PUKUI 蒲葵智能 intelligence

PK-ICE(180KG/320KG/450KG/900KG)

ICE VENDING MACHINE

WORKING MANUAL

China-jiangmen Pukui Intelligent Machine CO.,LTD

www.chinapukui.com

PREFACE

Welcome to use the PK-ICE self-service ice vending machine, please read this manual carefully before use!

This product is aimed at the special requirements of communities, shopping malls and other public places. It adopts advanced reverse osmosis purification technology, unique sterilization and sterilization process, advanced and efficient spray ice making technology, automated packaging technology and control technology; it is processed and manufactured by this machine. The ice that comes out is food grade, ensuring that the ice you consume is clean and good for your health.

Before you use this machine, we recommend that you read this manual carefully. We hope that you can install, debug, use and maintain according to our suggestions in the manual, reduce unnecessary errors in the above process, and make your system continue to run smoothly. Work for you.

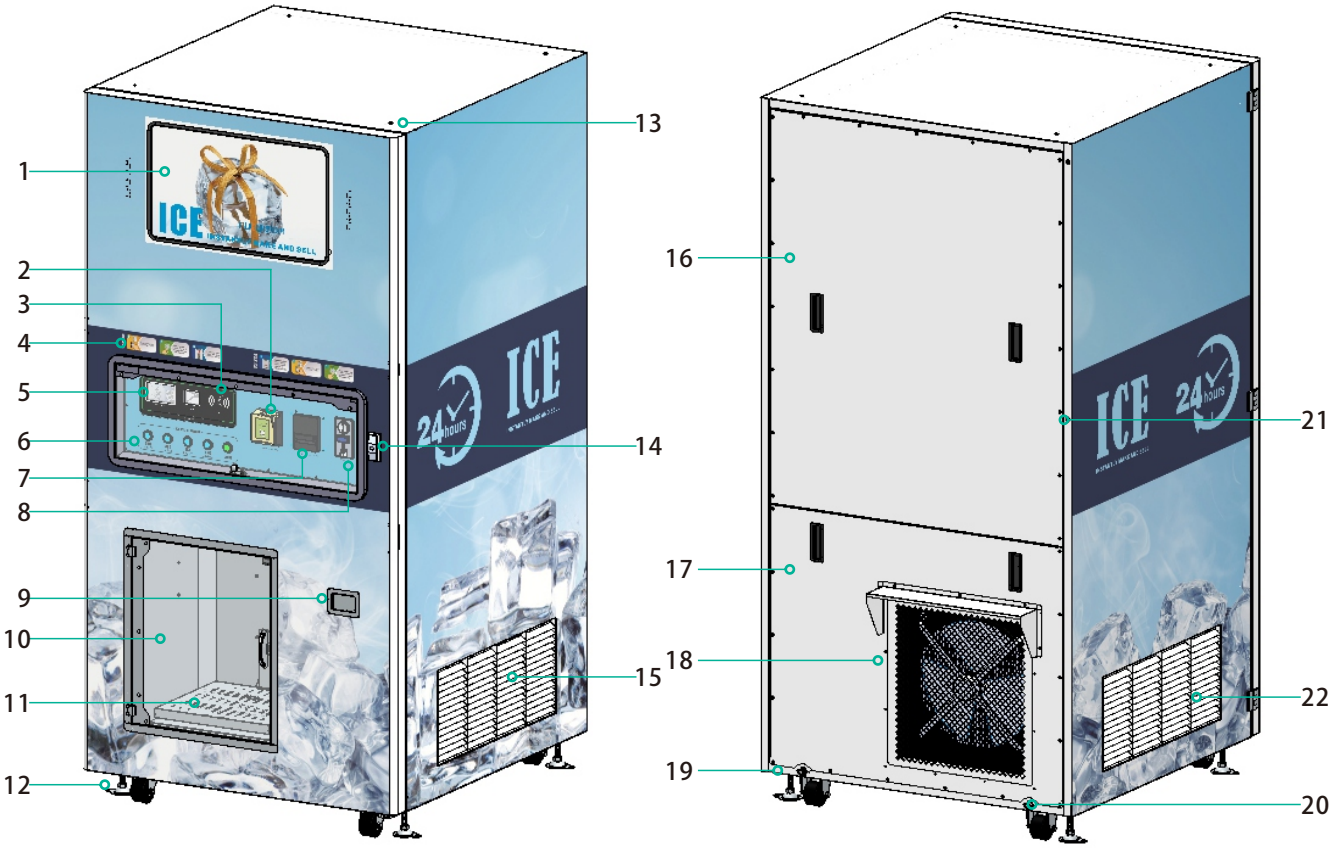
This instruction manual is prepared by Jiangmen Pukui Intelligent Machine Co., Ltd. Our company will make necessary changes to the instructions that are inconsistent with the latest information, equipment updates or improvements. These changes will be incorporated into the new instruction manual without further notice. , if the user has any questions, he or she can contact the local dealer or the company's after-sales service department.

Company service phone number:

Dealer service phone number:

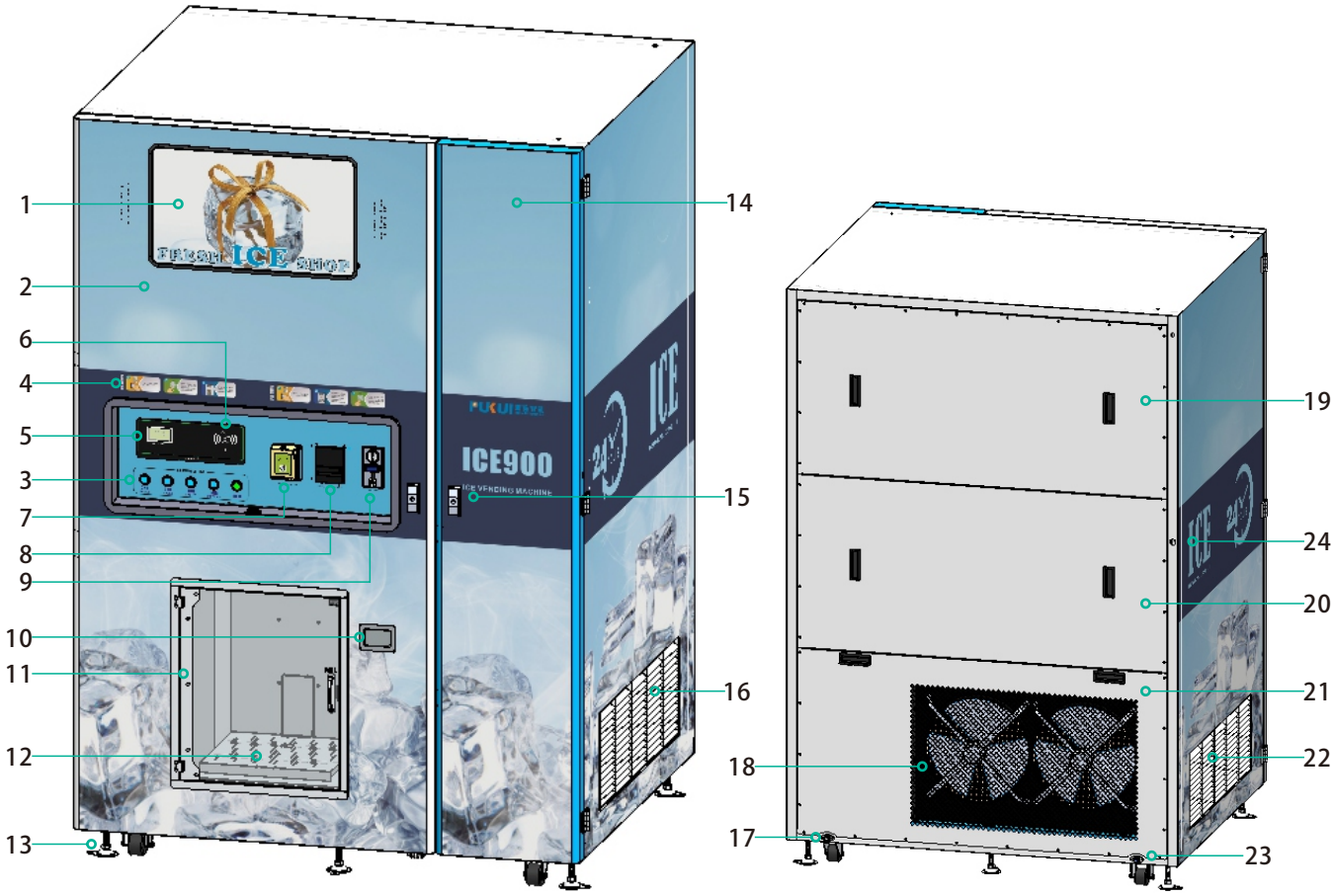
1. Appearance structure and name:

[1].PK-ICE180KG/320KG/450KG type:



No	Name	No	Name
1	LED light box (optional LCD)	2	Credit card payment device (optional)
3	IC card payment	4	Ice sales instructions
5	Sales display	6	Ice selection button
7	Banknote payment device (optional)	8	Coin acceptor
9	Change and coin return window (optional)	10	Ice filling room
11	Weighing platform	12	Adjust support feet/casters
13	Ceiling mounting threaded holes	14	Anti-theft door lock
15	Right air inlet window	16	Repair the upper back panel
17	Repair lower back panel	18	Air outlet cooling window
19	Tap water inlet	20	Waste water outlet
21	Power inlet	22	Left air inlet window

[2].PK-ICE900KG type:

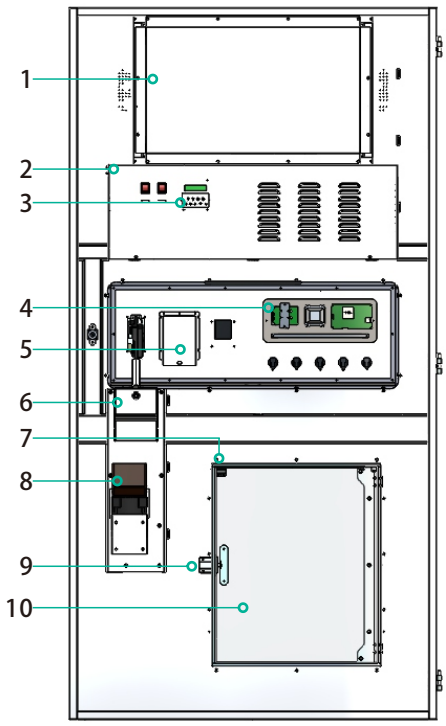


No	Name	No	Name
1	LED light box (optional LCD)	2	Left door
3	Ice selection button	4	Ice sales instructions
5	Sales display	6	IC card payment
7	Credit card payment device (optional)	8	Banknote payment device (optional)
9	Coin acceptor	10	Change and coin return window (optional)
11	Ice filling room	12	Weighing platform
13	Adjust support feet/casters	14	Right door
15	Anti-theft lock	16	Right air inlet window
17	Tap water inlet	18	Air outlet cooling window
19	Repair the upper back panel	20	Repair mid-panel
21	Repair lower back panel	22	Left air inlet window
23	Drainage outlet	24	Import of power supply

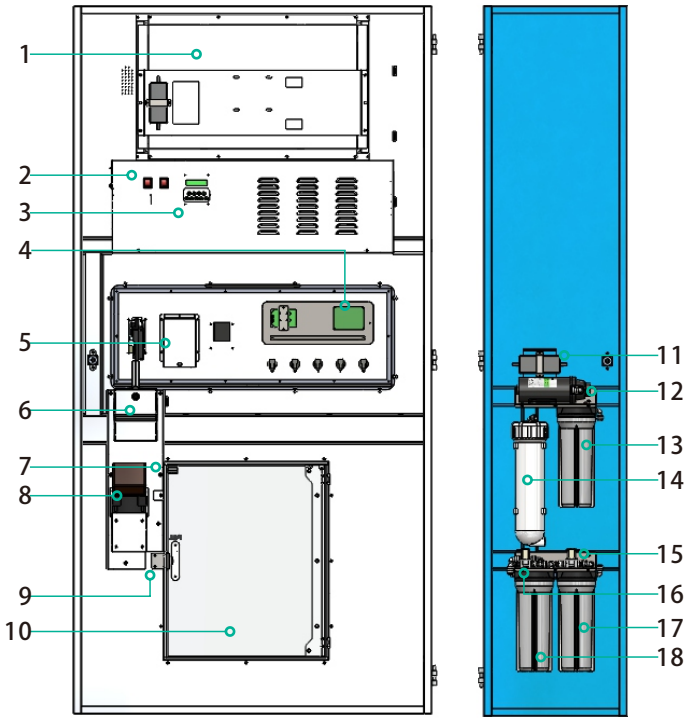
2. Internal structure and name:

[1]. Internal structure and name of the front door:

180/320/450KG Front door



900KG Type front door



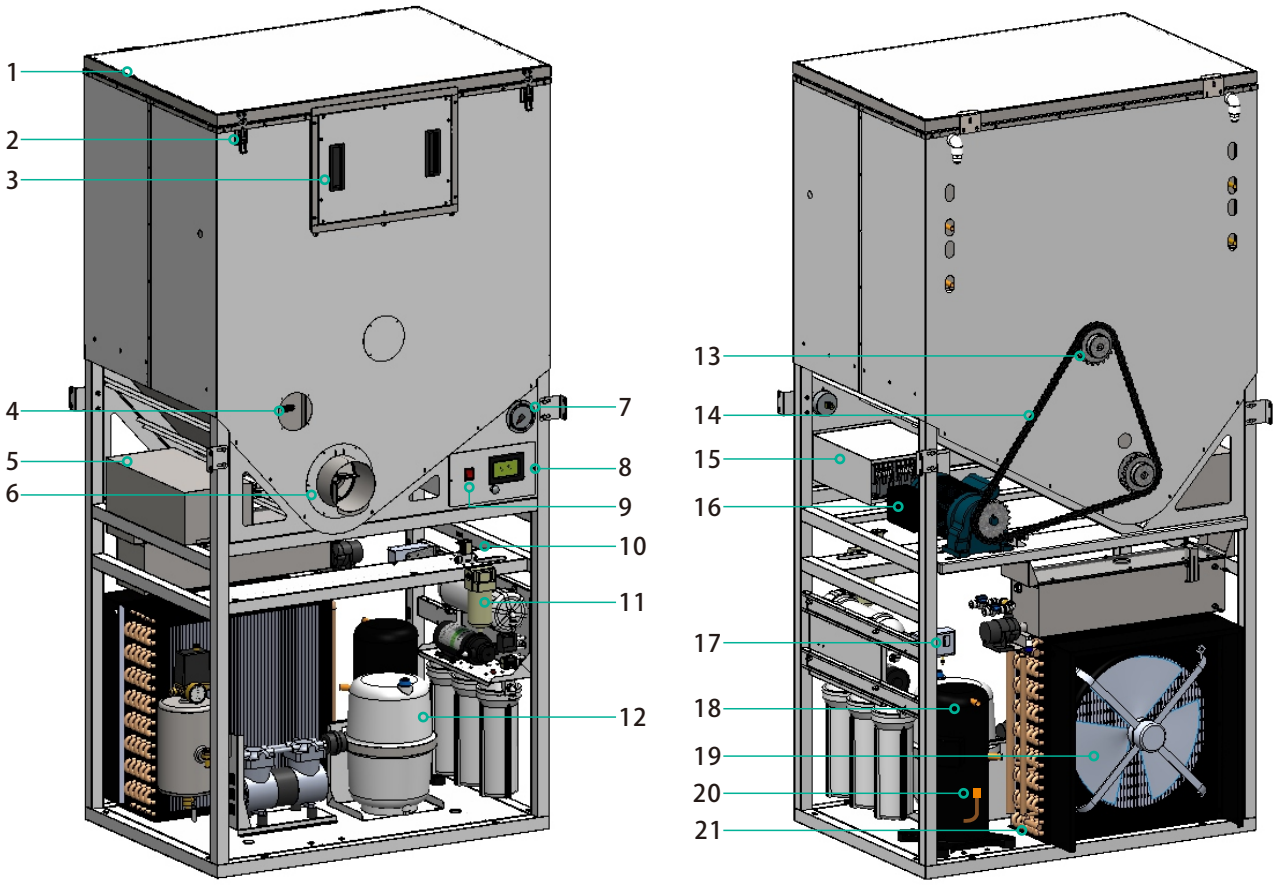
180/320/450KG front door:

