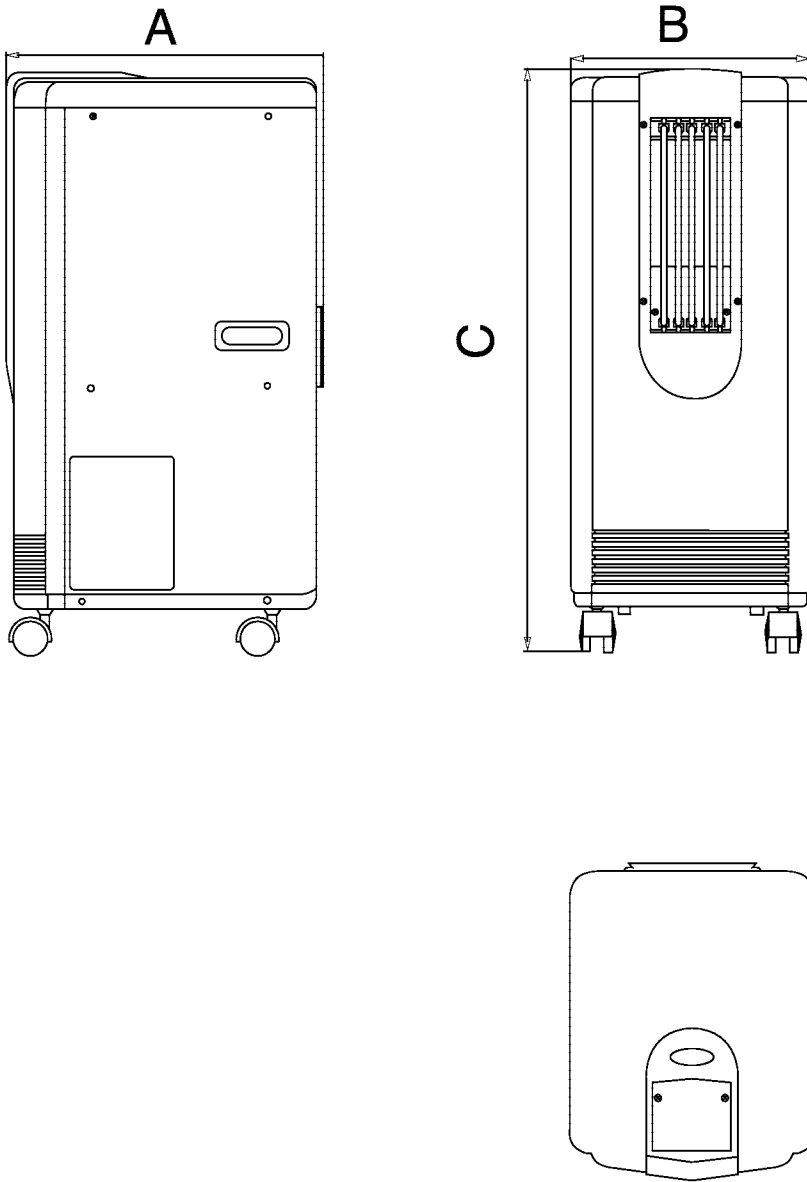


Net dimension



Width	Height	Length
A :420	B :330	C :800

Installation and Accessory parts

In order to make the air conditioner to work effectively, first need to calculate the cooling capacity of the air conditioner, according to the room size and surroundings. After selecting a proper one and putting it in a suitable work place, please confirm the place to install the air conditioner referring to the following instruction:

1. Better install the outdoor unit in the outdoors to make an easy heat exchange. The ideal place: out of window, balcony, corridor and so on. To make the outdoor have an easy heat exchange, please leave the distance between the back of outdoor unit and the wall or other things no less than 5CM. (Fig.1)

The specific installation process refers to installation.

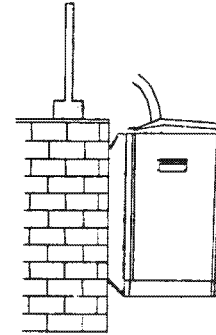


Fig. 1

NOTE:

The bracket to support the outdoor unit should be strong and firm, and endure the pressure of the unit. Regularly check the bracket about its firm condition and rusted degree to avoid accidents.

Only using the connecting pipe to hang the outdoor unit is definitely forbidden.

2. The left side of indoor unit should leave the objects (such as curtain, wall, etc) no less than 20CM. To guarantee smooth ventilation the alien things should not block outlet. (Fig.2)

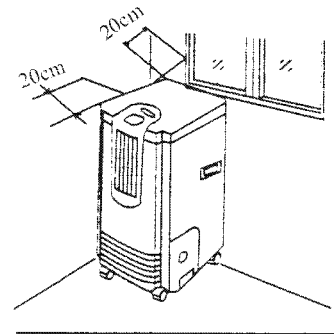


Fig. 2

3. The connecting pipe can cross the chink of the window. When the unit in operation, the window should be closed as tight as possible to avoid the loss of energy. (Fig.3)

