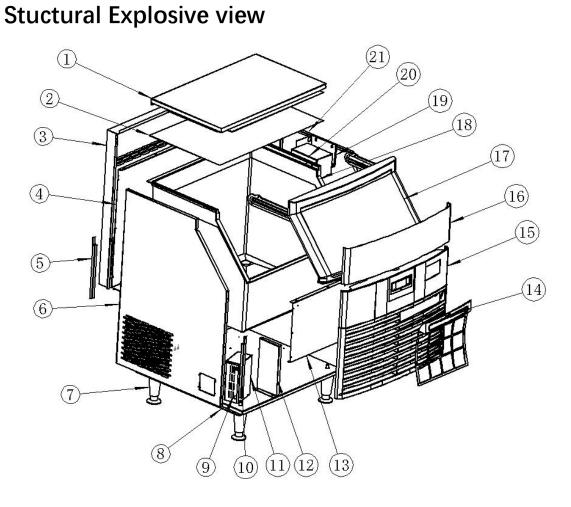
Circuit Diagram

17. Circuit diagram



Explosive View

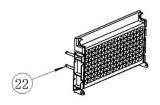
18. Explosive view

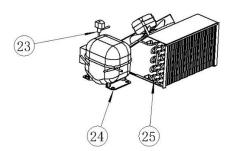


Serial	Figure	IB200A	IB255A	IB320A	Serial	Figure	IB200A	IB255A	IB320A
1	Top cover plate	1	1	1	12	Wind screen	/	/	1
2	PP sheets	1	1	1	13	The guard B	1	1	1
3	Postnotum	1	1	1	14	Filter net	1	1	1
4	The guard A	1	1	1	15	Ventlight	1	1	1
5	After-poppet	2	2	2	16	Decorative sheet	1	1	1
6	Left-side plate	1	1	1	17	Door frame	1	1	1
7	Adjustable foot	4	4	4	18	Ice pail	1	1	1
8	Baseplate	1	1	1	19	Water pump box	1	1	1
9	Electrical box	1	1	1	20	Water pump lifted the lid	1	1	1
10	Front bracket	2	2	2	21	Right-side plate	1	1	1
11	Box cover	1	1	1					

Explosive View

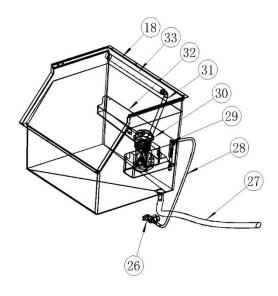
Explosion diagram of refrigeration system





Serial	Figure	IB200A	IB255A	IB320A
22	Evaporator	1	1	1
23	Solenoid Valve	1	1	1
24	Compressor	1	1	1
25	Condenser	1	1	1

Water system explosion diagram

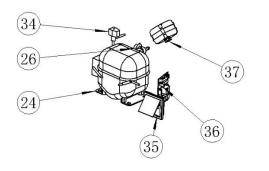


Serial	Figure	IB200A	IB255A	IB320A
18	Ice pail	1	1	1
26	Inlet valve	1	1	1
27	Drain-pipe	1	1	1
28	Inlet pipe	1	1	1
29	Intake pipe joint	1	1	1
30	Water pump	1	1	1
31	Water supply pipe	1	1	1
32	Water tank	1	1	1
33	Water pipe	1	1	1

Explosive View

Explosion diagram of electrical control system





Serial	Figure	IB200A	IB255A	IB320A
24	Compressor	1	1	1
26	Inlet valve	1	1	1
30	Water pump	1	1	1
34	Solenoid Valve Winding	1	1	1
35	Control box	1	1	1
36	Circuit board	1	1	1
37	Fan	1	1	1