No	Name	No	Name
1	Light box LED light	2	Electrical box
3	Function setting interface/display	4	IC card induction antenna
5	Banknote cash box (optional)	6	Coin box
7	Magnetic sensor switch for the ice room door	8	Coin change (optional)
9	Electromagnetic lock	10	Ice filling room acrylic door

900KG front door:

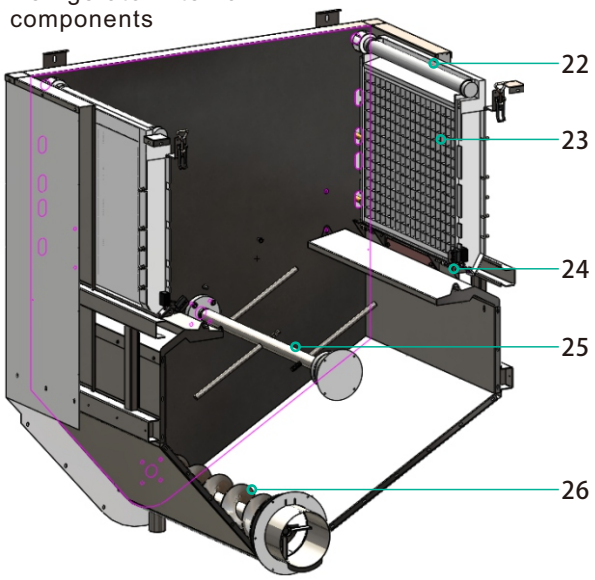
No	Name	No	Name
1	Light box LED light	2	Electrical box
3	Function setting interface/display	4	IC card induction antenna
5	Banknote cash box (optional)	6	Coin box
7	Magnetic sensor switch for the ice room door	8	Coin change (optional)
9	Electromagnetic lock	10	Ice filling room acrylic door
11	24V-3A Transformer	12	RO pump
13	10"-CTO filter	14	400G-RO membrane
15	RO flushing solenoid valve	16	Water inlet solenoid valve
17	10"-UDF filter	18	10"-PP filter

[2].180KG/320KG/450KG ice making system structure and name:

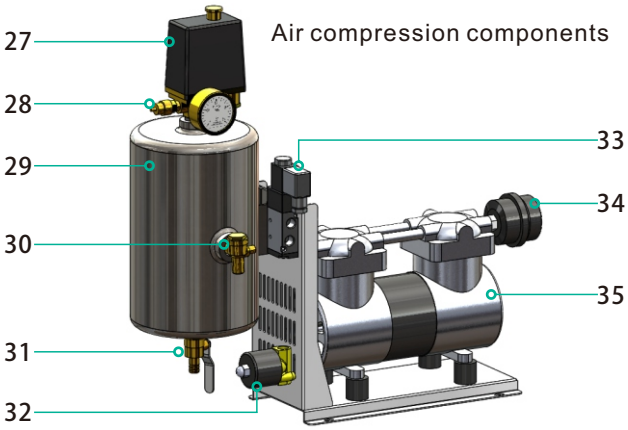


No	Name	No	Name
1	refrigerator lid	2	Refrigerator lid zipper
3	Refrigerator viewing window cover	4	Lack of ice infrared sensor
5	Water cooling radiator (optional)	6	ice outlet
7	Ice making high pressure gauge	8	Ice making status display
9	Ice making power switch	10	Refrigeration circulating water tank water inlet solenoid valve
11	suction bag water filter	12	3G pure water storage tank
13	10A-20T sprocket	14	10A chain
15	Ice making control box	16	Ice discharge motor
17	Compressor high and low pressure protection switch	18	compressor
19	condenser cooling fan	20	Refrigerant filling port
21	condenser		

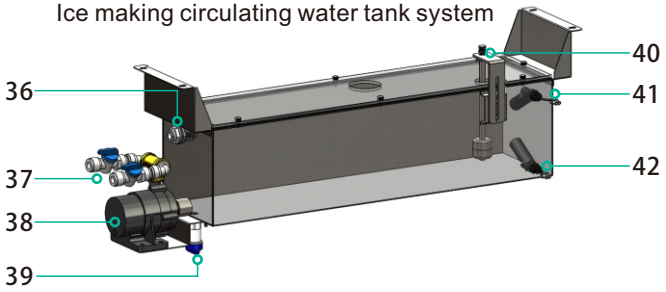
Refrigerator internal components



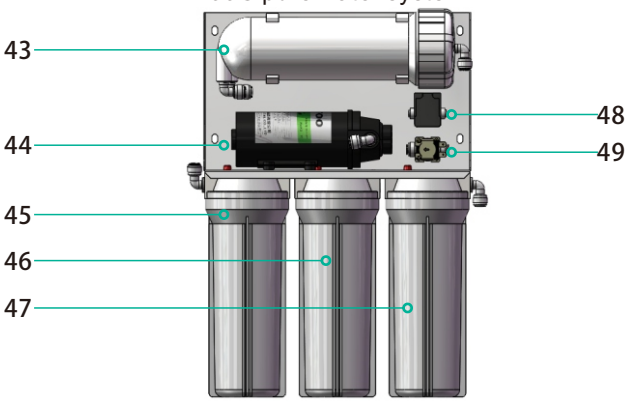
Air compression components



Ice making circulating water tank system

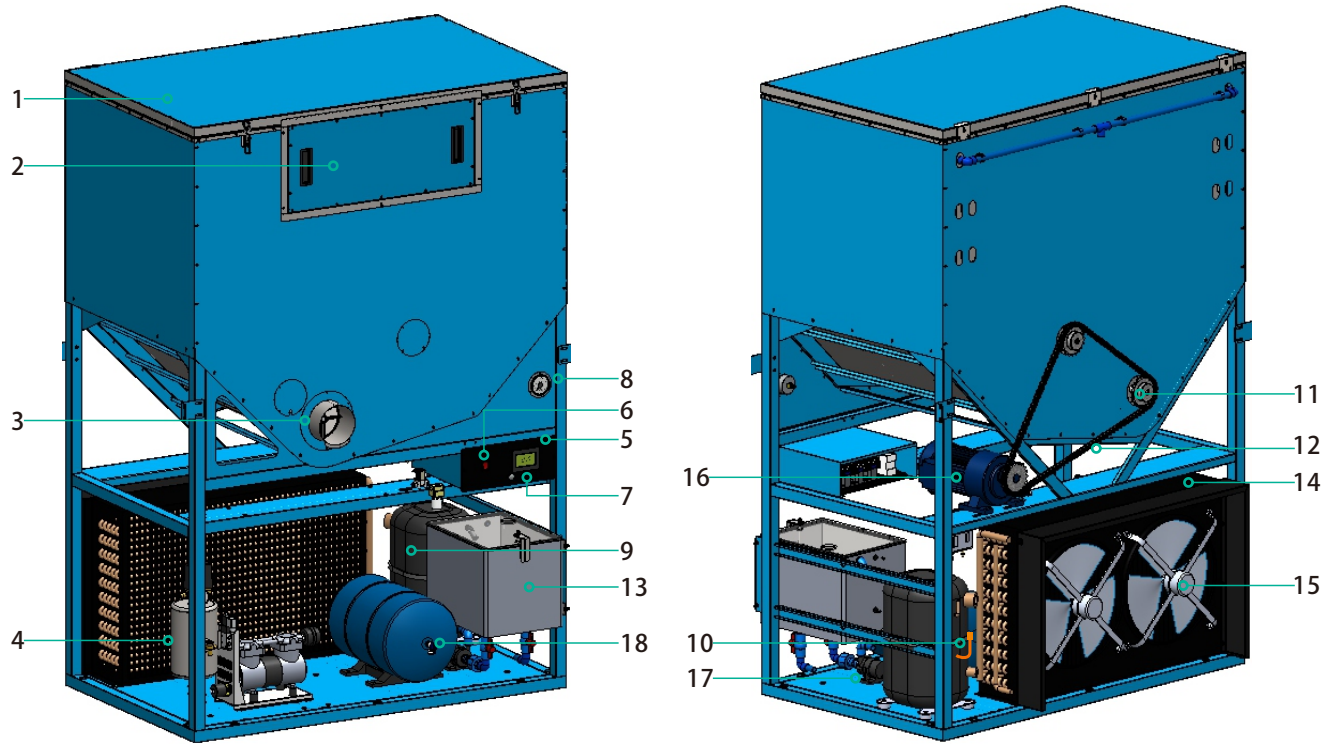


200G pure water system



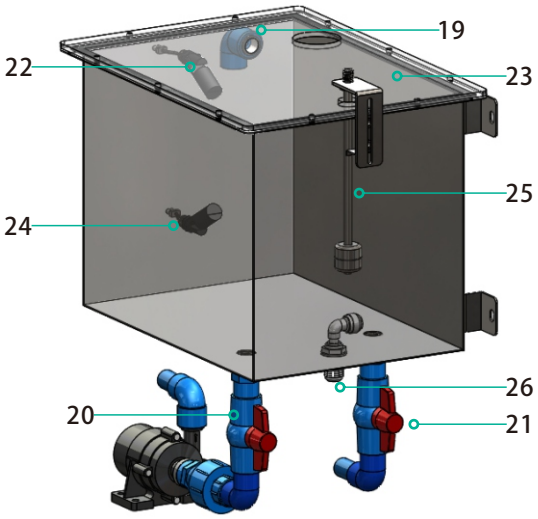
No	Name	No	Name
22	Spray pipe	23	ice tray
24	Ice tray flapper	25	ice stirrer
26	Ice outlet screw	27	pressure control switch
28	safety valve	29	gas tank
30	Intake check valve	31	Drain valve
32	Suction switching solenoid valve	33	Pressure relief solenoid valve
34	air filter	35	Air compressor
36	water inlet	37	Ice making water supply regulating valve
38	Ice supply pump	39	Drain valve
40	Ice thickness regulator	41	Stop water replenishment level gauge
42	Water shortage protection level gauge	43	RO membrane
44	RO pump	45	CTO filter
46	UDF filter	47	PP filter
48	RO flushing solenoid valve	49	Water inlet solenoid valve

[3].Structure and name of 900KG ice making system:



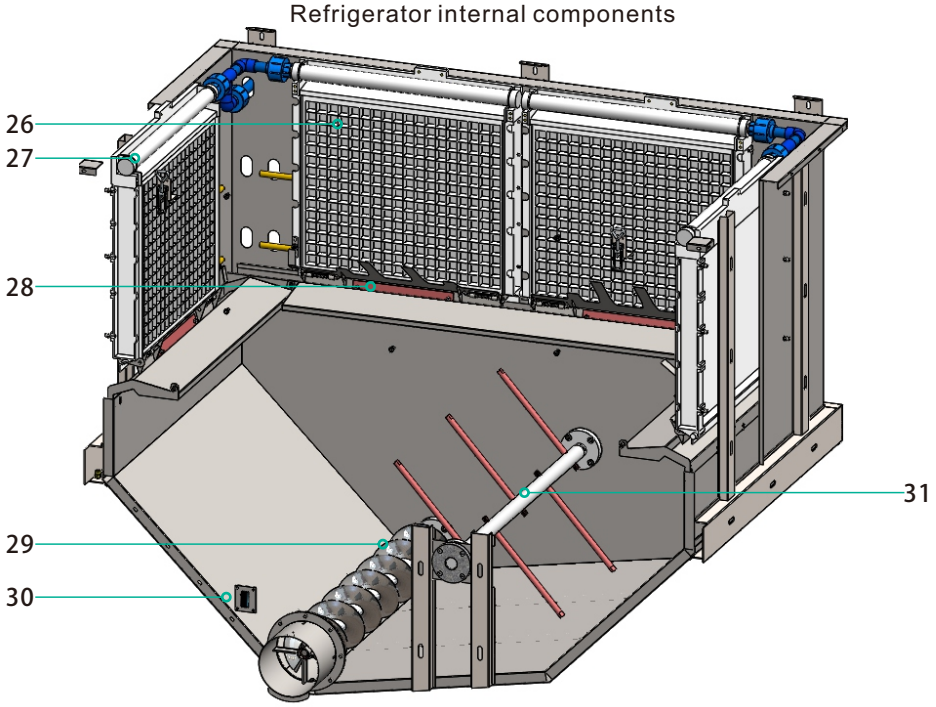
No	Name	No	Name
1	refrigerator lid	2	Refrigerator viewing window cover
3	ice outlet	4	Air compression system (same as 450KG type)
5	Ice making control box	6	Ice making power switch
7	Ice making status display	8	Ice making high pressure gauge
9	compressor	10	Refrigerant filling port
11	10A-20T single sprocket	12	10A chain
13	Ice making circulating water tank	14	condenser
15	condenser cooling fan	16	Ice discharge motor
17	Ice supply pump	18	5G Water storage bucket

Ice making circulating water tank system



No	Name
19	Overflow
20	Water supply regulator
21	Drain value
22	water full level gauge
23	Liquid level observation
24	Water shortage protection level gauge
25	Ice thickness regulator
26	Water inlet