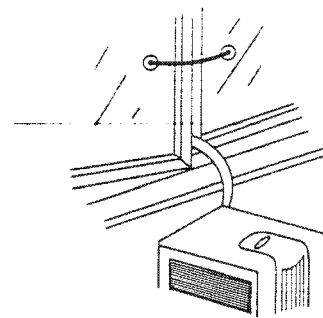


Fig. 3

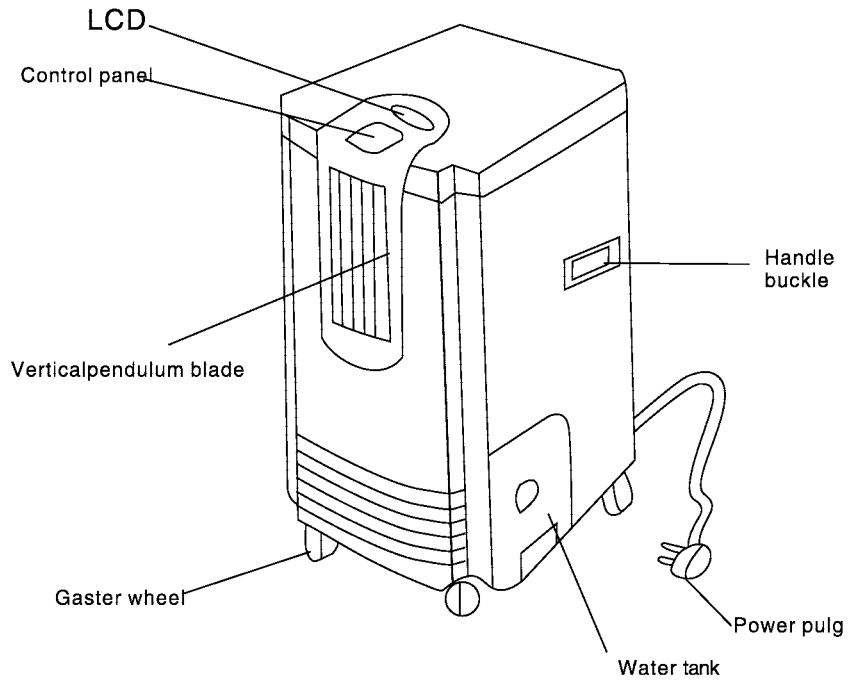
Parts and Functions

HM-05CC03/R1 HM-07CC03/R1 HM-09CC03/R1

Main components and accessories

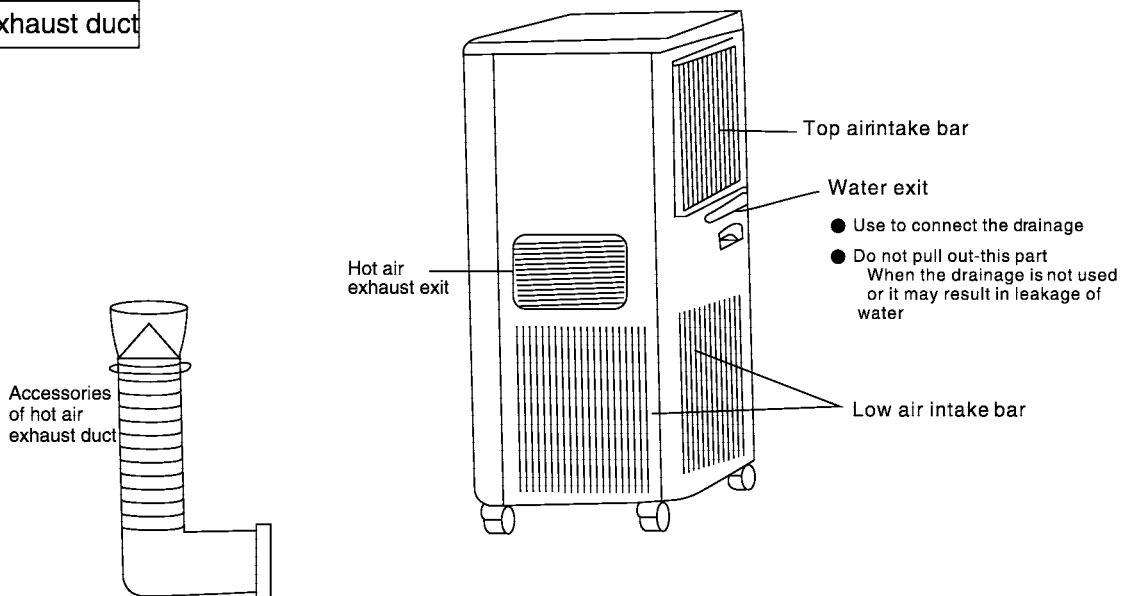
Machine body

Front

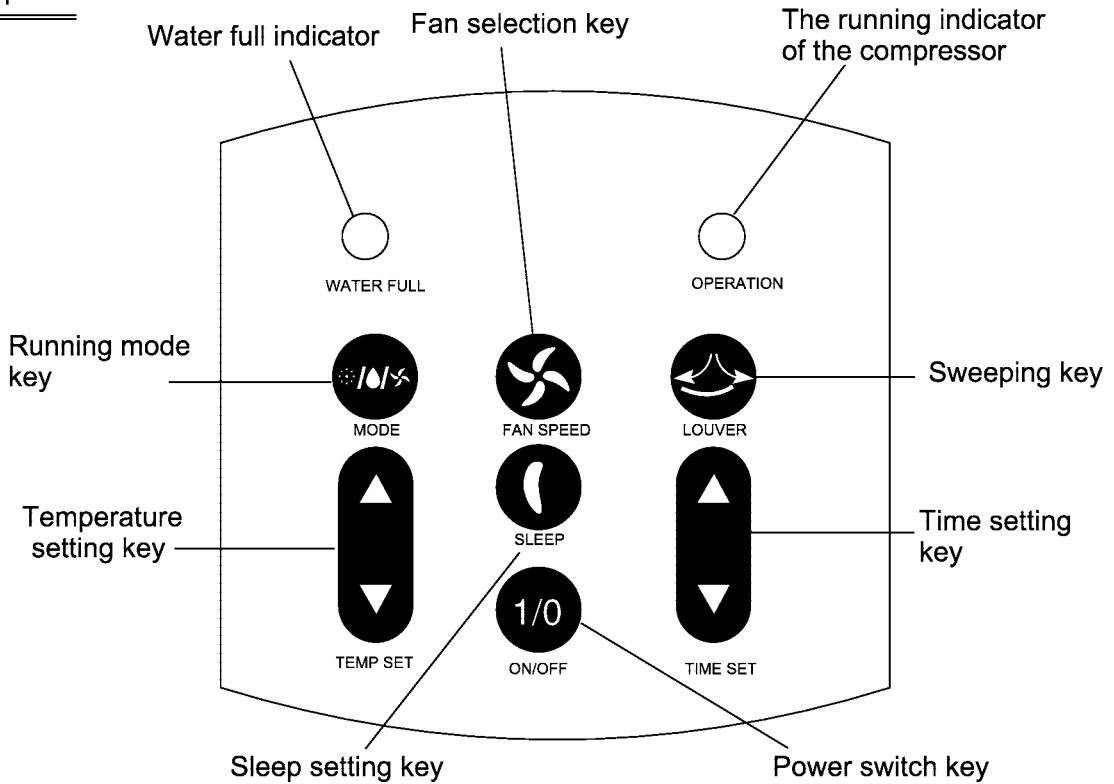


Back

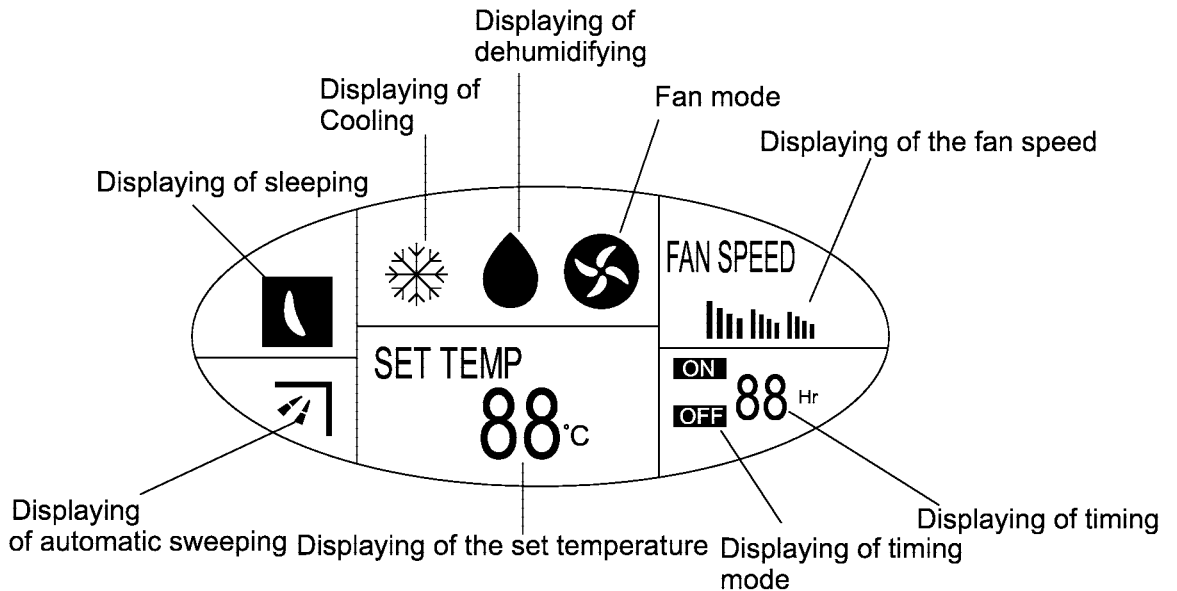
Hot air exhaust duct



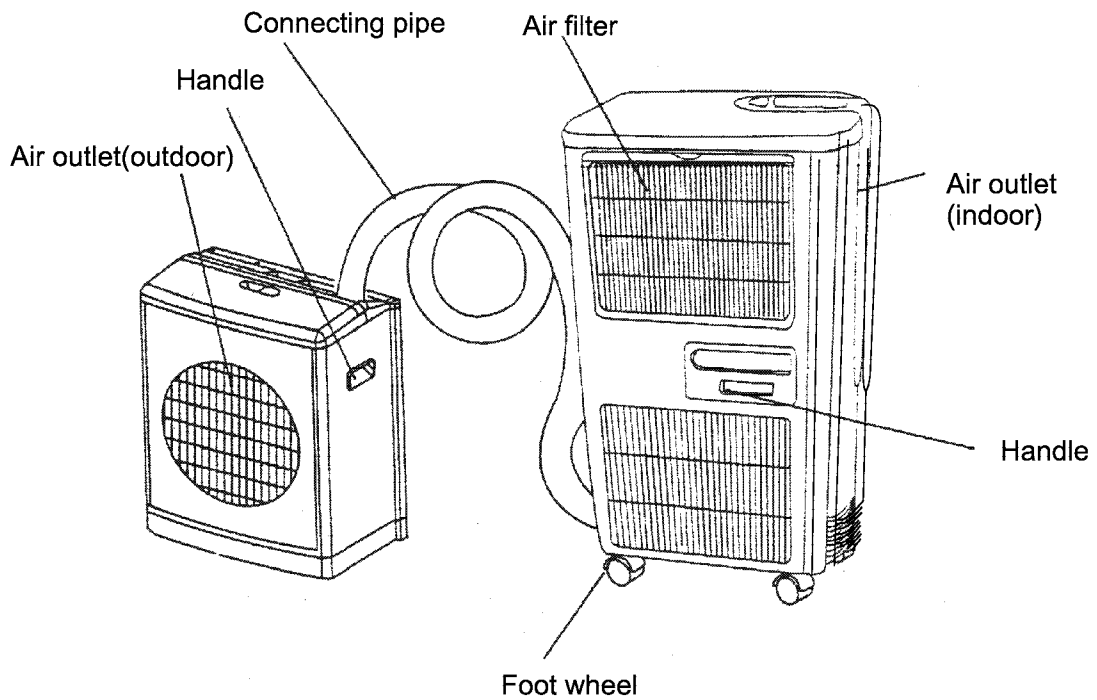
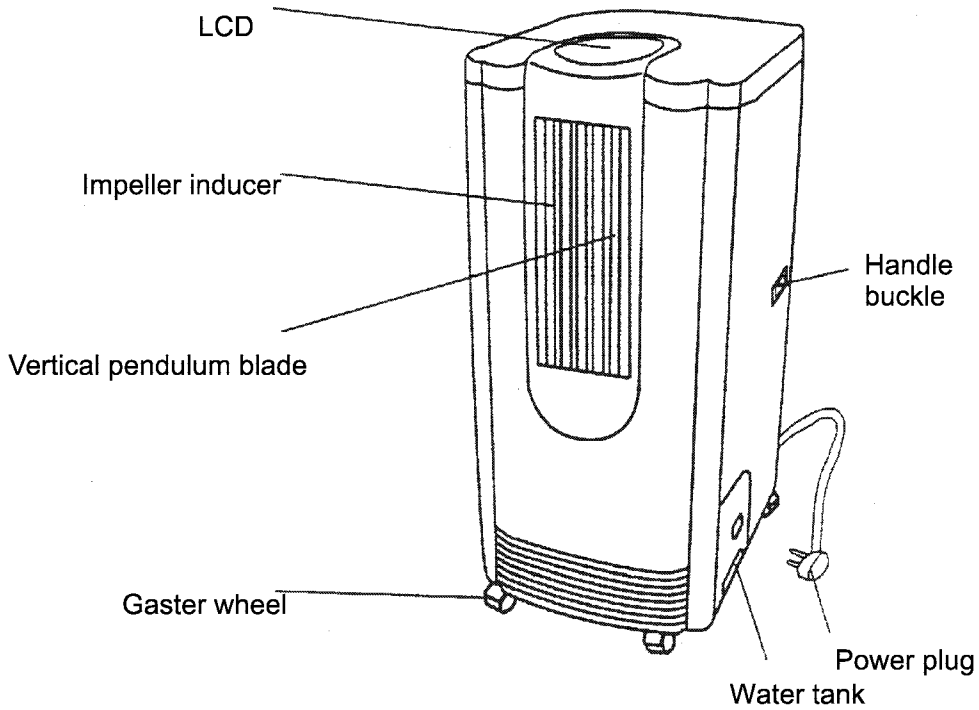
Control panel



LCD window






HM-08CC03/R1






Function schedule


1. Running Mode Key

press the key to choose from three running mode: cooling → dehumidifying → Fan. The LCD window displays correspondingly:  →  → 



2. Fan Selection Key

Press the key to choose from three fan speed: high → middle → low. The LCD window displays correspondingly:  →  → 


3. Sweep key:

Press the key to enable automatic side-to-side sweeping of the indoor air. The LCD window displays ; press the key again to fix the indoor air at present direction.