Refrigerator internal components

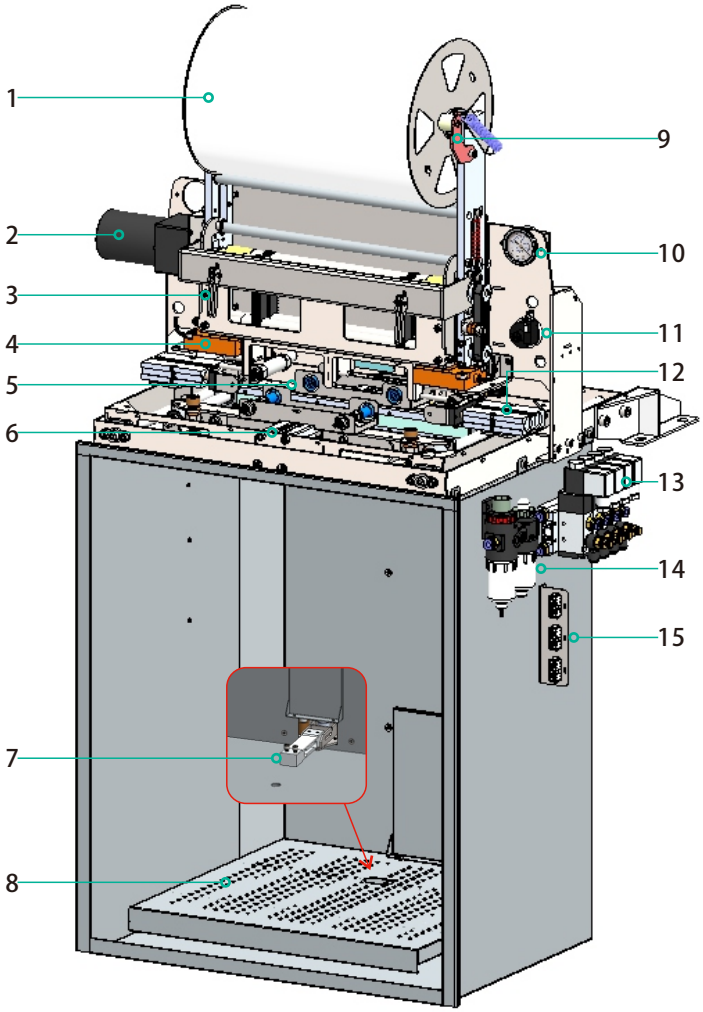


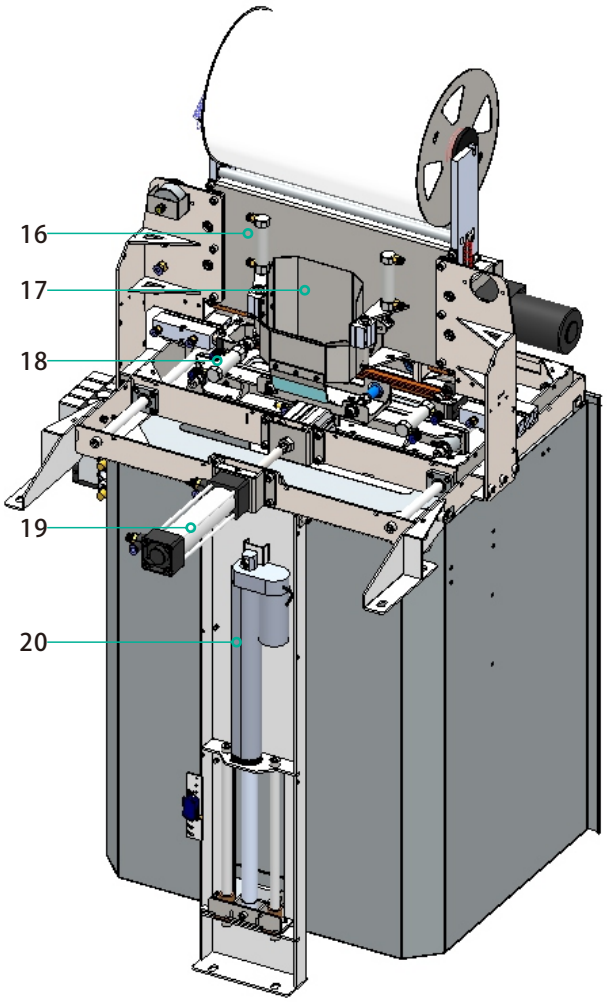
No	Name	No	Name
26	ice tray	27	Spray pipe
28	Ice tray flapper	29	Ice out screw
30	Lack of ice infrared sensor	31	ice stirrer

Warning

Our company will carry out technical upgrades and parts replacement for this machine at any time. If the name and location of the parts marked on the user's machine are inconsistent with those in this manual, please contact our company in time.

[4]. Packaging system structure and name:





No	Name	No	Name
1	roll bag	2	DC24V-15K bag out motor
3	bagging pull handle	4	Bag positioning U-shaped infrared sensor
5	Sucker	6	bag sealing cylinder
7	30KG weighing platform	8	Weighing platform
9	roll bag damper	10	Negative pressure gauge
11	Negative pressure control switch	12	Bag mouth telescopic cylinder
13	Pneumatic solenoid valve group	14	Water and oil filter/air pressure regulator
15	Control wiring port	16	Ice loading port lifting cylinder
17	ice port	18	Bag clamping cylinder
19	Bag moving cylinder	20	Weighing platform lifting electric push rod

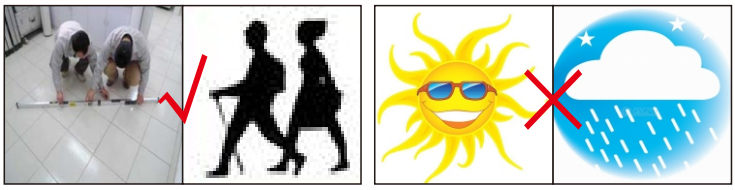
Item	180KG type	320KG type	450KG type	900KG type
Voltage	AC~220V-50Hz AC~110V-60Hz	AC~220V-50Hz/60Hz	AC~220V-50Hz/60Hz	3 ph AC~380V-50Hz 3 ph AC~220V-60Hz
Total power	≈2.5KW	≈3.0KW	≈3.75KW	≈6.2KW
24H ice production/ ambient temperature	180KG/20℃	320KG/20℃	450KG/20℃	900KG/20℃
Ice cube size	22mm×22mm×22mm（Customized：40mm×40mm×25mm）			
Total number of ice trays	198	396	540	1080
Compressor power	1.5HP	2.0HP	3.0HP	6.0HP
Refrigerant model	R404a			
Ice making method	Circulating spray			
Spray water flow	≈6L/min	≈10L/min	≈10L/min	≈20L/min
Heat dissipation method	Air cooling (customized: water cooling)			
Working temperature	1~38℃ (water-cooled type can accept the maximum ambient temperature of 45℃)			
Refrigerator ice storage capacity	≈120KG	≈120KG	≈110KG	≈150KG
Source water	Municipal tap water			
Water source pressure/flow	> 0.2MPa / > 300L/H			
Pure water output (optional)	200GPD			400GPD
Air compressor power	380W			
Gas tank volume/ gas storage pressure	5L / 0.8MPa			
Packaging working pressure	0.6~0.8MPa			
suction bag negative pressure	-0.06~-0.08MPa			
Bag out induction delay	0.4S			
Sealing heating time	3.0~4.0S			
Weighing reference value (AD)	1KG:800/2KG:2400/3KG:3800/4KG:5500/6KG:7200/7KG:8900			
Selling way	Automatic bagged ice + bulk ice			
Pricing method	Unit price×weight			
payment method	Standard: IC card payment/coin payment (optional: banknote payment/ credit card payment/scan code payment/change)			
Ice bag sizes	1-4KG plastic bag size 300×560(mm) / 5-7KG plastic bag size 300×710(mm)			
Single roll bag quantity	300×560(mm) type: 350 pcs (0.08mm thickness) / 400 pcs (0.06mm thickness) 300×710(mm) type: 250 pcs (0.08mm thickness) / 300 pcs (0.06mm thickness)			
Bag material	Food grade translucent PE			
Inlet/drainage connector	G1/2 external thread			
Machine size	W110×D118.5×H225(cm)			W154×D134×H228(cm)

Warning

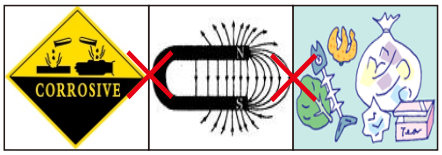
1. These parameters are the basic parameters of conventional models. If there are any changes in the parameters of customized models, the user will be informed separately.
2. The ice production capacity is based on the ambient temperature of 20°C. The increase in ambient temperature will cause the output to decrease. The maximum working ambient temperature of the air-cooled heat dissipation model is 40°C. In areas exceeding this ambient temperature, water cooling is required. Cooling model.

1. Select installation site:

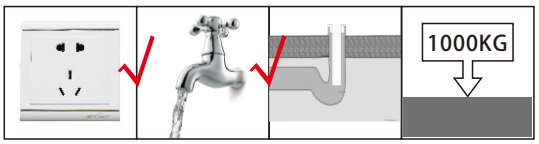
[1]. Place the machine in a flat place that does not affect people's activities, and try to avoid direct sunlight and rain.



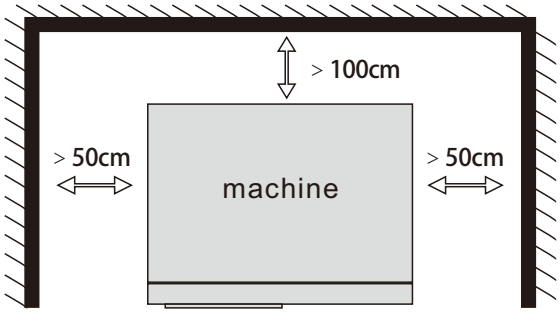
[2]. This machine is not suitable for installation in environments with corrosive gases, liquid erosion, strong magnetic fields, and unhygienic environments.



[3]. The installation site is conducive to electricity, water and drainage, and the ground can bear a load of more than 1000KG.



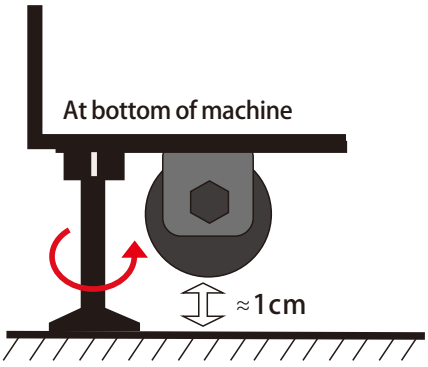
[4]. As shown below, the distance between the installation position and the walls on both sides is not less than 50cm, and the distance between the back and the wall is not less than 100cm.



2. Machine installation steps:

[1]. Installation of support feet:

As shown in the picture on the right, after determining the installation position, please screw the four randomly configured adjusting support legs (6 for the 900KG type) onto the nuts at the bottom of the machine to keep the machine level and without swinging, lock the nuts, and then use them with the ground. Expansion screw fixation.



Notice

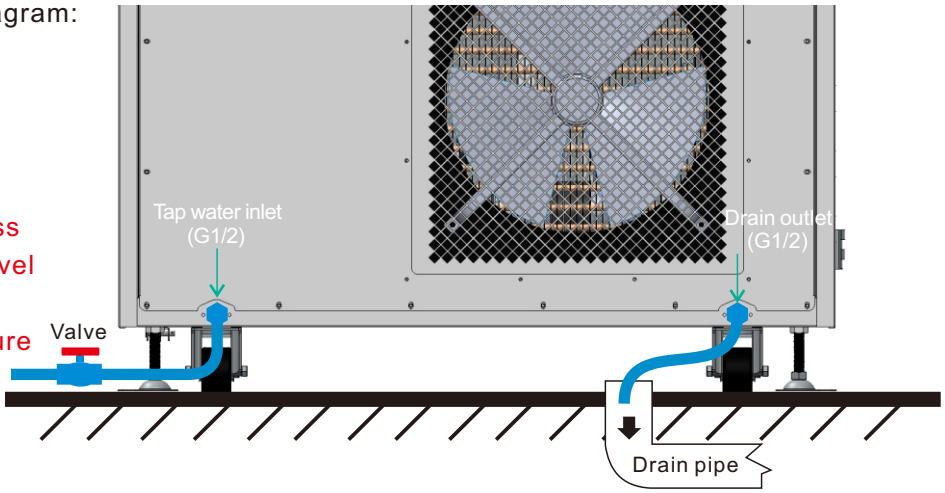
1. The machine installation should be kept level and fastened to the ground.
2. The installation environment must be well ventilated.
3. The installation ground must be flat and solid.

[2]. Selection of pipe materials:

As shown in the figure below, the tap water inlet pipe uses a 4-point PVC pipe or aluminum-plastic pipe and the corresponding joints, and the drainage pipe uses a 4-point reticulated rubber pipe and the corresponding joints.

[3]. Water pipe installation diagram:

3.1.180/320/450KG type:



Notice

This machine has pressureless drainage, and the drainage level must not be higher than the bottom of the machine to ensure smooth drainage.

Warning

1. In order to ensure the hygiene of the ice cubes, please use a clean and sanitary water source with a water pressure of not less than 0.2MPa and not higher than 0.4MPa.

2. The ambient temperature of this machine should be between 5 and 38°C. If it exceeds this range, please pay attention to antifreeze or cooling treatment.

3. The water inlet pipe connection ensures no leakage under a water pressure of 0.6MPa.

3.2.900KG Type:

Same as the 450KG model

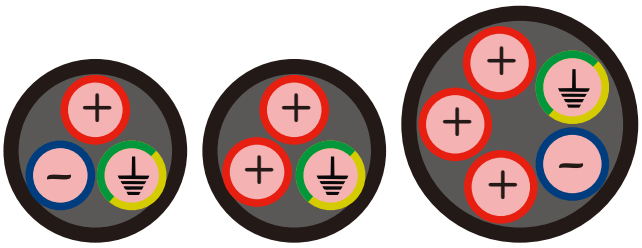
[4]. Power input diagram:

4.1. Selection of power cord: (picture on the right)

4.1.1. The input power cord should be waterproof insulated cable that complies with national standards;

4.1.2. The voltage of the power cord is 220V or 380V and the specification is not less than 3×2.5㎡ cable. (The following figure)

4.1.3. The input power supply must use a distribution box with a leakage protector. (The following figure)

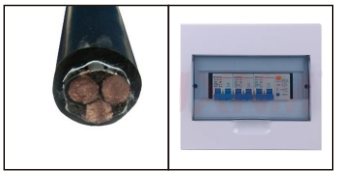


110V-60Hz 220V-50Hz single phase power cord

220V-60Hz single phase power cord

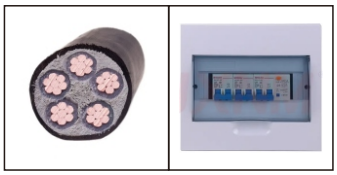
380~400V /50~60Hz 3 phase power cord

180/320/450KG type



a. The cable is not smaller than 3×2.5㎡
b. The leakage switch is not less than 64A

900KG type



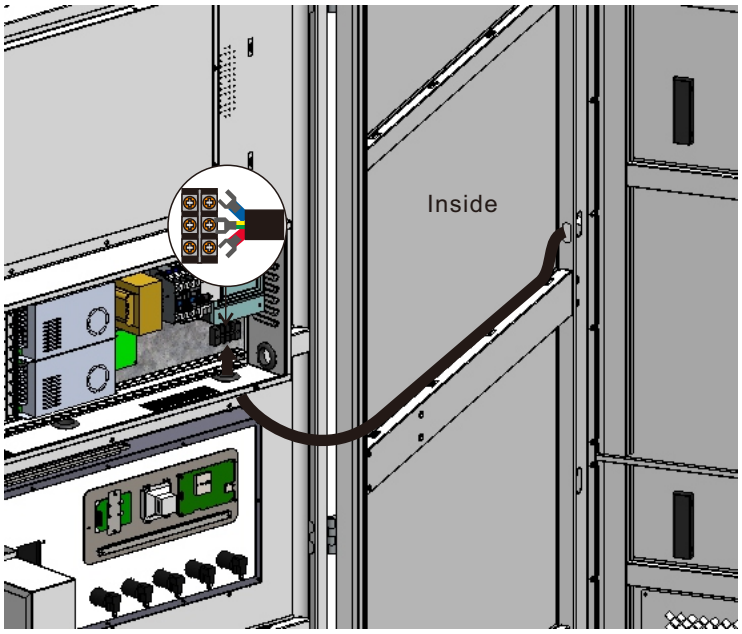
a. The cable is not smaller than 5×2.5㎡
b. The leakage switch is not less than 64A

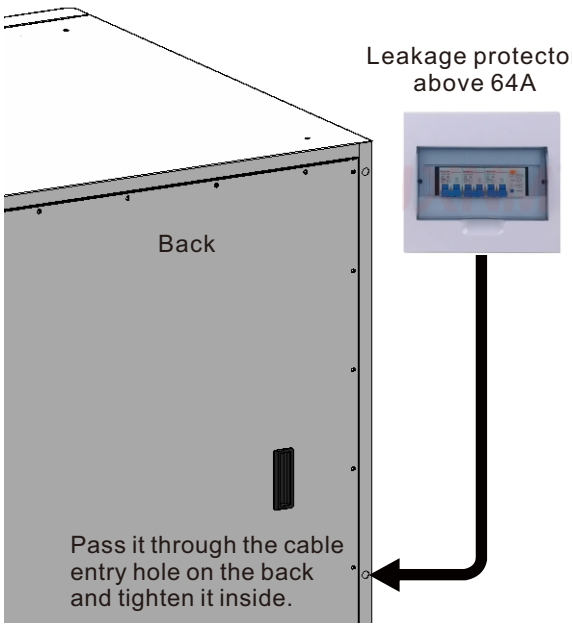
Warning

1. It is strictly prohibited to use non-standard wires.
2. It is strictly prohibited to use non-copper wires.
3. For models with 110V power supply, the cable must be no less than 4.0㎡

4.2. Power connection diagram:

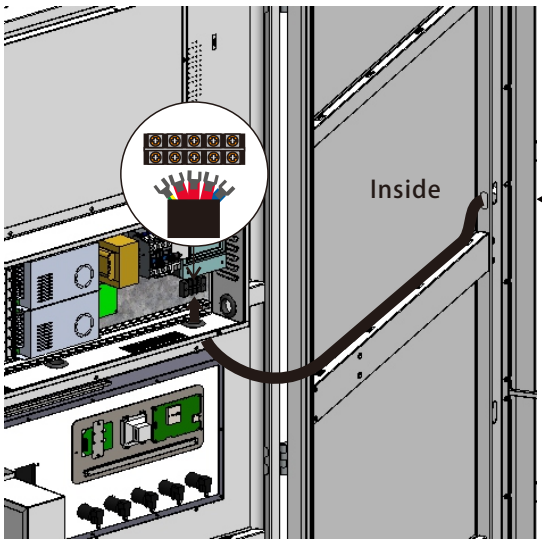
4.2.1.180/320/450KG type power supply connection diagram:





4.2.2.900KG type power supply connection diagram:

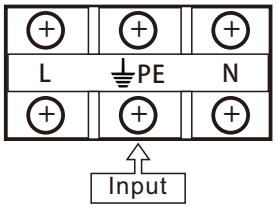
Three-phase leakage protector above 64A



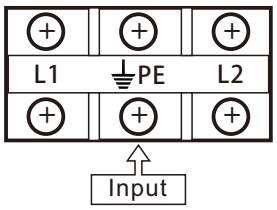
Pass the power cord through the sealing plate before connecting.