4. Temperature Setting key

Press the key to set the temperature between 10-30°C. Each press of the  part will increase the temperature for 1°C, each press of the  part will decrease the temperature for 1°C. The temperature will be displayed in the LCD window.



5. Sleep Setting key

Press the key to set or cancel Sleep Mode. When the LCD window displays  the air conditioner is under Sleep Mode. Press again to cancel the Sleep Mode, and the signal will disappear on the LCD window.

6. Power Switch key

Power Switch on/off the power of the air conditioner.

7. Time Setting key:

Press the key to set or cancel the Time Mode, or set time between 1-24/hours. Each press of the  part will add one hour, which will be displayed on the LCD window, each pressing of the  part will reduce one hour, if it shows 1 hour. Press once to cancel the timing.

8. Water Full indicator:

When the water tank is filled with water, the indicator will flash, and alarm with beep. The compressor stops working. The air conditioner enters fan mode. Please take out the water tank. Pour the condensed water, then replace it. The air conditioner runs as per the mode before stopping of the compressor (the compressor can only start after 3 minutes of time-delay protection).

9. The run indicator of the compressor:

In cooling or dehumidifying mode, the indicator will be on in the running of the compressor.

System flow chart

(1) Refrigerant

HM-05CC03/R1 uses freon R407C as its refrigerant, when leaving factory, refrigerant charge is 0.5kg.

HM-07CC03/R1 uses freon R407C as its refrigerant, when leaving factory, refrigerant charge is 0.7kg.

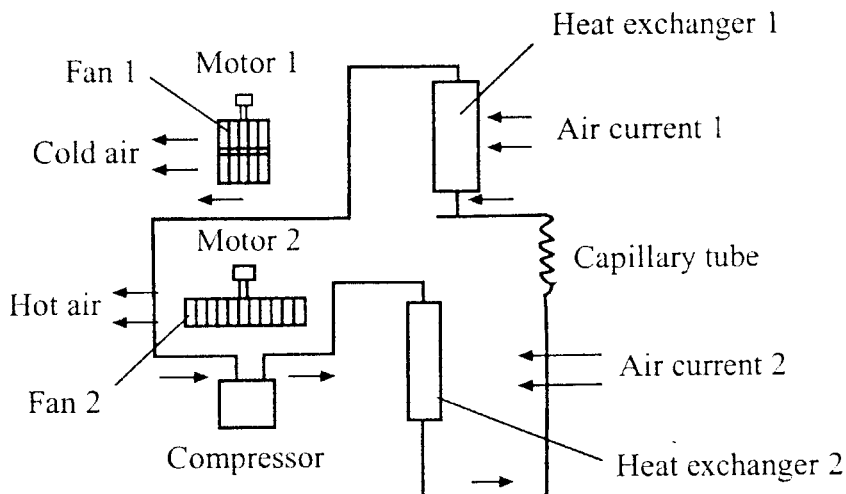
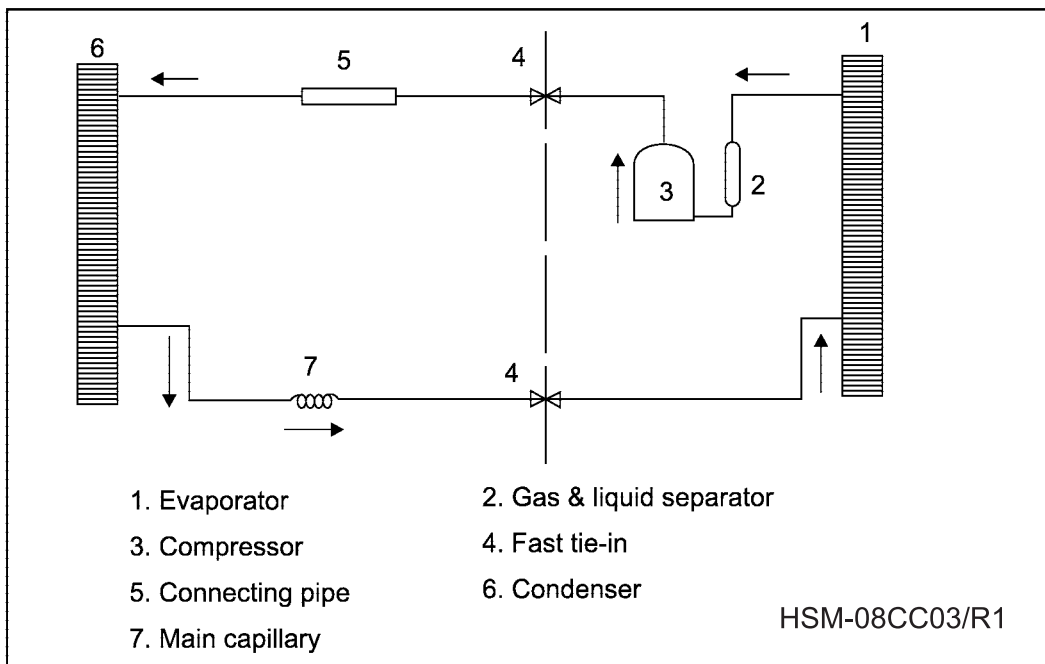
HM-09CC03/R1 uses freon R407C as its refrigerant, when leaving factory, refrigerant charge is 0.73kg.

HSM-08CC03/R1 uses freon R407C as its refrigerant, when leaving factory, refrigerant charge is 0.8kg.

(2) system vacuumize:

After whole set of mobile air conditioner assembling is finished, use vacuum pump to draw out air and water in the indoor unit. System vacuum tolerance will be under 200Pa.

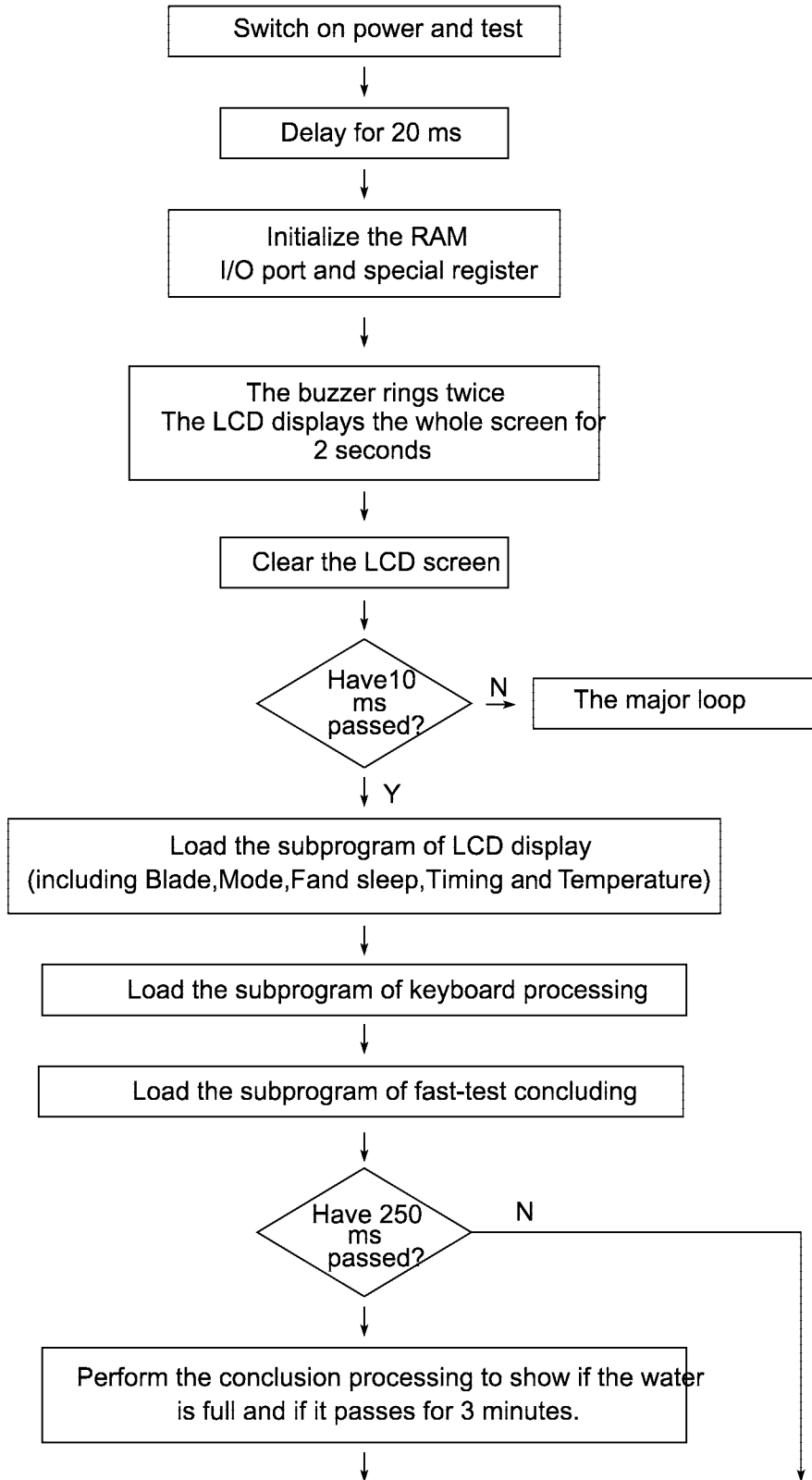
(3) Diagram of pipe system:

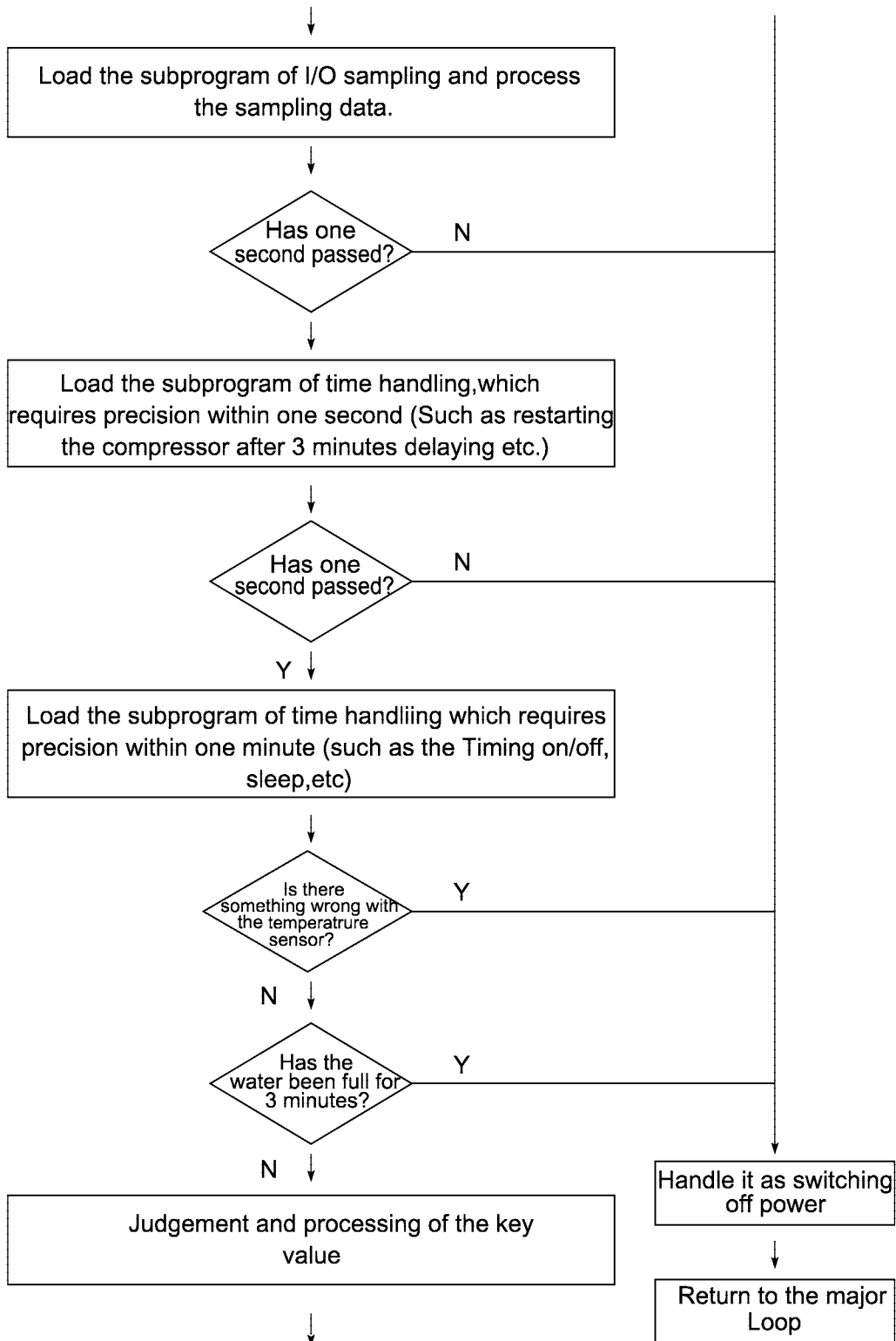


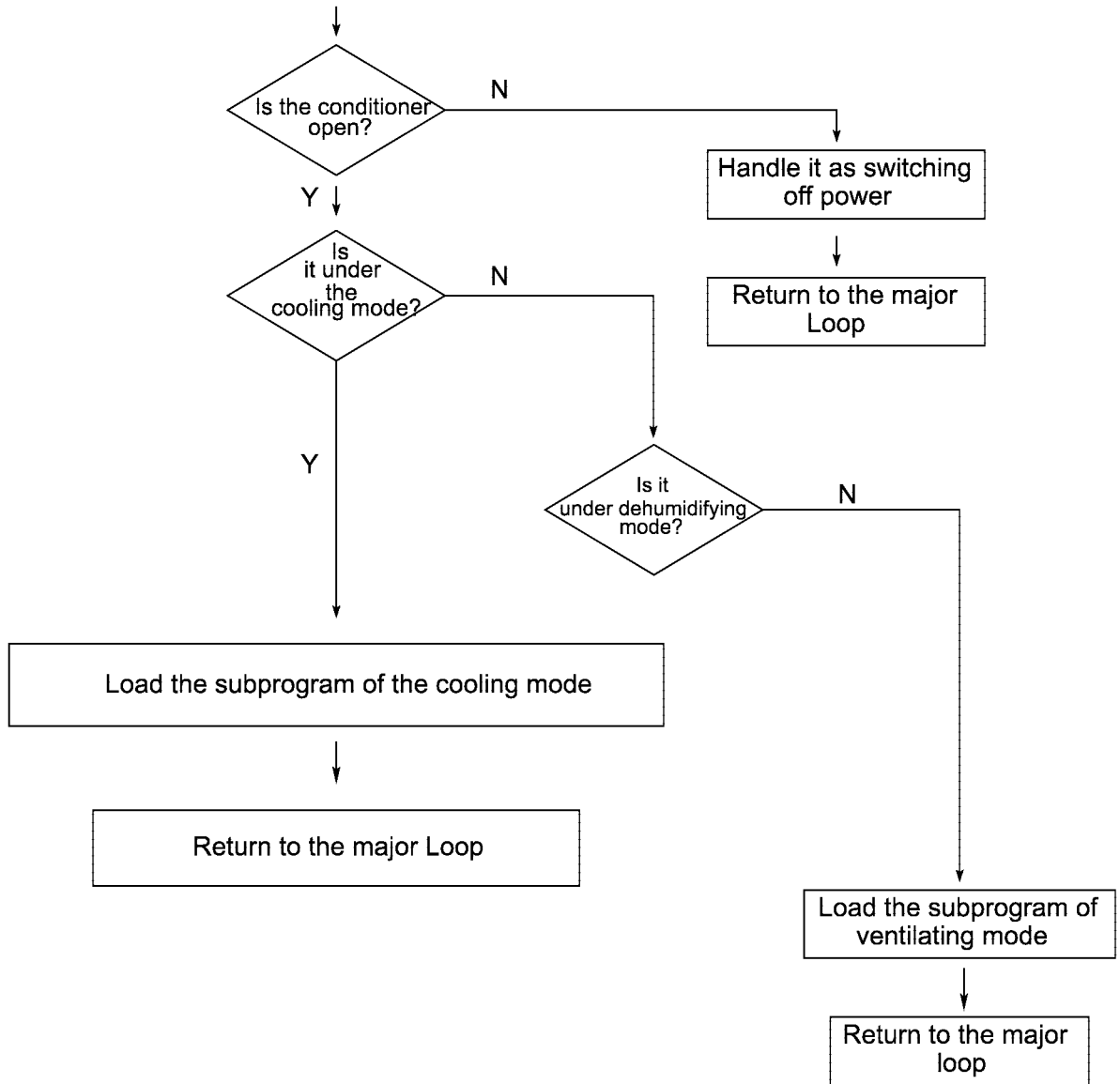
HM-05CC03/R1, HM-07CC03/R1, HM-09CC03/R1

Program diagramme

Flow chart for operation







Maintenance service and Trouble shooting

9.1.Maintenance manual

1) Functional instruction

1.Run mode:cooling → dehumidifying → air flowing

2.Fan adjusting:HI → MID →LO

3.Timing:Timing on 1-24 h

Timing off 1-24 h

4.The set temperature range:15℃ -30℃

5.Swing automatic swing or fix at a point

6.Sleep:8 hours

2)Instruction of the run mode:

1Cooling mode:

(1)The inner initialized set temperature is 24℃ and the initialized fan is HI.