4.2.3. Schematic diagram of power connection row:

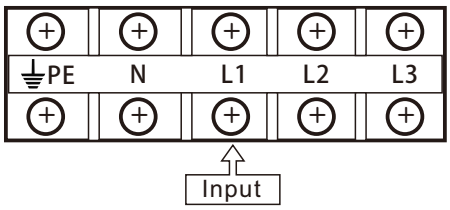
110V-60Hz/220V-50Hz Single-phase model access diagram



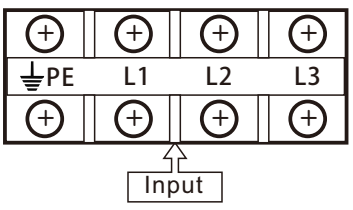
220V-60Hz Single-phase model access diagram



380~400V-50Hz Single-phase model access diagram



220V-60Hz Three-phase model access diagram



Warning

1. The input power supply must be well grounded, or a grounding wire must be connected between the machine and the ground.

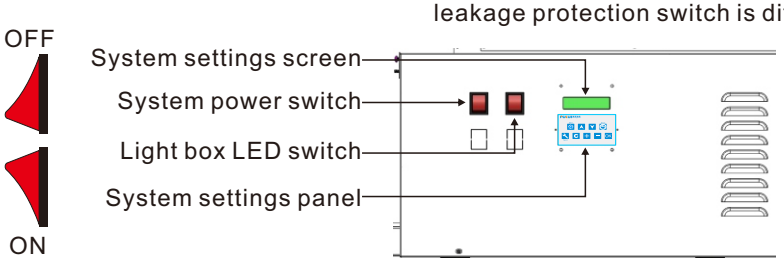
2. Please use a hard round tube as a protective sleeve for the power input line exposed on the machine.

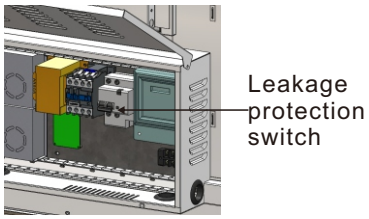
3. The three-phase power supply must distinguish between positive and negative squares to ensure that the motor rotates correctly.

1. Initial work steps:

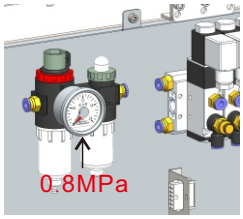
[1].Control switch identification:

Note: All models are the same, the position of the leakage protection switch is different.





[2]. Make sure that the water inlet and drainage pipes are installed without leakage, the power input is connected well, and if the pure water system is equipped with a pure water system, confirm that all types of filters are installed, then open the main water inlet valve; turn on the leakage protection switch, and the air compressor Start working and stop working when the pressure reaches the set value; during this period, observe whether the air compressor system starts and stops and the air pressure is completely normal. (picture on the right)

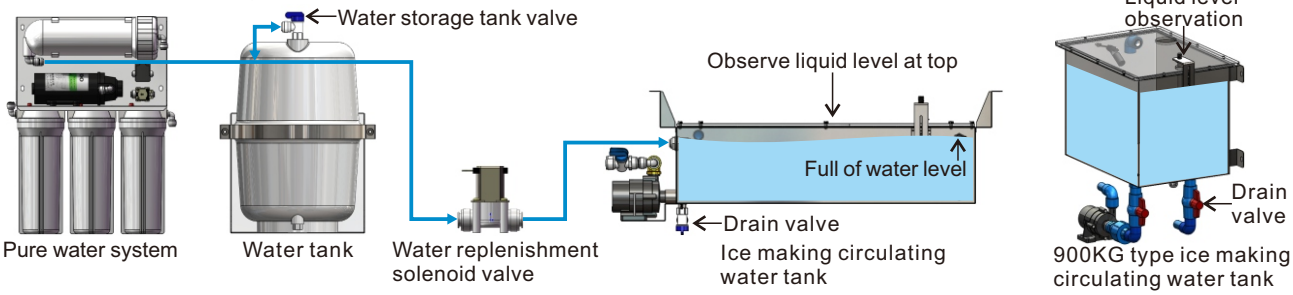


[3]. Start the pure water system water production, circulating water tank replenishment and cleaning steps: (picture below)

3.1. For models with a pure water system, open the water storage tank valve. If there is no such configuration, ignore this step.

3.2. Turn on the system power switch and the ice making power switch, the system setting screen will light up, the pure water system will start to produce water, the water replenishment solenoid valve will automatically open, and the ice making circulating water tank will be replenished simultaneously. After the water tank reaches the full level, replenish water. The solenoid valve automatically closes. At this time, turn off the ice making power switch and soak for 10 minutes. Then open the water tank drain valve. After draining the water tank, close the drain valve. Turn on the ice making power switch and the water tank will automatically replenish water. (If the water storage tank is full of water, keep opening the drain valve to drain water until the water tank and water storage tank are completely drained.)

3.3. After the water tank is full, the pure water system continues to work. When the pressure in the water storage tank reaches 0.3MPa, the pure water system stops.

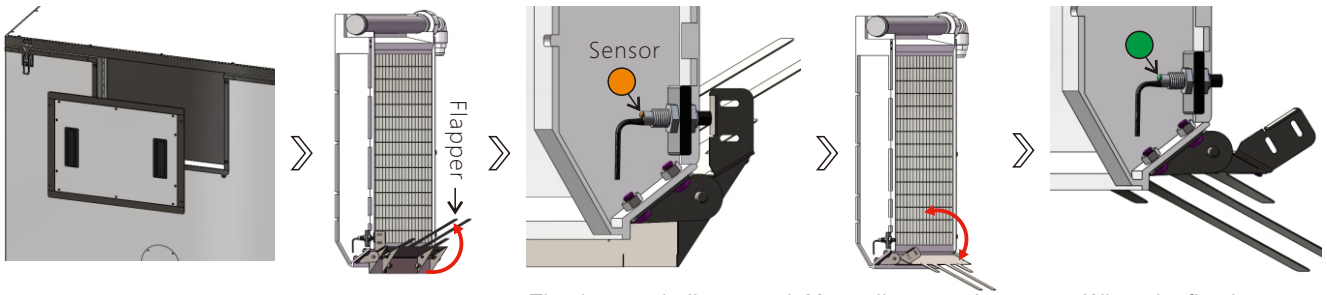


Warning

1. When working for the first time, you need to check whether the water replenishment of the ice making circulating water tank is normal, and whether the water replenishment solenoid valve closes normally and automatically when the water is full.
2. When the pure water system is working for the first time, it is necessary to confirm whether the water production is normal and whether the water storage tank will automatically stop when the water is full.
3. Before starting to make ice, pure water needs to be taken to check whether the water quality meets the standard.
4. The first tank of water in the ice-making circulating water tank and the water storage tank need to be soaked and then drained, and the water tank and water storage tank should be cleaned.

[4]. Ice making startup steps:

4.1. Before starting the ice making, the ice tray flap and sensor need to be tested.
The steps are as follows. Only when everything is normal can the ice making be started:



a. Open the refrigerator observation window

b. The reset state of the flap is upward

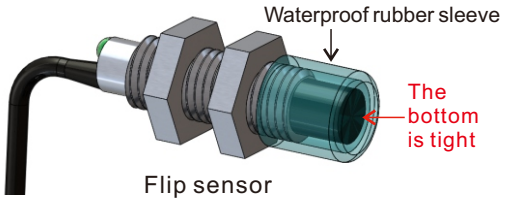
c. The detector indicator light is orange when in reset state

d. Manually press the flap several times to see if it can be reset smoothly.

e. When the flap is pressed down, the detector indicator light is green.

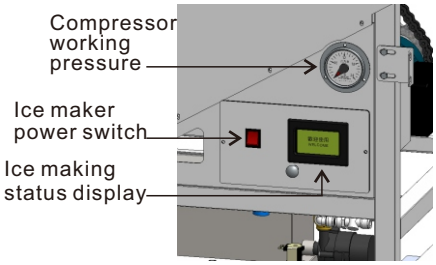
Notice

1. All flaps need to be tested before starting ice making.
2. Each time the flip plate is pressed down, smooth reset is ensure
3. Every time the flip plate is pressed down and reset, it is necessary to check whether the sensor is sensing normally.
4. Make sure that the waterproof rubber sleeve on the front of the sensor is not peeled off or damaged, and that the bottom of the rubber sleeve is close to the sensor.

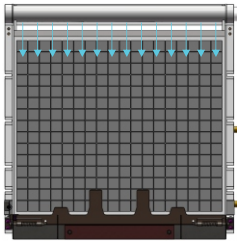


4.2. Ice making can be started after the flap detection is completed, the ice making circulating water tank and water storage tank are cleaned and filled with water.

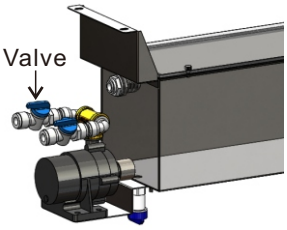
4.3. As shown in the picture on the right, turn on the ice making power switch, the ice making status display lights up, and the ice making system enters the automatic working state; first pre-cool the ice tray for 3 minutes, then the water supply pump starts water supply and enters the ice making mode.



4.4. In the initial ice making state, the water spray state needs to be detected. The steps are as follows:



a. Check whether the water spraying state is uniform and whether there is water flowing through each ice tray.



b. If the water flow is too large, control the water flow by adjusting the valve at the rear of the water supply pump. Each valve controls an ice tray.

Notice

1. Since the plastic on the top of the ice tray has a certain degree of hydrophilicity, it will cause uneven distribution of water flow. If this situation occurs, it can be improved by treating the surface with 360# emery cloth, and then clean it.
2. Improper installation of the machine will result in uneven watering of the ice tray.

4.5. Comparison standard between compressor working pressure and ambient temperature:

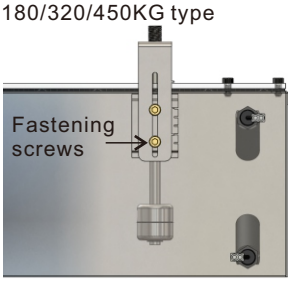
Ambient temperature	Under 20℃	21~25℃	26~30℃	31~35℃	36~38℃
Working pressure	≈1.2~1.3MPa	≈1.4~1.5MPa	≈1.6~1.8MPa	≈1.8~2.0MPa	≈2.0~2.2MPa

Notice

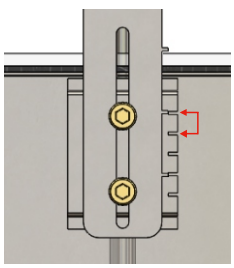
1. The values in the above table are reference values for compressor working pressure. Under normal circumstances, low pressure within different ambient temperature ranges means insufficient refrigerant, and high pressure means too much refrigerant.
2. It is not recommended to use air-cooled cooling models for ambient temperatures within the orange range. To ensure ice production, it is recommended to use water-cooled cooling models.
3. When starting ice making for the first time, the working pressure of the compressor needs to be approved, and adding or releasing refrigerant requires professional operations.

4.6. Ice thickness adjustment steps:
When the ice making is initially started, the thickness of the ice cubes is adjusted based on the ice making thickness after the second time as the reference value. The steps are as follows:

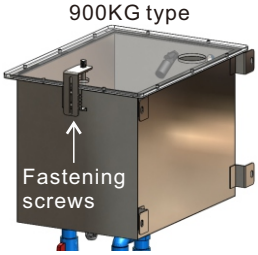
180/320/450KG type



a. Loosen the fastening screws of the ice thickness adjustment level gauge of the circulating water tank.



900KG type



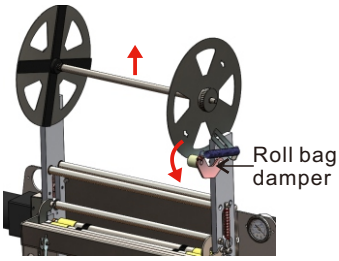
b. Each adjustment level representsice weight ≈ 0.5KG. Adjust upwardto reduce the thickness of the ice cube, and adjust downward to increase the thickness of the ice cube.

Warning

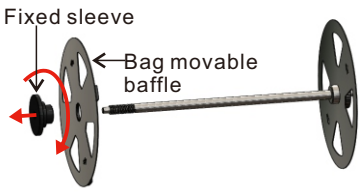
1. The thickness of the ice cubes has been adjusted before the machine leaves the factory and should not be adjusted at will.
2. If the thickness of the ice is too thick or too thin, it will make it impossible to remove the ice.