(2)The fan speed is adjustable, in turn of HI → MID → LO

(3)Adjusting of the temperature:

Each pressing of the“△”key will increase the set temperature for 1℃ till

it reaches30℃ , Each pressing of the“▽”key will decrease the set temperature for1℃,till it reaches 15℃

(4)Adjusting of the air direction:

Under the mode of inner fan running, the air direction can be adjusted by the synchro motor to control the starting and closing of the motor

2.Dehumidifying mode:

(1)The fan speed is not adjustable

In case of the ambient temperature>15℃,the fan speed is LO.and compressor is open;

In case of 12℃ ≤ambient temperature ≤15℃,the fan speed is MID,the compressor is open;

In case of ambient temperature ≤12℃ ,the fan speed is Lo,and the compressor and nter fan are hot open,only the inner fan sends air;

(2)The air direction is adjustable.

(3)The set temperature is not adjustable.

3. Air supply mode:

(1) The compressor and outer fan are close and only the inner fan is open,The fan speed can be adjusted in turn of HI →MID → LO.

(2) The set temperature is not adjustable.

4. Protection function

(1) Water full protection

Under any mode, when the water full protection is detected to be activated,the buzzer will beep several times consecutively,and the water full alarm lamp will flash on and off with a 0.5 second frequency.The compressor and outer fan will stop running It will enter air supply mode The inner fanwill run at the former speed.If the water full protection is released in 3 minutes,the controller will run under previous set mode and the water full alarm lamp will be off.If it is not released in 3 minutes, the inner fan will stop running either and whole machine is under stand-by mode,.But the water full alarm lamp will keep on flashing till it is released.

2.Protection against freezing

When the coiled pipe temperature sensor detects that the surface temperature of the evaporator $T \leq -2^{\circ}\text{C}$,the compressor and the fan will stop running,the inner fan will run at HI speed and the Fan key will be impotent.When the detected temperature $> -8^{\circ}\text{C}$ and the stop time of the compressor is longer than 3 minutes, the compressor and the onter fan will be started and the inner fan runs at set fan speed.

3. Protection of the compressor

The compressor must be restarted after 3 minutes from the former stop, except for the power failure.

5) Sleep protection

1. the function is only activated under cooling mode, and important under other modes.

2. After one hour running under cooling sleep, the set temperature will rise for 1°C, and rise for another 1°C after one another hour, after another 6 hours of running the complete machine will be shut down.

3. In case that Sleep and Timing Off are set at the same time, the first important not will be activated.

4. In Sleep mode the Timing On will be important.

6) Timing function

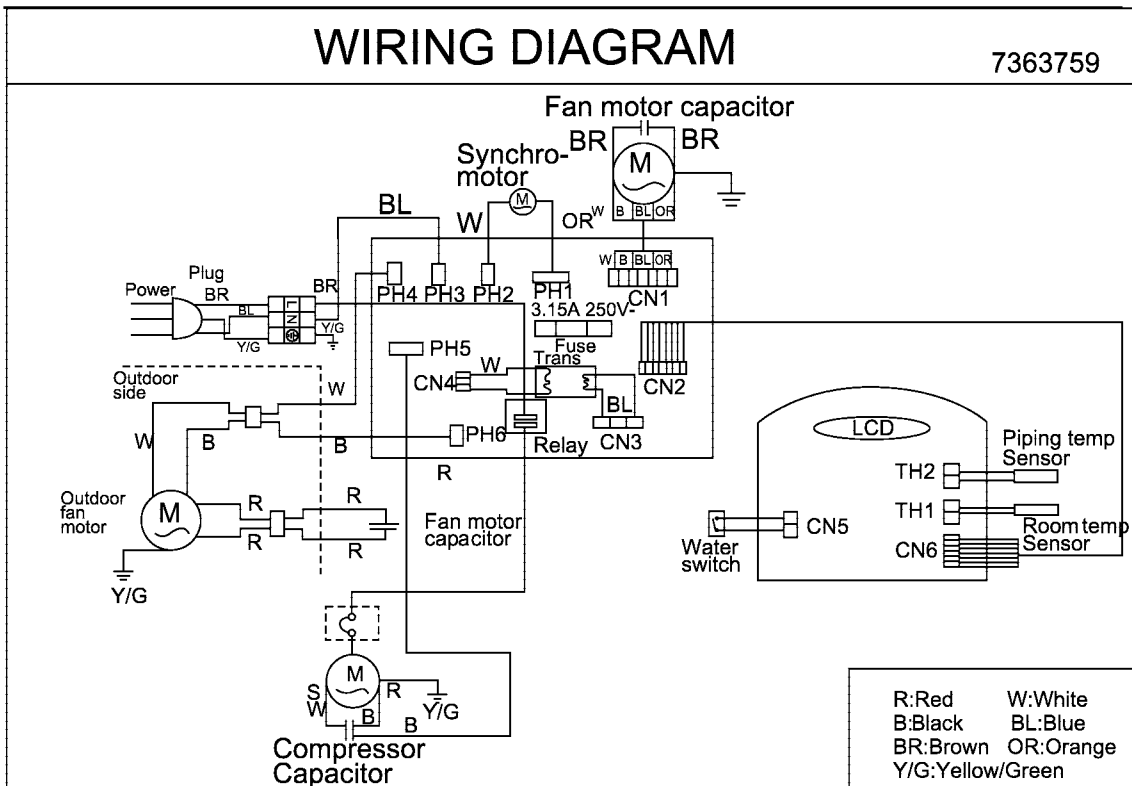
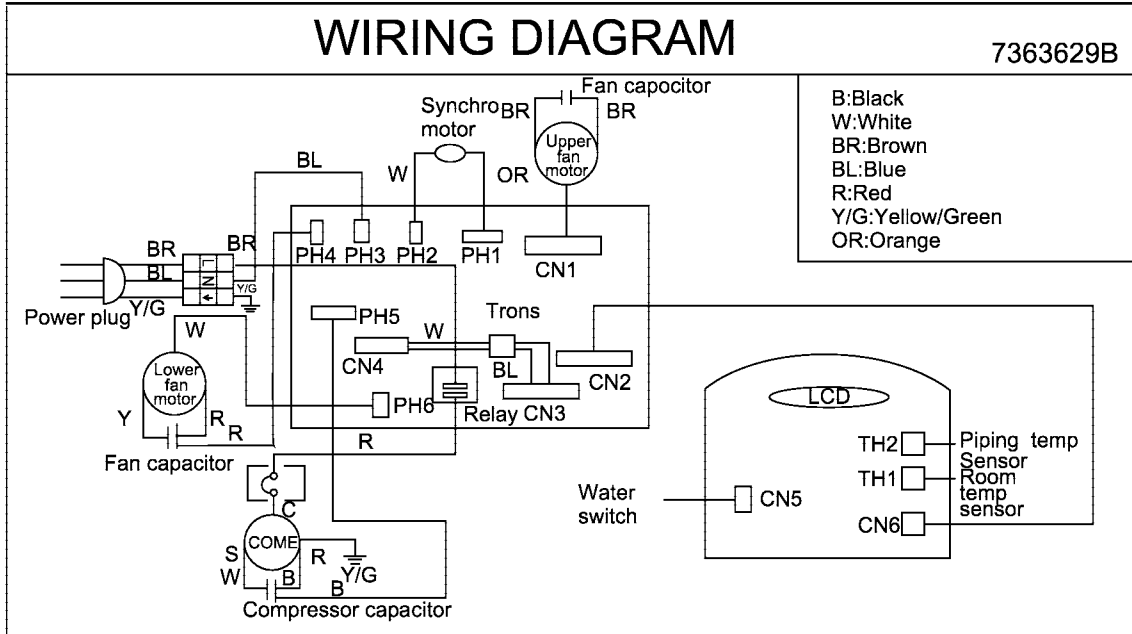
1. The timing Off can be set when the machine is running; the Timing On can be set when the machine is shut down.

2. The timing range is 1-24h;

Each pressing of the “ \triangle ” key will raise the set time for 1h; each pressing of the “ ∇ ” key will reduce the set time for 1h. When it is added to 24h the “ \triangle ” key or “ ∇ ” key will cancel the timing.