2. Packaging system operation steps:

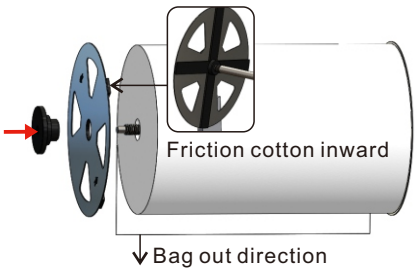
[1]. Roll bag placement steps:



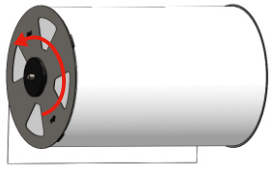
a. Pull the damper downward, Remove the bagging shaft upwards



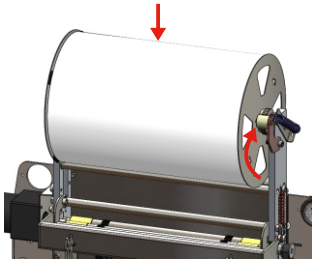
b. Twist the fixing sleeve clockwise and take out the roll bag baffle



c. Insert the roll bag, roll bag movable baffle and fixed sleeve in sequence

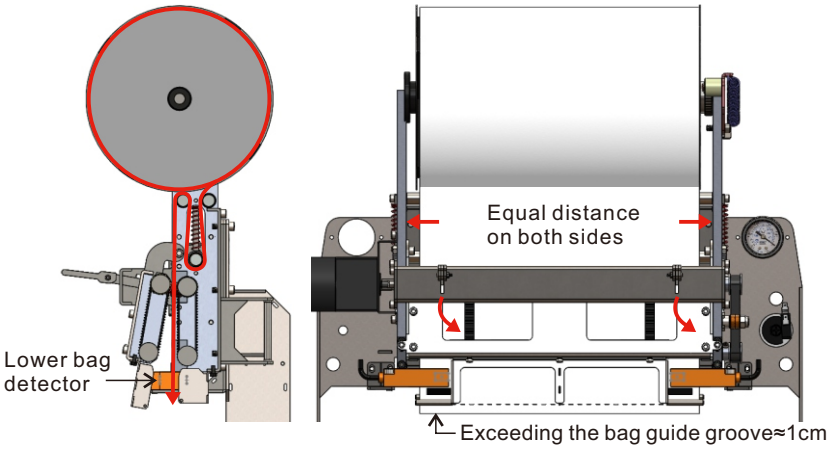


d. Tighten the fixing sleeve counterclockwise to ensure that the roll bag is not loose.



e. Put the roll bag assembly into the slot and push the damper upwards

f. Pull the handle of the bag organizer's movable pressure plate upward about 100° and keep it in the position where it does not move downward.



g. Insert the plastic bag in the order shown in the figure, exceeding the bag guide groove by ≈ 1cm, making both sides of the bag equal, and then pull down the handle of the bag management movable pressure plate.

Notice

1. When filling the plastic bag, keep the plastic bag flat and the bottom of the bag is level with the packaging system.
2. Pay attention to the direction of the plastic bag when loading the roll bag. Wrong direction will lead to failure in normal packaging.

[2]. Bag out parameter setting:

2.1. Set interface function keys:

SET	Set	TEST	Test	OK	Confirm
▲	Up	C	Clear		
▼	Down	+	Increase		
EXIT	Exit	−	Decrease		

2.2. System parameter setting:

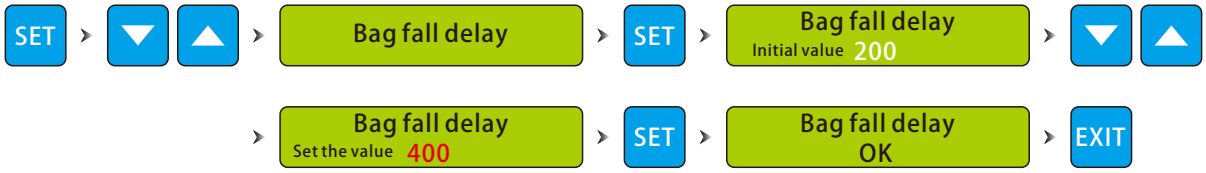
Bag quantity setting:

Quantity comparison table of roll bags of different thicknesses and sizes:

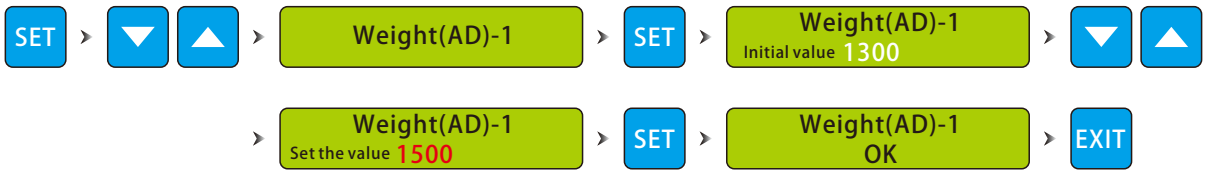
Bag specifications	300×560×0.06 thick	300×560×0.08 thick	300×710×0.06 thick	300×710×0.08 thick
Quantity of roll bags	400 pcs	300 pcs	350 pcs	250 pcs

Notice In order to ensure that the last bag comes out normally, when the system sets the number of bags, it must be 5 less than the actual number of roll bags.

Bag lowering delay setting:



Weigher value setting:



Ice sales weight display setting:

Different ice sales methods and weight comparison table:

Selling way	300×560(mm) bag ice	300×710(mm) bag ice	Bulk ice
Ice sales weight range	1~4KG	1~7KG	1~10KG

Ice sales unit price setting:

Notice Each unit price and weight must be set accordingly.
For example: Weight(KG)-1 corresponds to Price-1.

› Bag seal heating settings:

SET › ▼ ▲ › Heat time › SET › Heat time Initial value 020 0.1S › ▼ ▲

› Heat time Set the value 030 0.1S › SET › Heat time OK › EXIT

› Cash consumption amount inquiry:

SET › ▼ ▲ › Cash accumulated › SET › Cash accumulated 500.00 › EXIT

› IC card consumption amount inquiry:

SET › ▼ ▲ › Card accumulated › SET › Card accumulated 500.00 › EXIT

› Identity code settings:

SET › ID Card number › SET › ID Card number Initial value B001 › ID CARD B002 Use new ID card to sense

› ID Card number Set the value B002 › EXIT

› IC card withholding amount setting:

SET › ▼ ▲ › Card Pre-deduct › SET › Card Pre-deduct Initial value 4.00 › ▼ ▲

› Card Pre-deduct Set the value 5.00 › SET › Card Pre-deduct OK › EXIT

› Banknote pulse value setting:

SET › ▼ ▲ › Bill pulse › SET › Bill pulse Initial value 1.00 › ▼ ▲

› Bill pulse Set the value 5.00 › SET › Bill pulse OK › EXIT

› Coin pulse value setting:

SET › ▼ ▲ › Coin pulse › SET › Coin pulse Initial value 0.20 › ▼ ▲

› Coin pulse Set the value 0.50 › SET › Coin pulse OK › EXIT

› System time setting:

SET › ▼ ▲ › System Time › SET › System Time Initial value 8:30 › M ▼ H ▲

› System Time Set the value 12:30 › SET › System Time OK › EXIT

› Light box opening time setting:

SET › ▼ ▲ › Light on time › SET › Light on time Initial value 18:00 › M ▼ H ▲

› Light on time Set the value 17:00 › SET › Light on time OK › EXIT

› Light box off time setting:

SET › ▼ ▲ › Light off Time › SET › Light off Time Initial value 6:00 › M ▼ H ▲

› Light off Time Set the value 6:30 › SET › Light off Time OK › EXIT

2.3. Manual bagging and packaging test:

›Output bag test:

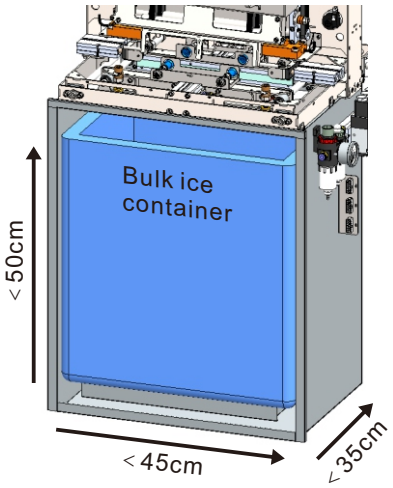
TEST › [Test Mode] Bag › OK - Continue to press OK after testing multiple times - - ► OK

Warning Every time a new roll bag is replaced, it needs to be manually unpacked and packaged for 3 to 5 times before entering the normal sales mode.

3. Take the size of the bulk ice container:

Notice

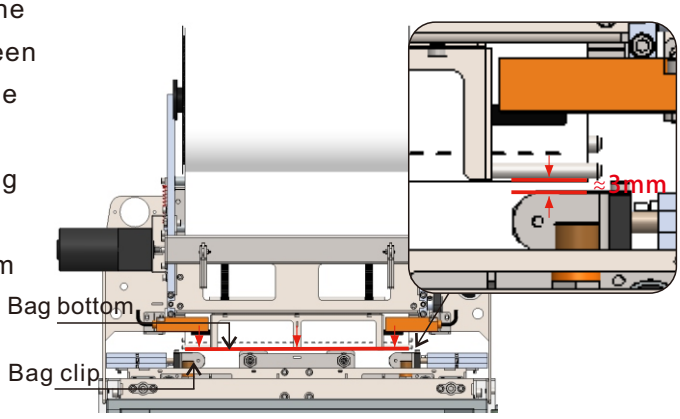
1. As shown in the picture on the right, the size of the loose ice container must not exceed this size. If it exceeds the size, it will not be placed inside.
2. The container cannot exceed the ice room door. If the ice room door is not closed, bulk ice will not be sold.



4. Fall bag position setting:

[1]. As shown in the picture on the right, set the lower bag stop position to the distance between the bottom of the bag and the upper part of the bag clip ≈ 3mm.

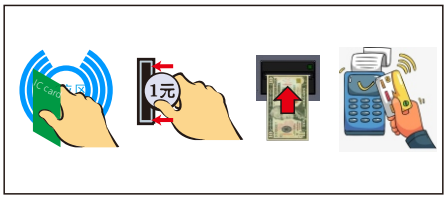
[2]. Set through the bag lowering delay setting item set by the system. Decreasing the value will lengthen the distance between the bottom of the bag and the bag clip, and vice versa shorten the distance.



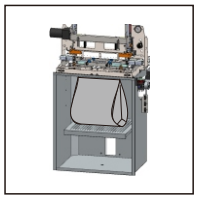
5.Sales process:

[1]. Bag ice sales process:

a. Press the button to select the required amount of ice bag



b.Pay the amount of ice sold



C. Wait for automatic ice packaging

d. After packaging is completed, the door lock is opened, the ice room door is opened, the bag of ice is taken out and the door is closed.

[2].Bulk ice sales process:

a. Press the button to select the required amount of bulk ice

b.Pay the amount of ice sold

C. Open the door lock, open the ice room door, and put the container in

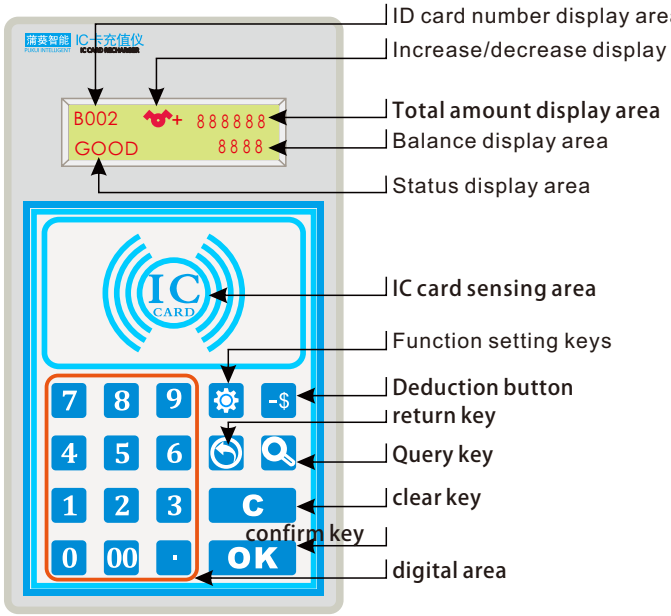
d. Close the ice room door and the ice will be automatically dispensed. After the ice is dispensed, open the door and take it out.

Warning

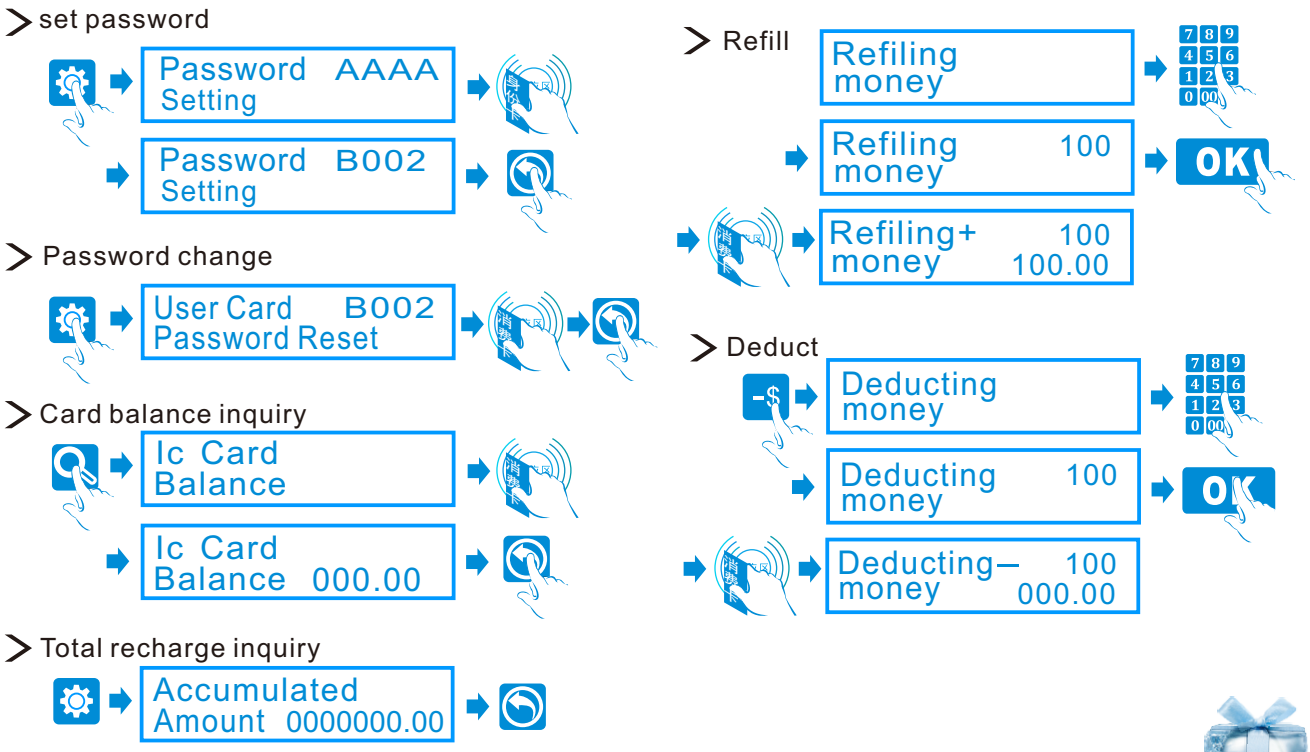
1. During the period when bag ice is being packed, the bunker door should be locked. During this period, it is strictly prohibited to pull the bunker door by force.
2. After placing the loose ice in the container for sale, the ice room door must be closed in place. If it is not closed in place, the ice will not be discharged.

6. IC card recharge steps:

[1].Recharge machine function keys:



[2].Recharge machine functions:

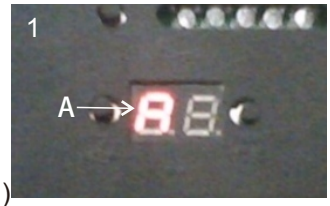


[3]. Function settings:
When setting, press and hold (precision key) and (relaxation key) at the same time for about 3 seconds. After the display window displays the word (A), you can set the internal value:
3.1. Select several currency settings:
Press (Setting key) and the word (E) will appear in the display window, then press (Precision key) or (Relaxation key) to increase or decrease the value. When the required number of currencies is reached, press (Setting key) to confirm.
3.2. Single currency sampling quantity value setting:
Press (Setting key) and the word (H) will appear in the display window, then press (Precision key) or (Relaxation key) to increase or decrease the value. When the required number of currencies is reached, press (Setting key) to confirm.

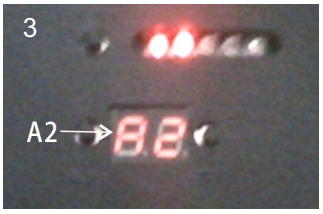
[4]. Currency pulse signal output value setting:
Press the (setting key) and the word (P) will appear in the display window, then press the (precision key) or (relaxation key) to increase or decrease the value. When the required number of currencies is reached, press the (setting key) to confirm.

[5]. Currency sampling accuracy setting:
Press (Setting key) and the word (F) will appear in the display window, then press (Precision key) or (Relaxation key) to increase or decrease the value. When the required number of currencies is reached, press (Setting key) to confirm.
After the above steps are completed, wait until the word (E) appears, turn off the power for about 30 seconds, and then turn on the power again to use it normally.

[6]. Coin sampling steps:
6.1. Press the (SET) button and the word (A) will appear, as shown in Figure 1:



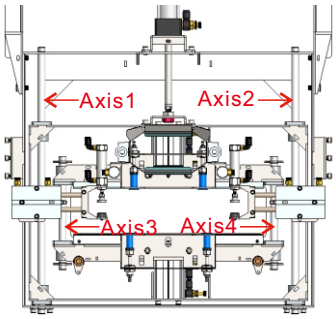
6.2. Press the (SET) button again and the word (A1) will appear, as shown in Figure 2:

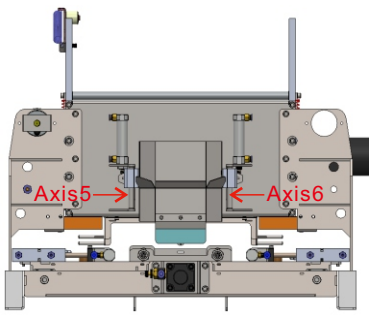


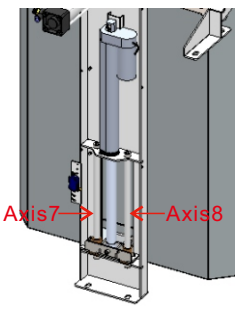
6.3. The first LED light lights up, please put in 10 sample coins (the setting value of H1 is 10). After the investment is completed, the LED light will jump; as shown in Figure 3, when the word (A2) appears. The second LED light lights up, which means the second coin is set, and so on until all currency settings are completed.

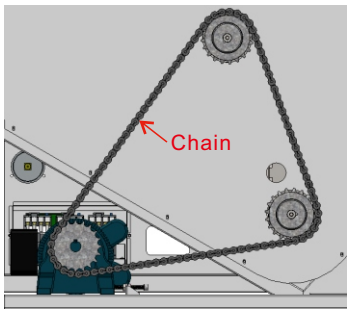
Notice
If the setting is unsuccessful at one time, you can repeat the setting several times; if you only use one kind of coin, just press the SW6 button to "01" in the third step. If you use several coins, please set with the smallest currency value. The denominations from small to large are "01, 02, 03..." and so on!

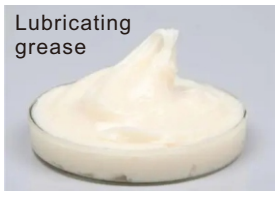
3. Adding lubricant to packaging system:











[1]. Use medium viscosity white bearing special lubricating grease to evenly apply to the surface of the lubricating area.
[2]. Apply lubricating grease to the lubricating areas marked above once a month.

1. Cleaning and replacement of the pure water system filter element:

(there are models equipped with this system)

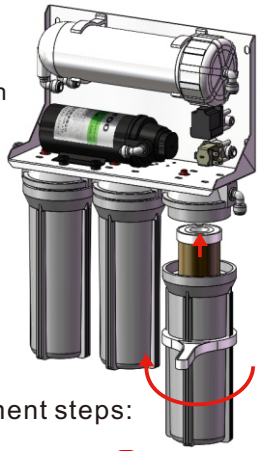
[1]. Filter material/filter element cleaning and replacement table:

If users pay attention to timely replacement of filter elements, they can ensure long-term good water quality. The cycle of replacing filter elements depends on the quality of the water source and the mineral content, or based on the water quality test results. The data in the table below are for reference only (based on municipal Tap water shall prevail).

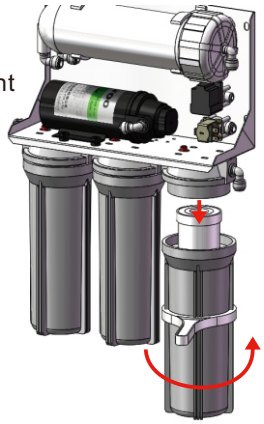
Filter material	Cleaning cycle	Change cycle	Filter material	Cleaning cycle	Change cycle
PP filter	15 days	15~30 days	UDF carbon filter		30~60 days
CTO carbon filter	15 days	30~60 days	RO membrane		180~360 days

[2]. Filter element replacement steps:

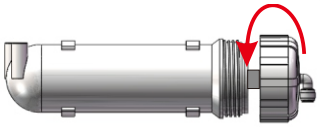
a. Use the filter cartridge wrench to unscrew the filter cartridge counterclockwise, take out the waste filter element, and clean the filter cartridge.



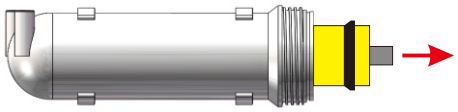
b. Put the new filter element into the filter cartridge and tighten it vertically. The replacement steps for the other two stages are the same.



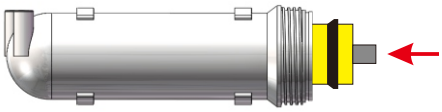
[3].RO membrane replacement steps:



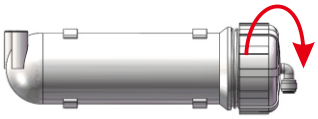
a. Turn the membrane housing end cover counterclockwise.



b. Pull out the old RO membrane



c. Insert new RO membrane



d. Tighten the membrane housing end cover clockwise

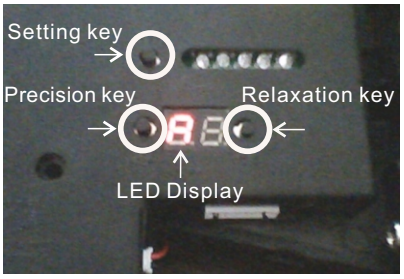
Notice

1. One end of the RO membrane apron faces the end cover.
2. When installing a new RO membrane, food-grade lubricating oil needs to be applied to the RO membrane sealing ring.

Warning

1. Replace the membrane with the same model.
2. Pay attention to the direction of water inlet when installing the membrane. Installing in the opposite direction will cause the RO membrane to fail to work properly or be damaged.
3. Check whether there is any leakage during work after replacement.
4. Test the water quality.

2. Coin dispenser setting steps:



[1]. Function keys, as shown on the right:

[2]. Function code:

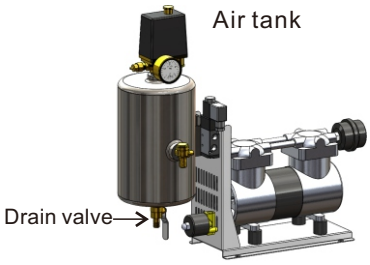
E: Represents the usage value of several currencies (1 to 5)

H: represents the sampling quantity value of a single currency (1 to 20)

P: represents the number of currency value pulse signal outputs (1 to 50)

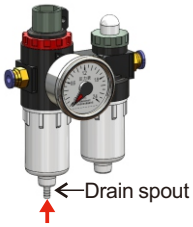
F: represents currency sampling accuracy (the smaller the value from 1 to 30, the higher the accuracy)Setting key: Confirm key Precision key: Numeric value "+" Relaxation key: Numeric value "-"

4. Drainage of gas tank, water filter and oil filter:



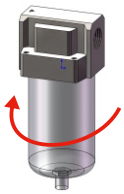
Open the drain valve to drain water once a month.

Air intake water filter



Lift the drain spout upward to drain the water, do this once a month.

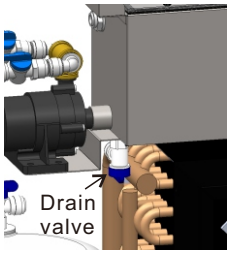
Suction bag water filter



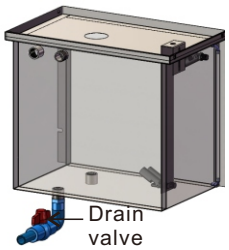
Once a month, unscrew the filter bottle and pour it out.

5. Refrigerator cleaning and disinfection steps:

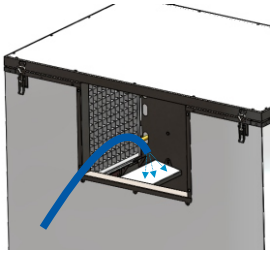
180/320/450KG type



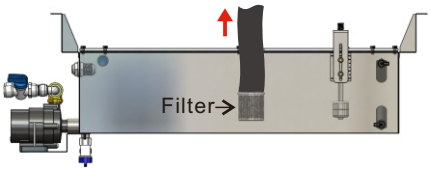
900KG type



a. Remove the back panel of the machine and open the drainage valve of the circulating water tank.



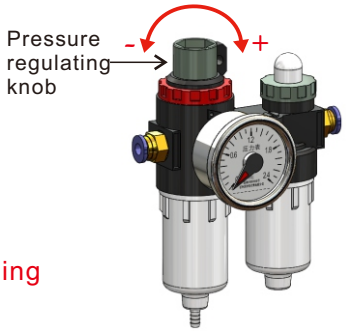
b. Open the observation window of the refrigerator, rinse it with disinfectant, then rinse it with clean water, close the drain valve, and clean and disinfect it every 6 months.



c. Take out the filter in the water tank and clean it.

6. Packaging system inlet pressure adjustment:

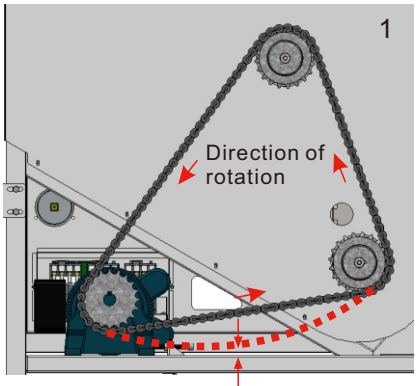
The working pressure range of the packaging system cylinder is 0.6~0.8MPa. If the air inlet pressure is too high, adjust it through the pressure regulating knob of the air inlet water filter. Turn it clockwise to increase the pressure, and vice versa to decrease the pressure.

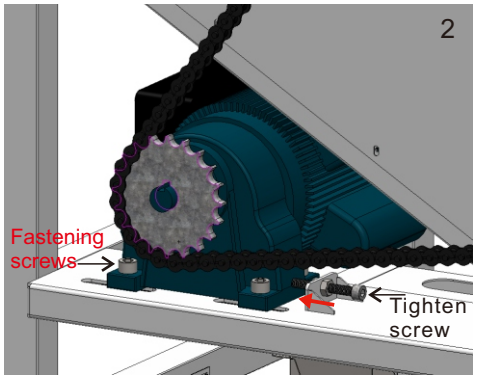


Notice When the air inlet pressure is lower than 0.4MPa, the packaging system is forced to stop protection.

7. Tightness adjustment of the ice discharging and ice churning transmission chain:

[1]. After the machine has been working for a period of time, the transmission chain will stretch appropriately, as shown in Figure 1. When the bottom chain sag to this distance, it needs to be tightened.

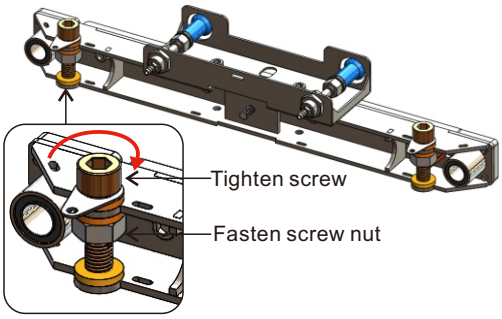




[2]. As shown in Figure 2, when adjusting, first loosen the motor fastening screws until the motor can move left and right; adjust the tightening screw forward until the chain reaches a moderate degree of tension, and then tighten the motor fastening screws.

Notice To test the chain tension, it is better to press the bottom chain and it can move up and down about 1cm. Too loose or too tight will reduce the transmission stability.

8. Bag sealing heating adjustment/replacement steps:

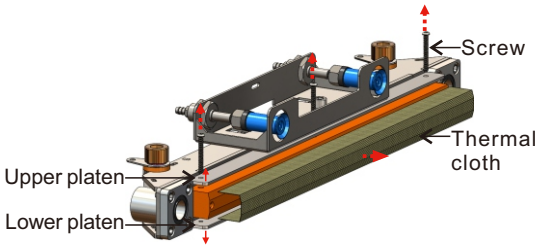


[1]. Heating wire tension adjustment:

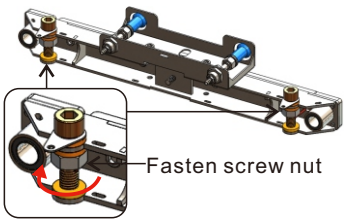
1.1. When the bag is unevenly sealed or partially sealed, the heating wire needs to be tightened and adjusted.

1.2. When adjusting, first loosen the locking nut, and then twist the tightening screw clockwise until the heating wire is straightened and tightened. After tightening the locking nut, remove the tightening screw wrench.

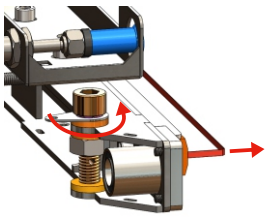
[2]. Replacement steps of heating wire and thermal cloth:



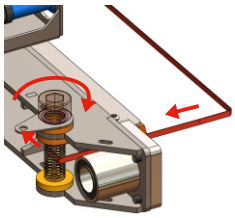
a. Twist out the pressure plate screw and take out the thermal cloth



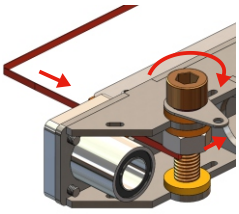
b. Loosen the locking nuts at both ends



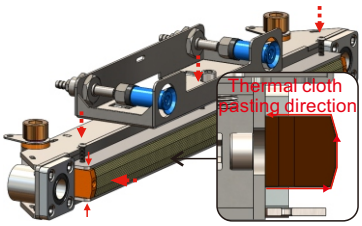
c. Rotate the heating wire tightening screw counterclockwise and pull out the old heating wire simultaneously. Do the same at both ends.



d. Insert one end of the new heating wire, insert the heating wire head into the tightening screw hole at a right angle, turn the tightening screw clockwise about 3 turns and tighten the locking nut.



e. Insert the other end of the heating wire through the same steps, turn the tightening screw clockwise until the heating wire is straightened and tightened, and then tighten the locking nut.



f. Paste the new thermal conductive cloth, install the upper and lower pressure plates, and tighten the screws.

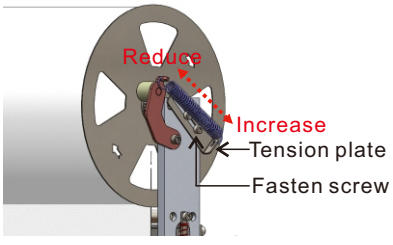
Warning

1. The new heating wire and thermal conductive cloth must be of the same model and specifications as the original configuration.
2. When replacing, ensure that the power input and heating wire are in good contact with the tightening screw.
3. In order to ensure that the bag is well sealed, the heating wire needs to be tightened and adjusted regularly and the surface of the thermal conductive cloth needs to be cleaned.
4. The thermal conductive cloth must be applied flat and without creases.