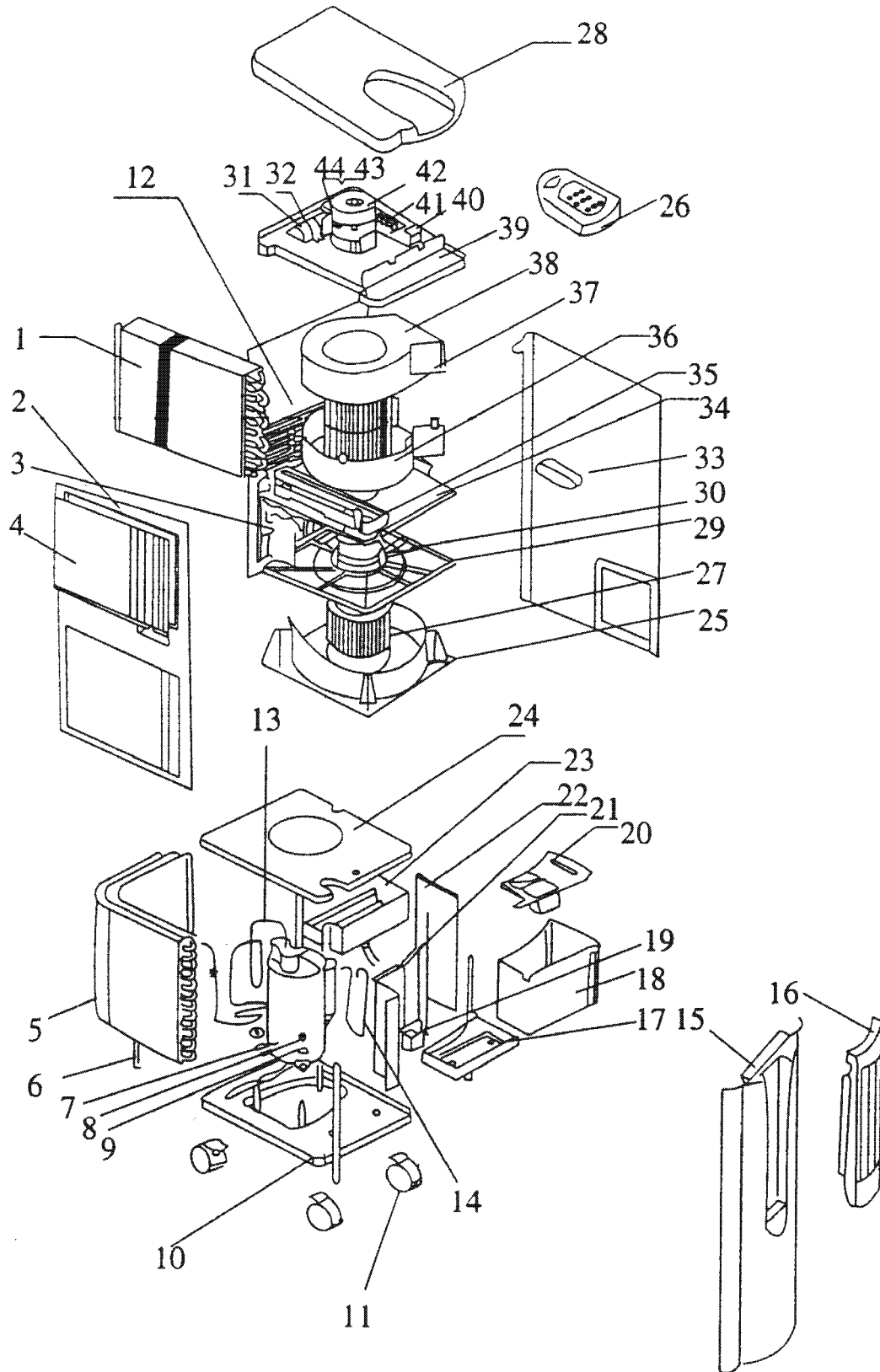
No.	Phenomenon	Reason	Remedy
1	The complete machine does not start without any reflection after the power is switched on	<input type="checkbox"/> No power supply or abnormal power supply <input type="checkbox"/> The fuse is broken <input type="checkbox"/> The corrugated copper plate is burnt <input type="checkbox"/> The L end and compressor end of the compressor relay are mixed up <input type="checkbox"/> The plug between the high electropite and the weak electropite, or between the transformer and transformer and the circuit board is loose.	<ul style="list-style-type: none"> ● Check if the power line and plugs are well ● Replace the fuse ● Check out the reason of burning, and welding the copper plate after debugging ● Change the terminals ● Insert the plug firmly
2	The LCD displays, but the complete machine can not start.	<input type="checkbox"/> The indoor temperature sensor pack is with open circuit <input type="checkbox"/> The water tank is full or the water level seitch is with short circuit	<ul style="list-style-type: none"> ● Check the circuit of the temperature sensor pack ● Discharge the water or check the circuit of the water level switch.
3	The refrigerating works with bad effect	<input type="checkbox"/> The refrigerating medium is leaking. <input type="checkbox"/> The refrigerating system is blocked. <input type="checkbox"/> The compressor is broken down. <input type="checkbox"/> The air circulation is bad <input type="checkbox"/> The fan setting is not reasonable.	<ul style="list-style-type: none"> ● Detect the leakage and fill the refrigerating medium. ● Clean the pipeline system. and fill again. ● Replace the compressor. ● Clean the filter screen. ● Set reasonable fan speed.
4	The noise is large.	<input type="checkbox"/> The components are loosen. <input type="checkbox"/> The fan is off-center. <input type="checkbox"/> The compressor is broken down.	<ul style="list-style-type: none"> ● Find out the loosen part and fasten it ● Replace the fan ● Replace the compressor.
5	Th machine does not stop after the water is full	The water level switch is with open circuit.	Check and repair the water level switch circuit.
6	The sweep fins do not move or move abnormally.	<input type="checkbox"/> The connector of the sweep motor is loosen. <input type="checkbox"/> The spot weld of the sweep motor is with rosin joint. <input type="checkbox"/> The sweep motor is broken down. <input type="checkbox"/> There's mechanical resistance with the sweep mechanism.	<ul style="list-style-type: none"> ● Repair or replace the connector. ● Weld the spot to be under good condition. ● Replace the sweep motor. ● Repair or replace the sweep spindle, pitman, pins.
7	The LCD is not complete or not clear	<input type="checkbox"/> The LCD foot is with rosin joint <input type="checkbox"/> The LCD is broken down.	<ul style="list-style-type: none"> ● Check the spot weld. ● Replace the LCD or major control board.

Wiring diagram

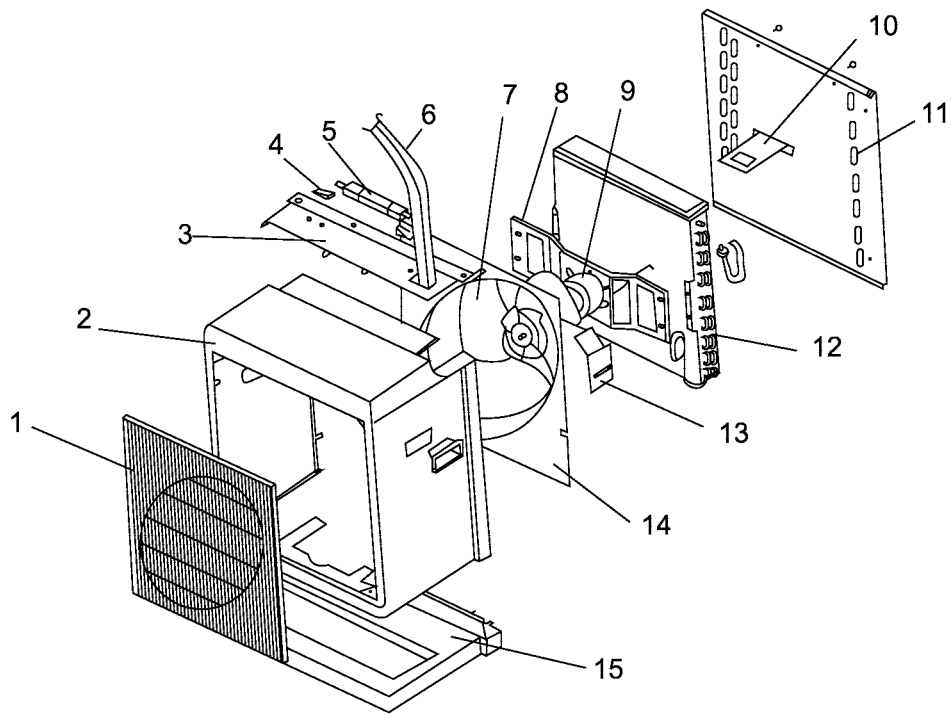


Exploded view and parts lists (Indoors unit and Outdoor unit)

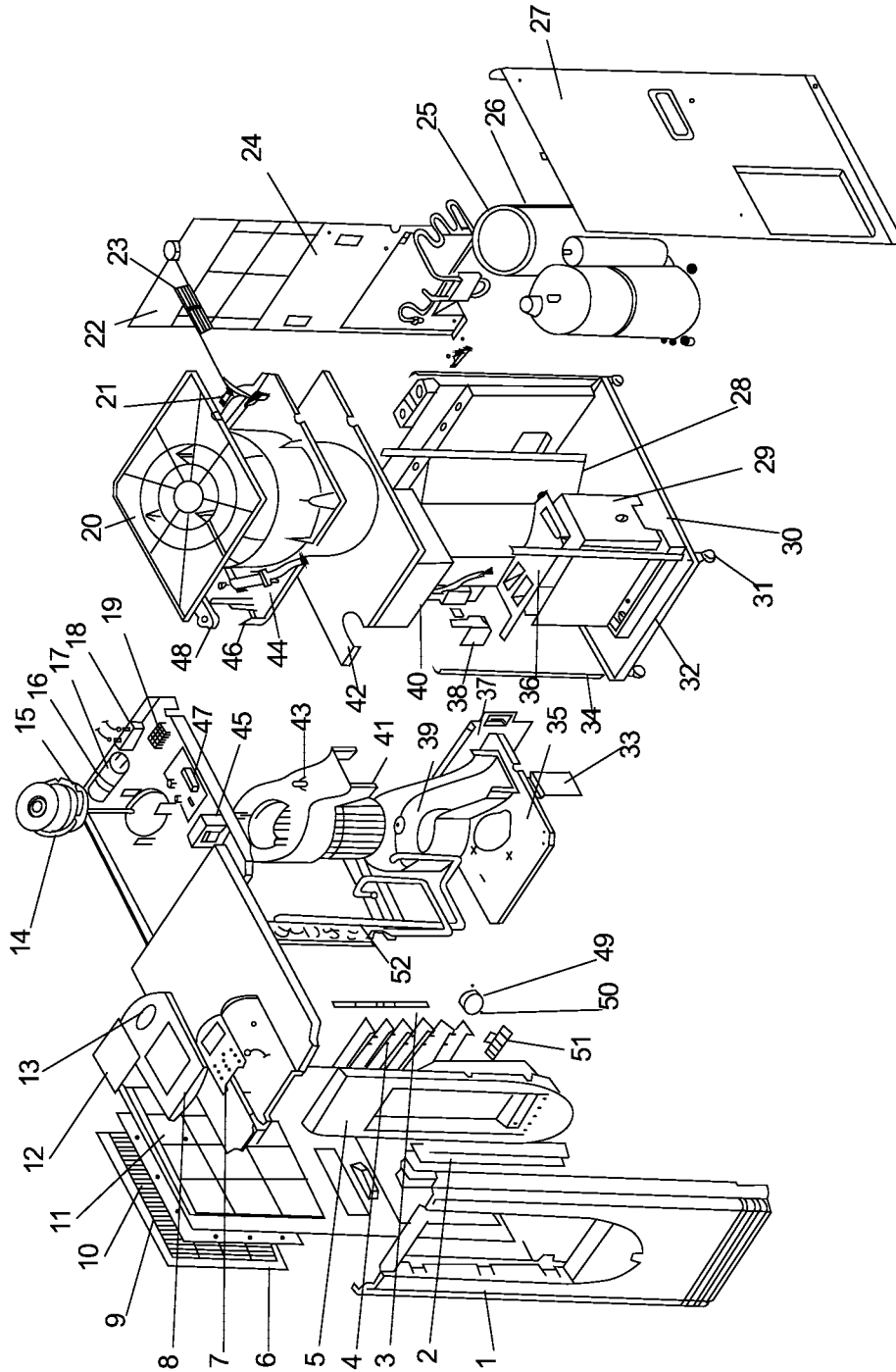
Model:HM-09CC03/R1 HM07CC03/R1 HM-05CC03/R1



Model:HSM-08CC03/R1 (Outdoor)



Model:HSM-08CC03/R1(indoor)



Model:HM-05CC03/R1

No. in exploded view	Spare parts description in english	Spare parts number	Qty
1	evaporator	0010701838	1
2	side plate .left	001A1231144	1
3	draw board	001A1301332	2
4	Indoor intake bar	001A1231149	1
5	Condenser assembly	001A0400081	1
6	Support bar	001A1301331	4
7	Compressor	0010701835	1
8	Nut special	001A5102050	3
9	cushion rubber	001A1754742	3
10	bottom plate	001A1101090	1
11	Wheel	001A1431503	4
12	Rear panel	001A1231148	1
13	Discharge pipe	001B2111740	1
14	Suction pipe	0010703836	1
15	Front plate	001A1231142	1
16	Front panel	001A0100286	1
17	Storage tank base bord	001A1431507	1
18	Storage tank	001A1231145	1
19	Micro switch	001A3400063	1
20	Storage tank cover	001A1436506	1
21	Partituion plate assy	001A1101086	1
22	Protective plate	001A1101088	1
23	Drain pan	001A1231158	1
24	Cover	001A1101089	1
25	Vendiuct(outdoor)	001A1231157	1
26	Cover panel	001A1231147	1
27	Outside fan	001A1231160	1
28	Cover	001A1231146	1
29	Vendiuct cover(outdoor)	001A1231153	1
30	Motor(down)	001A3000079	1
31	Compressor capacitor	001A3600008	1
32	Capacitor clamp	0010100001	1
33	Side plate right	001A1231145	1
34	Support plate	001A1301338	1
35	Drain pan	001A1436499	1

36	Vendiduct(indoor .down)	001A1231152	1
37	Inside fan	001A1231159	1
38	Vendiduct(indoor .up)	001A3800063	1
39	Electric board	001A1231154	1
40	Transformer	001A3800063	1
41	Control board	001A3300092	1
42	Motor(up)	0010403615	1
43	Fan capacitor(up)	001A3600007	1
44	Motor capacitor(down)	001A3600098	1

Model:HM-07CC03/R1

No. in exploded view	Spare parts description in english	Spare parts number	Qty
1	evaporator	001A0400080	1
2	side plate .left	001A1231144	1
2-1	Air filter	0010201974	1
3	draw board	001A1301332	2
4	Indoor intake bar	001A1231149	1
5	Condenser assembly	001A0400081	1
6	Support bar	001A1301331	4
7	Compressor	0010701945	1
8	Nut special	001A5102050	1
9	cushion rubber	included in compressor	1
10	bottom plate	001A1101090	1
11	Wheel	001A1431503	4
12	Rear panel	001A1231148	1
13	Discharge pipe	001B21111146	1
14	Suction pipe	0010703836	1
15	Front plate	001A1231142	1
16	Front panel	001A0100286	1
16-1	Motor lamellas	001A3000080	1
17	Storage tank base bord	001A1431507	1
18	Storage tank base bord	001A1231145	1
19	Micro switch	001A3400063	1
20	Strong tank cover	001A1436506	1
21	Partituion plate assy	001A1101086	1
22	Protective tube	001A1101088	1
23	Drain pan	001A1231158	1
24	Cover	001A1101089	1
25	Vendiuct(outdoor)	001A1231157	1
26	Cover panel	001A1231147	1
27	Outside fan	001A1231160	1
28	Cover	001A1231146	1
29	Vendiuct(outdoor)	001A1231153	1
30	Motor(down)	001A3000079	1
31	Compressor capacitor	001A3600008	1
32	Capacitor clamp	0010100001	1

33	Side plate right	001A1231145	1
34	Support plate	001A1301338	1
35	Drain pan	001A1436499	1
36	Vendiduct(inddor .down)	001A1231152	1
37	Centrifugal fan	001A1231159	1
38	Vendiduct(inddor .down)	001A1231151	1
39	Electric board	001A1231154	1
40	Transformer	001A3800063	1
41	Control board	001A3300092	1
41-1	PCB	001A3300177	1
42	Motor(up)	0010403614	1
43	Fan capacitor	001A3600098	1
44	Motor capacitor	001A3600007	1

Model:HM-09CC03/R1

No. in exploded view	Spare parts description in english	Spare parts number	Qty
1	evaporator	0010703652	1
2	side plate .left	001A1231144	1
3	draw board	001A1301332	2
4	Indoor intake bar	001A1231149	1
5	Condenser assembly	001A0400081	1
6	Support bar	001A1301331	4
7	Compressor	0010702090	1
8	Nut special	001A5102050	3
9	cushion rubber	001A1754742	3
10	bottom plate	001A1101090	1
11	Wheel	001A1431503	4
12	Rear panel	001A1231148	1
13	Discharge pipe	001B2111740	1
14	Suction pipe	0010703836	1
15	Front plate	001A1231142	1
16	Front panel	001A0100287	1
17	Storage tank base bord	001A1431507	1
18	Storage tank	001A1231145	1
19	Micro switch	001A3400063	1
20	Storage tank cover	001A1436506	1
21	Partituion plate assy	001A1101086	1
22	Protective plate	001A1101088	1
23	Drain pan	001A1231158	1
24	Cover	001A1101089	1
25	Vendiuct(outdoor)	001A1231157	1
26	Cover panel	001A1231147	1
27	Outside fan	001A1231160	1
28	Cover	001A1231146	1
29	Vendiuct cover(outdoor)	001A1231153	1
30	Motor(down)	001A3000079	1
31	Compressor capacitor	001A3600008	1
32	Capacitor clamp	0010100001	1
33	Side plate right	001A1231145	1
34	Support plate	001A1301338	1

35	Drain pan	001A1436499	1
36	Vendiduct(indoor .down)	001A1231152	1
37	Inside fan	001A1231159	1
38	Vendiduct(indoor .up)	001A3800063	1
39	Electric board	001A1231154	1
40	Transformer	001A3800063	1
41	Control board	001A3300092	1
42	Motor(up)	0010403614	1
43	Fan capacitor(up)	001A3600007	1
44	Motor capacitor(down)	001A3600098	1
42	Motor(up)	0010403614	1
43	Fan capacitor	001A3600098	1
44	Motor capacitor	001A3600007	1

Model:HSM-08CC03/R1

No. in exploded view	Spare parts description in english	Spare parts number	Qty
1	Front panel	001A1231142	1
2	verrical flap	001A1436498	1
3	connection rod	001A1436498	1
4	Horizontal flap	001A1436497	1
5	Front panel inlay	001A4311348	1
6	Top panel inlay	001A1231146	1
7	Control panel	001A3300177	1
8	Top panel	001A1231146	1
9	Indoor intake bar	001A1231149	1
10	filter	0010201974	1
11	Left side board	001A1231144	1
12	Press key membrane	001A1434516	1
13	Display board	001A1235168	1
14	Upper motor	001A3000078	1
15	electronic	001A1231154	1
16	Capacitor clip	0010100001	1
17	Compressor capacitor	001A3600008	1
18	Fan motor capacitor	001A3600007	1
19	line contact bank	001A4000004	1
20	scroll case cover(outdoor unit)	001A1231153	1
21	Power cord clip	001A1445520	1
22	Rear cover	001A1431738	1
23	Power cord	001A4200065	1
24	Connecting pipe bracker	001A1431751	1
25	Sound absorbtion cushion	001A1762207	1
26	copmpressor	0010702090	1
27	right side board	001A1231145	1
28	Partition panel	001A1301926	1
29	Water storage box	001A1231155	1
30	Base board of Water storage box	001A1431507	1
31	Foot whell	001A1431503	1
32	chassis	001A1101218	1
33	Pulling board	001A1301332	1