9. Bag output damping adjustment:

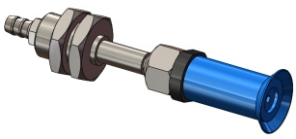
[1]. When the lower bag appears flat, it means that the damping of the rolled bag is too small and needs to be adjusted.

[2]. When adjusting, first loosen the fastening screw, pull the tension plate backward, and after reaching the appropriate damping, tighten the fastening screw, and vice versa to reduce the damping.



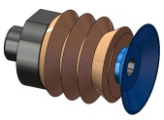
10. Nozzle selection:

Type: BK18-M5



Type A is suitable for 0.08mm thick plastic bags

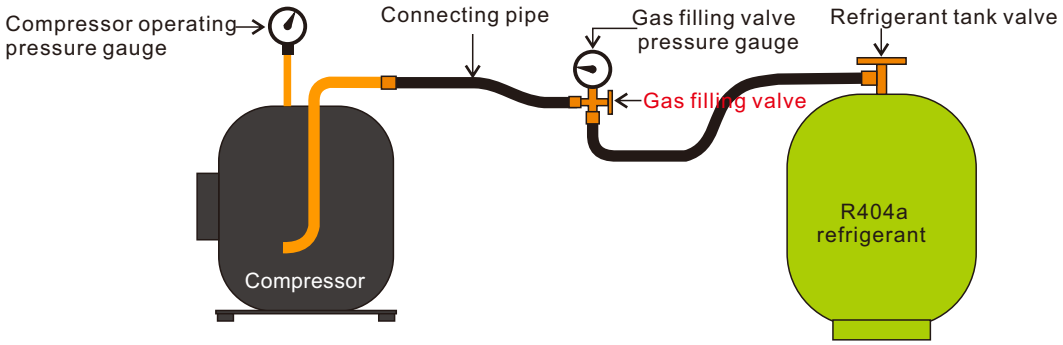
Type: BG25S-B3S1-18M



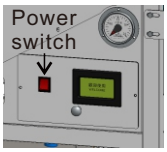
Type B is suitable for 0.06mm thick plastic bags

10. Refrigerant addition steps:

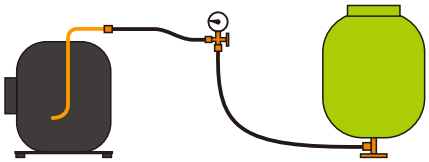
[1]. Connection diagram:



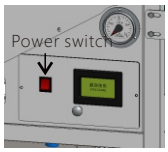
[2]. When the refrigeration efficiency is low, it means that the compressor refrigerant is insufficient and needs to be replenished. The steps are as follows:



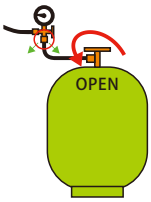
a. Turn off the ice making power switch



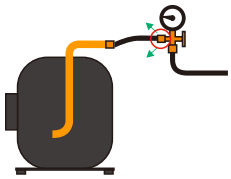
b. Use professional refrigerant pipes to connect them to ensure there is no leakage. When adding refrigerant, put the refrigerant tank upside down.



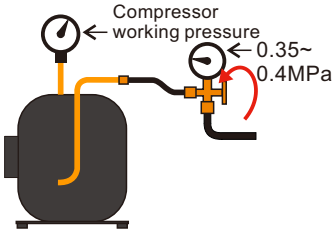
c. Turn on the ice making power switch and keep the compressor in working condition.



d. Loosen the inlet joint of the gas filling valve, open the refrigerant tank valve, exhaust the air in the pipe for 2 to 3 seconds and then tighten the inlet joint.



e. Unscrew the outlet connector of the gas filling valve, exhaust the air for 2 to 3 seconds and then tighten the outlet connector.



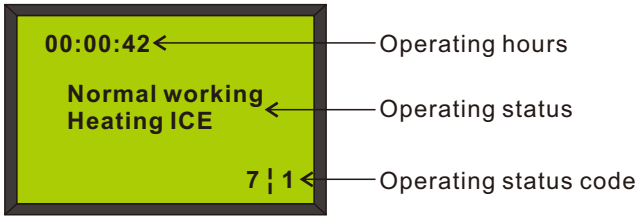
f. Open the gas filling valve until the gas filling pressure reaches 0.35~0.4MPa. Stop when the working pressure of the compressor reaches the working pressure at different ambient temperatures. After the ice is full, check the ice thickness to ensure that it reaches the required thickness.

Warning

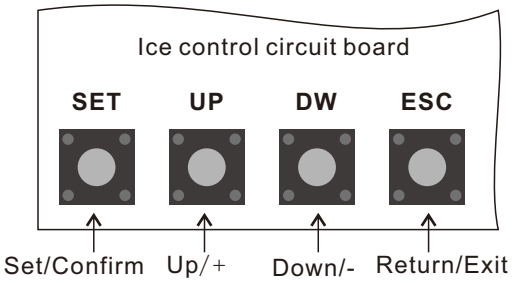
1. When adding refrigerant, refer to the "Compressor Working Pressure and Ambient Temperature Comparison Table" for the compressor working pressure value. Insufficient refrigerant will cause ice making efficiency to decrease, and too much refrigerant will cause the compressor working pressure to be too high. There may even be a high voltage protection shutdown.
2. During normal use, please check the ice making efficiency and heat dissipation regularly.
3. When the ice making efficiency decreases, refrigerant needs to be added or the radiator needs to be cleaned.
4. Adding refrigerant or maintenance requires professional refrigeration technicians.

11.Ice making status:

[1].Ice making status display interface:

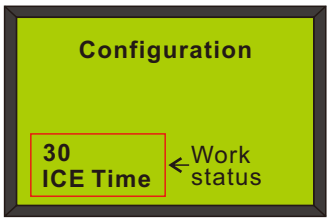


[2].Set function keys:



[3]. Ice making function settings:

3.1. Ice making function display:



30 ICE Time	It means the ice will enter the de-icing state after 30 minutes of ice making.
20 Water Time	It means that the ice-making circulating water tank will enter the water shortage protection state after 20 minutes of water replenishment time.
10 Heating Time	After 10 minutes of de-icing time, the water tank will be replenished.
20 Full Time	Each ice tray will enter a forced ice full shutdown after a difference of 2 minutes in the de-icing time.

3.2. Ice making function settings:

› Ice protection time setting:

SET › UP⇠⇢DW › ICE Time › SET › 20 Min › UP⇠⇢DW › 30 Min › SET › ESC

› Ice making circulating water tank replenishment protection time setting:

SET › UP⇠⇢DW › Water Time › SET › 15 Min › UP⇠⇢DW › 20 Min › SET › ESC

› De-icing protection duration setting:

SET › UP⇠⇢DW › Heating Time › SET › 15 Min › UP⇠⇢DW › 10 Min › SET › ESC

› De-icing time difference protection time setting between ice trays:

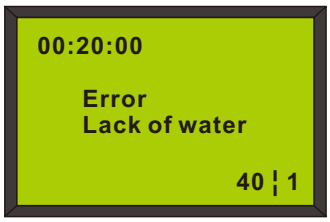
SET › UP⇠⇢DW › Full Time › SET › 15×0.1 Min › UP⇠⇢DW › 20×0.1 Min › SET › ESC

Warning

1. The above parameters have been set before the machine leaves the factory. Do not change them unless necessary.
2. Please contact our company's technical personnel before changing settings.

[4].Fault status display:

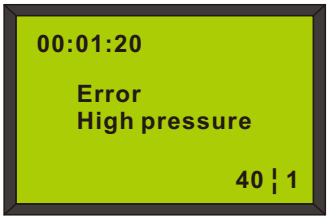
› Water ingress timeout protection tips:



› Status: Prompt that the ice making circulating water tank refill exceeds the set protection time.

› Reasons: a. The tap water is short of water and there is no water to replenish it.
b. The pure water system has no water production and no pure water replenishment.

› Compressor working pressure overpressure protection tips:



› Status: Prompts that the compressor is in overpressure protection shutdown state.

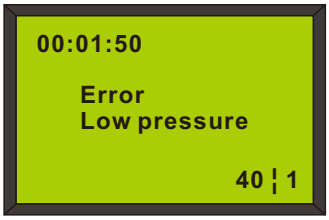
› Status: Prompt for compressor a Cause:

a. Too much refrigerant is added.

b. The cooling fan does not work.

c. The ambient temperature is too high. In the over-pressure protection shutdown state.

› Compressor low pressure protection tips:



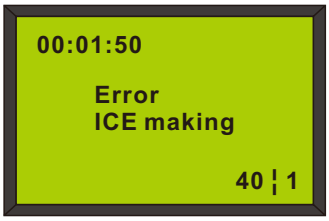
› Status: Prompts that the compressor is in low pressure protection shutdown state.

› Reason: a. No or insufficient refrigerant.

b. The ice supply water pump does not work.

c. There is no water on the ice tray.

› Compressor low pressure protection tips:



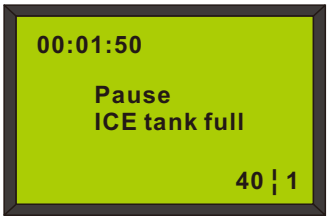
› Status: prompts that the ice tray flap has not been reset, the flap sensor has no induction, and the protection is in shutdown state.

› Reasons: a. The flap is stuck and cannot be reset automatically.

b. The flap sensor is damaged and cannot sense.

c. After the flap is reset, the distance between the sensing surface and the sensor is too far (within 3mm of sensing distance).

› The refrigerator is not full of ice, but it shows the ice full status:



› Status: prompts that the ice tray flap has not been reset, the flap sensor has no induction, and the protection is in shutdown state.

› Reasons: a. The flap is stuck and cannot be reset automatically.

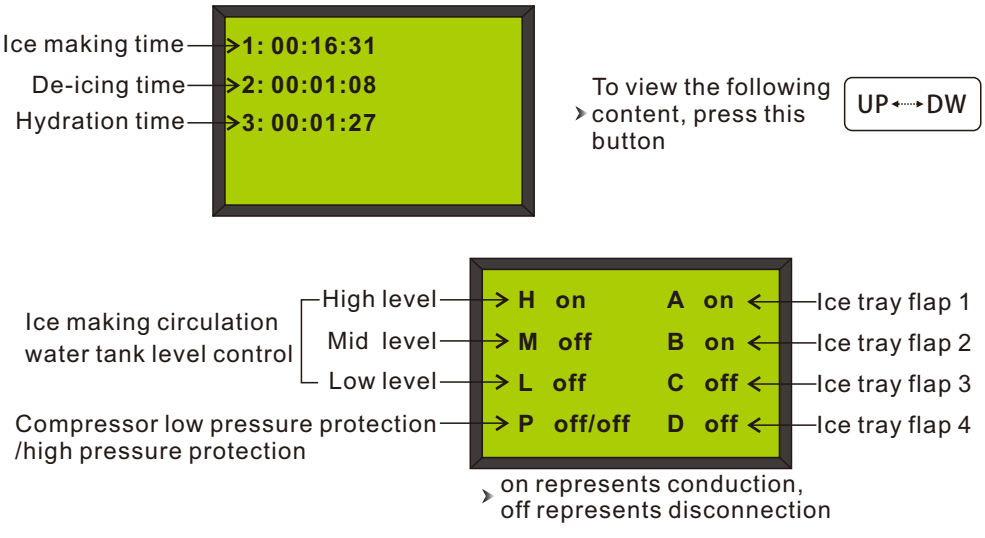
b. The flap sensor is damaged and cannot sense.

c. After the flap is reset, the distance between the sensing surface and the sensor is too far (within 3mm of sensing distance).

Warning

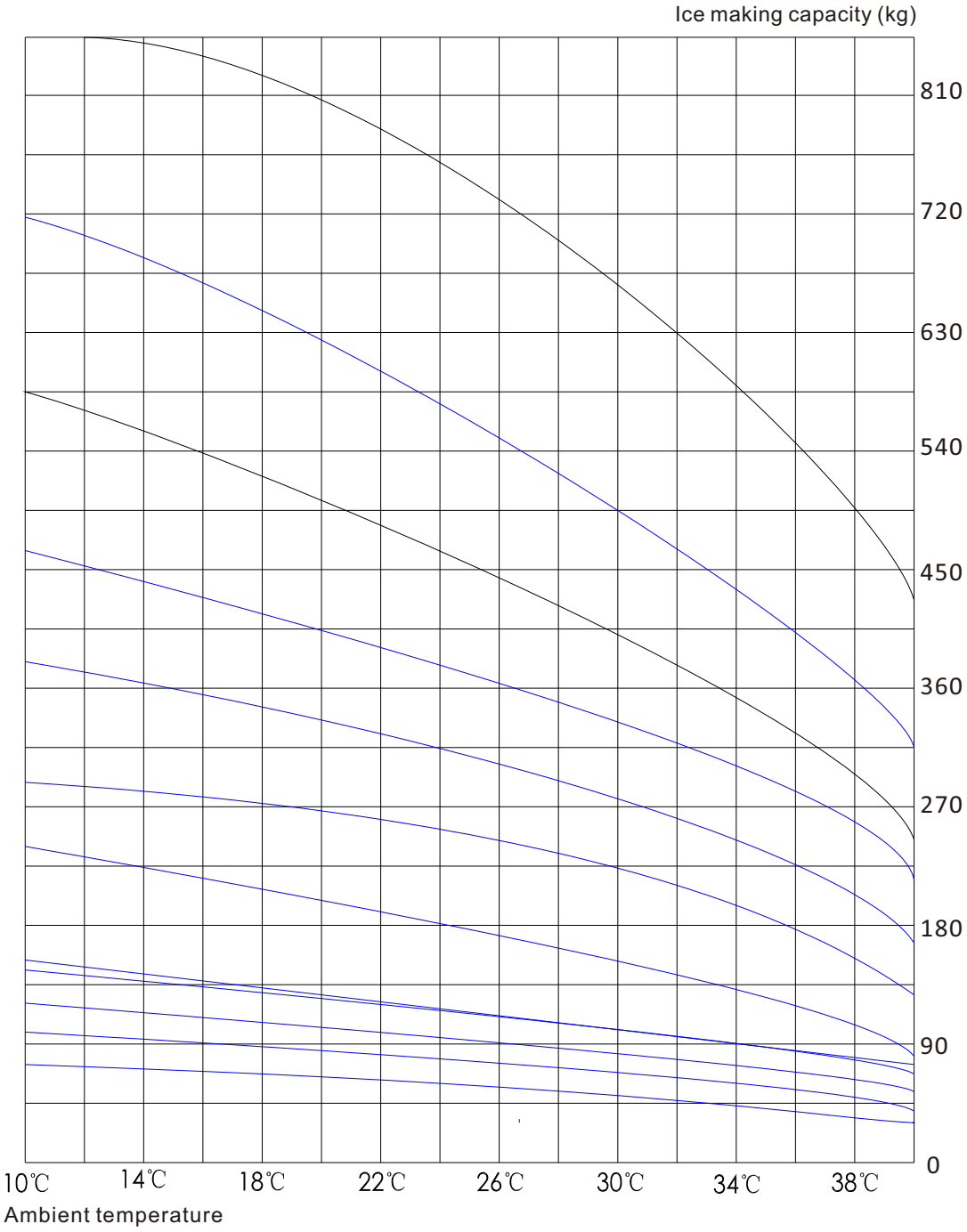
1. If the above conditions result in the inability to work, it is strictly prohibited to force the work to start.
2. Solve the problem according to the cause of the fault. If it cannot be solved, please contact our company's technical personnel.

[5].Last status query:



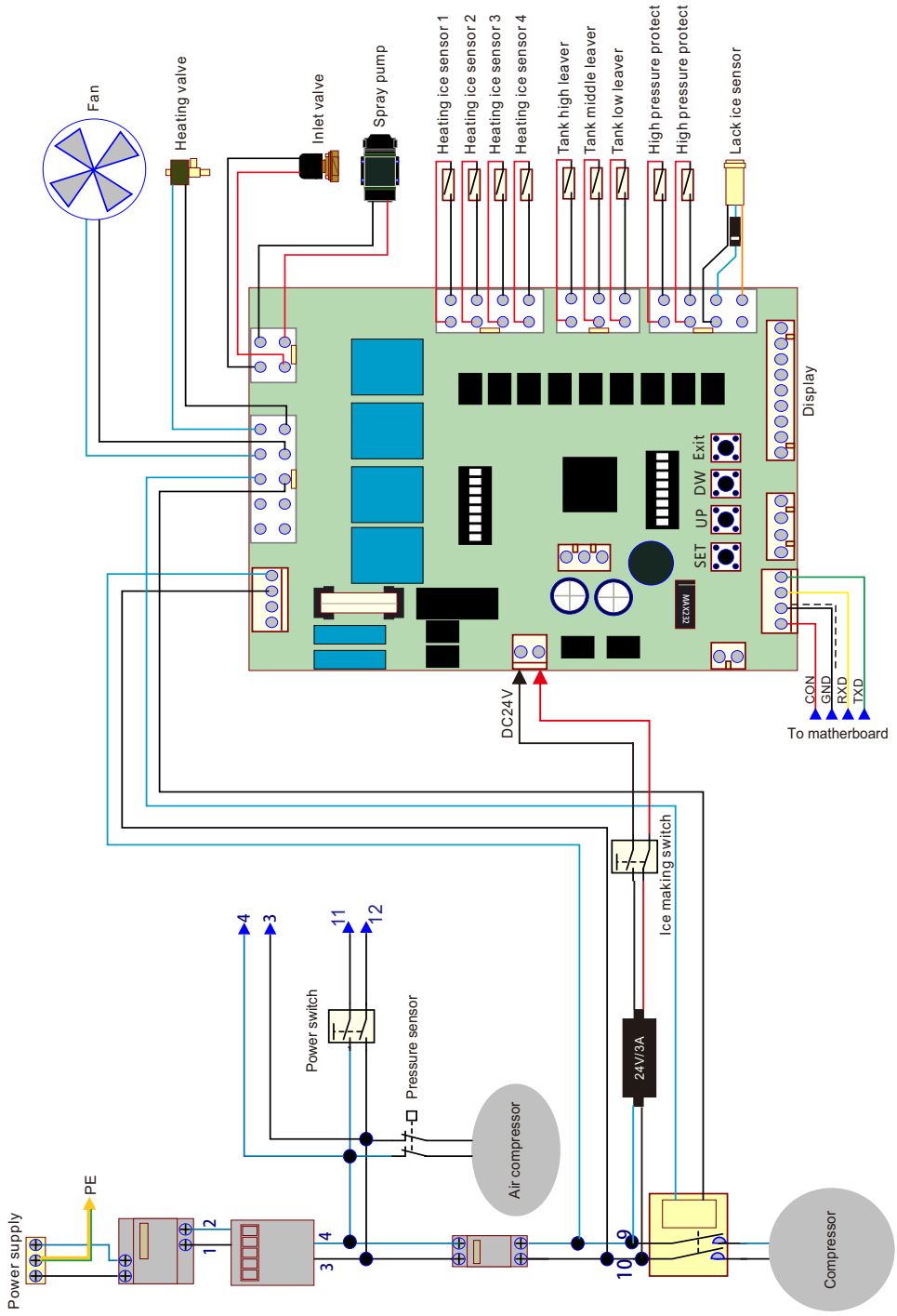
12. Ice making efficiency and ambient temperature comparison curve:

This graph only represents the air-cooled model and is for reference only.

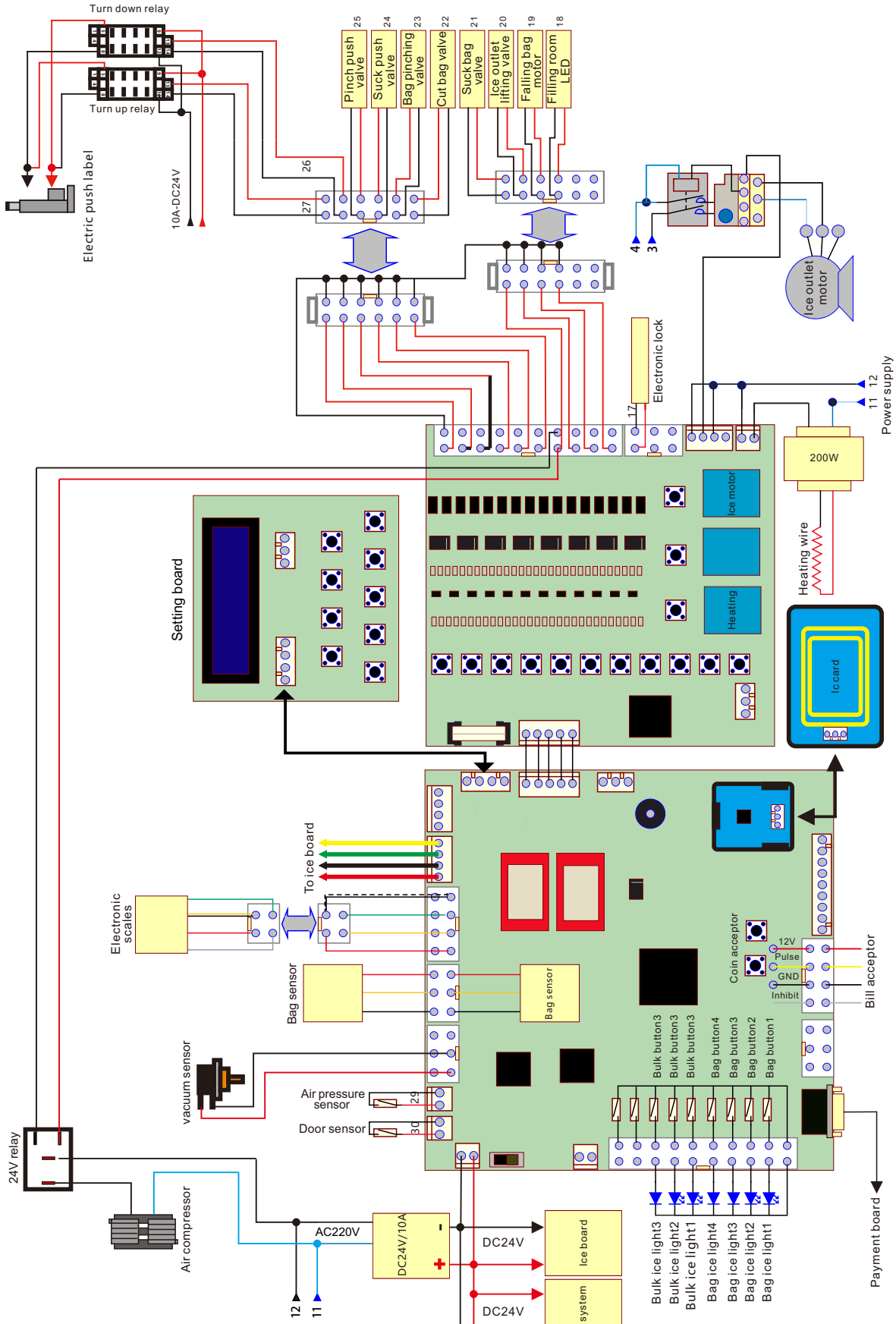


13.Circuit wiring diagram:

[1].180/320/450KG ice making part wiring diagram:

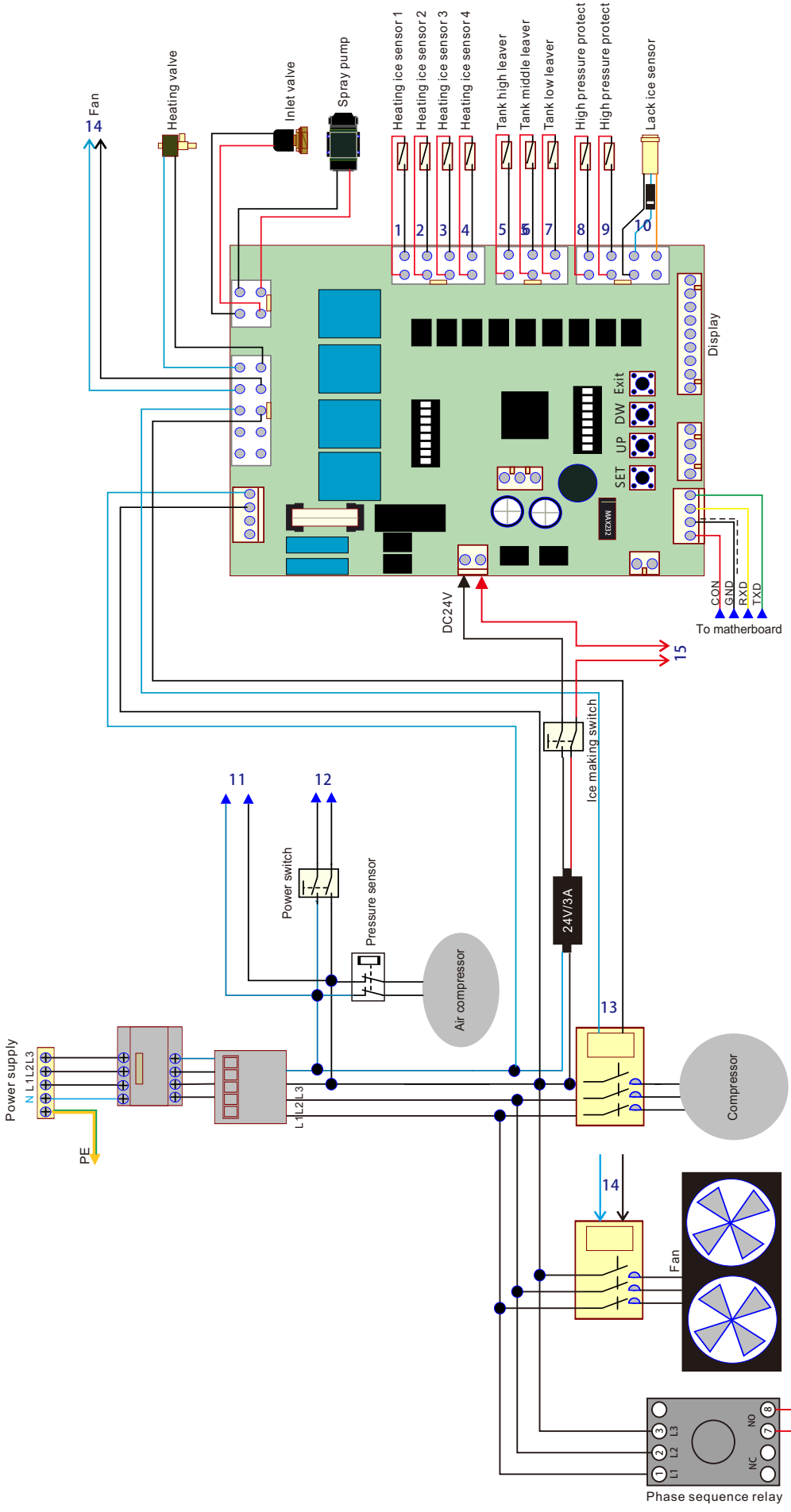


[2].180/320/450KG type sales/packaging wiring diagram:

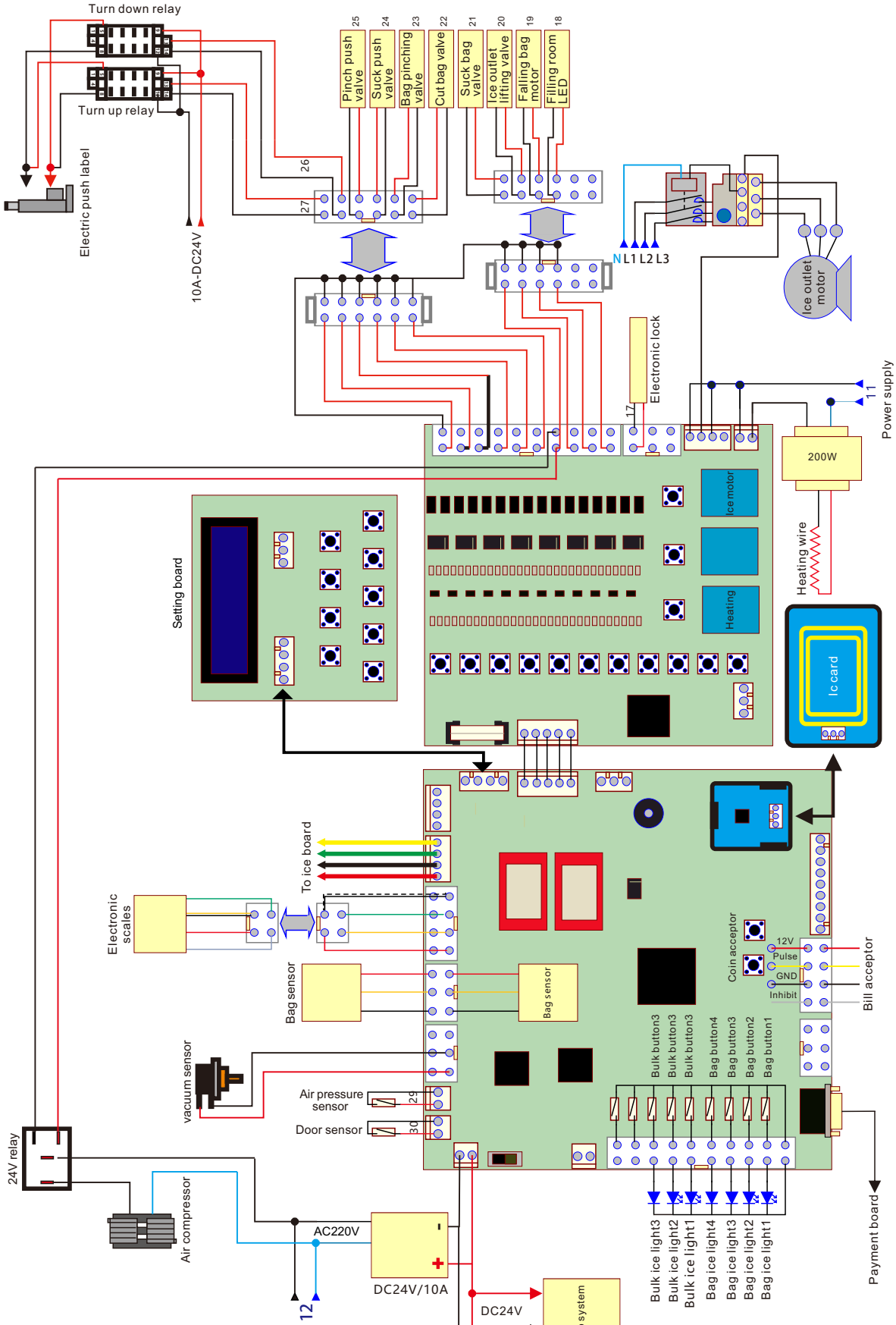


Warning This picture is a conventional product wiring diagram. Customized products must be provided separately!

[3].900KG ice making part wiring diagram:



[4].900KG type sales/packaging wiring diagram:



Warning

This picture is a conventional product wiring diagram. Customized products must be provided separately!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