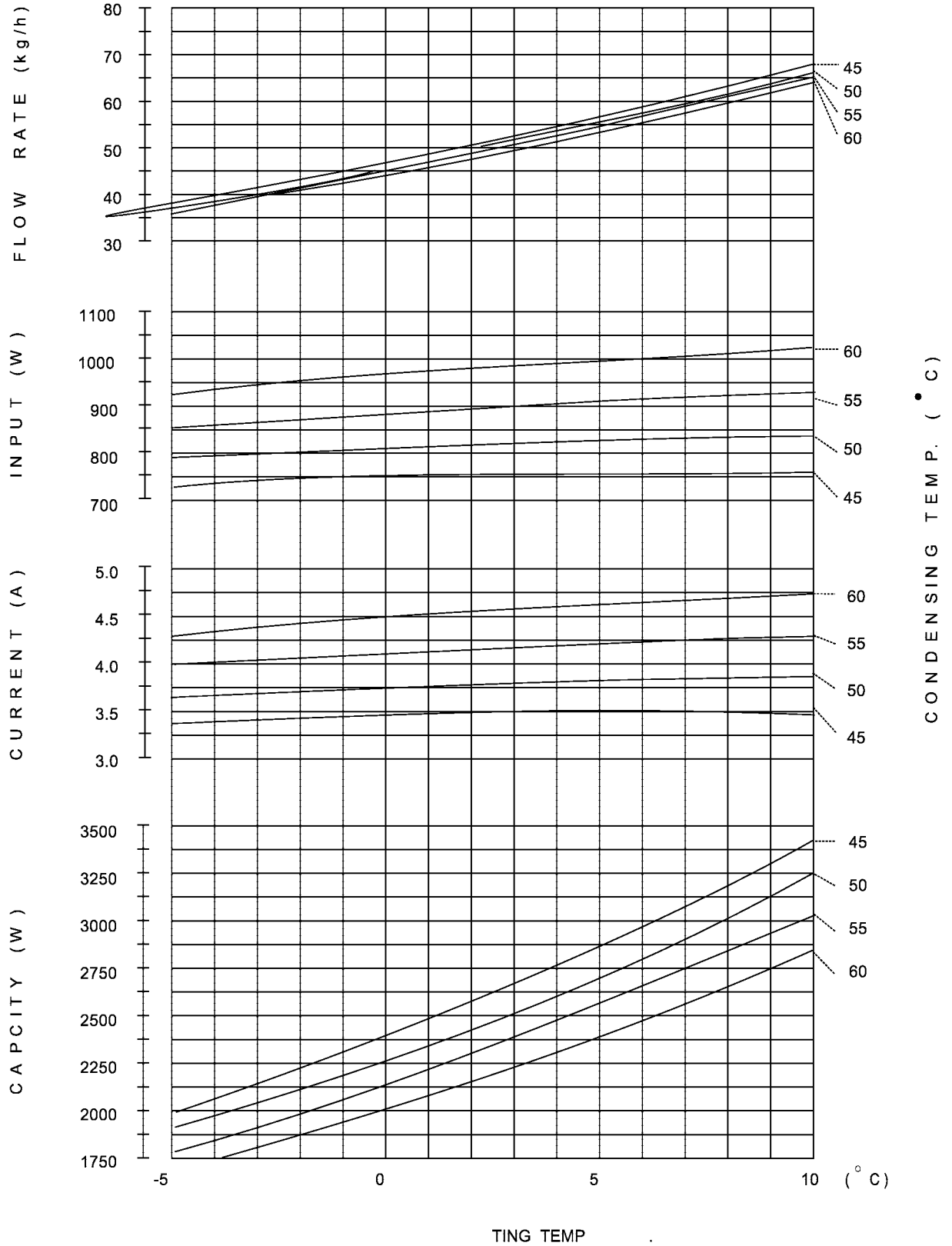
34	Support bar	001A1301331	1
35	baffle	001A1101219	1
36	Water storage box cover	0010201154	1
37	Machine hanging board	001A0100878	1
38	Full water switch	001A3400063	1
39	Scroll cover(indoor unit)	001A1231152	1
40	Cooled water box	001A1231158	1
41	Fan (indoor unit)	001A1231159	1
42	cover	001A1231153	1
43	Upper scroll cover(indoor unit)	001A1231151	1
44	Water meeting pipe clip	001A1445519	1
45	transformer	001A3800063	1
46	Water meeting pipe	001A1439445	1
47	Control panel	001A3300092	1
48	Water meeting tray	001A1436499	1
49	Synchronous motor	001A3000080	1
50	Brace of Symchronotus motor	001A1431500	1
51	flat board of flap	001A1431513	1
52	Evaporator	001A0400196	1
1	Inlet bars	001A1231149	1
2	Case	001A1436730	1
3	Handle holder	001A1436733	1
4	Handle abutment	001A1436732	1
5	Handle	001A1452737	1
6	Connecting pipe group	0010701784	1
7	Axial fan	001A2336052	1
8	Motor holder	001A1301473	1
9	Outdoor fan	001A3000268	1
10	Side board	001A1301474	1
11	Condenser	001A0400172	1
12	Cord board	001A1301474	1
13	Wind circle	001A1436734	1
14	Outdoor chassis	001A1436735	1

Curves of performance

Compressor model: PH165X1C-8DTC2

Machine model: HM-09CC03/R1

220V-- 50Hz-- 1PHASE
 SUCTION GAS TEMP-- 35 (°C)
 UNDER COOL ----- 8.3 (°K)
 AMBIENT TEMP. ---- 35 (°C)
 RUNNING CAPACITOR--25MFD

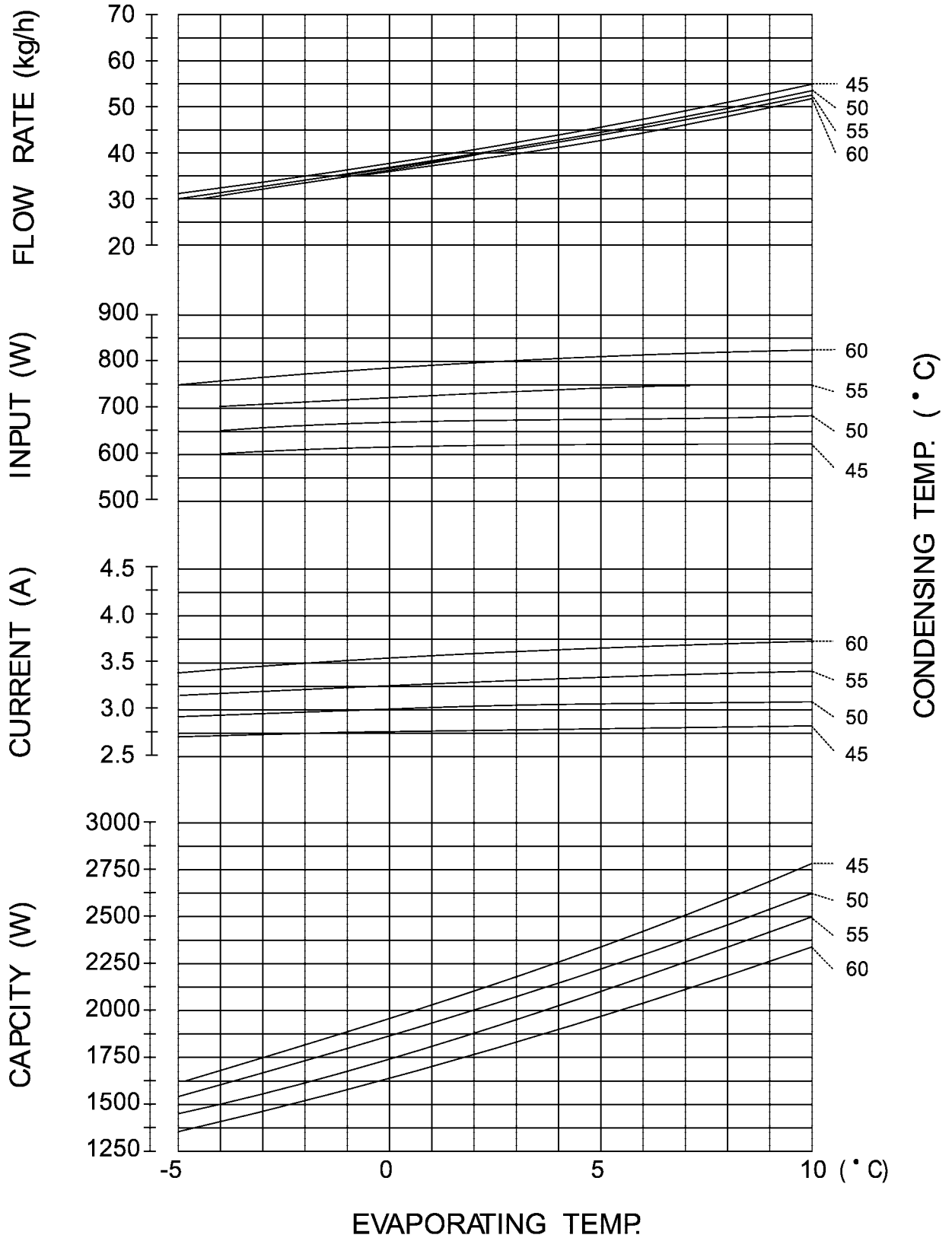


Curves of performance

Compressor model: PH135X1C

Machine model: HM-07CC03/R1

220V-- 50Hz-- 1PHASE
 SUCTION GAS TEMP- 35 (° C)
 UNDER COOL ----- 8.3 (K)
 AMBIENT TEMP.----- 35 (° C)
 RUNNING CAPACITOR--25MFD

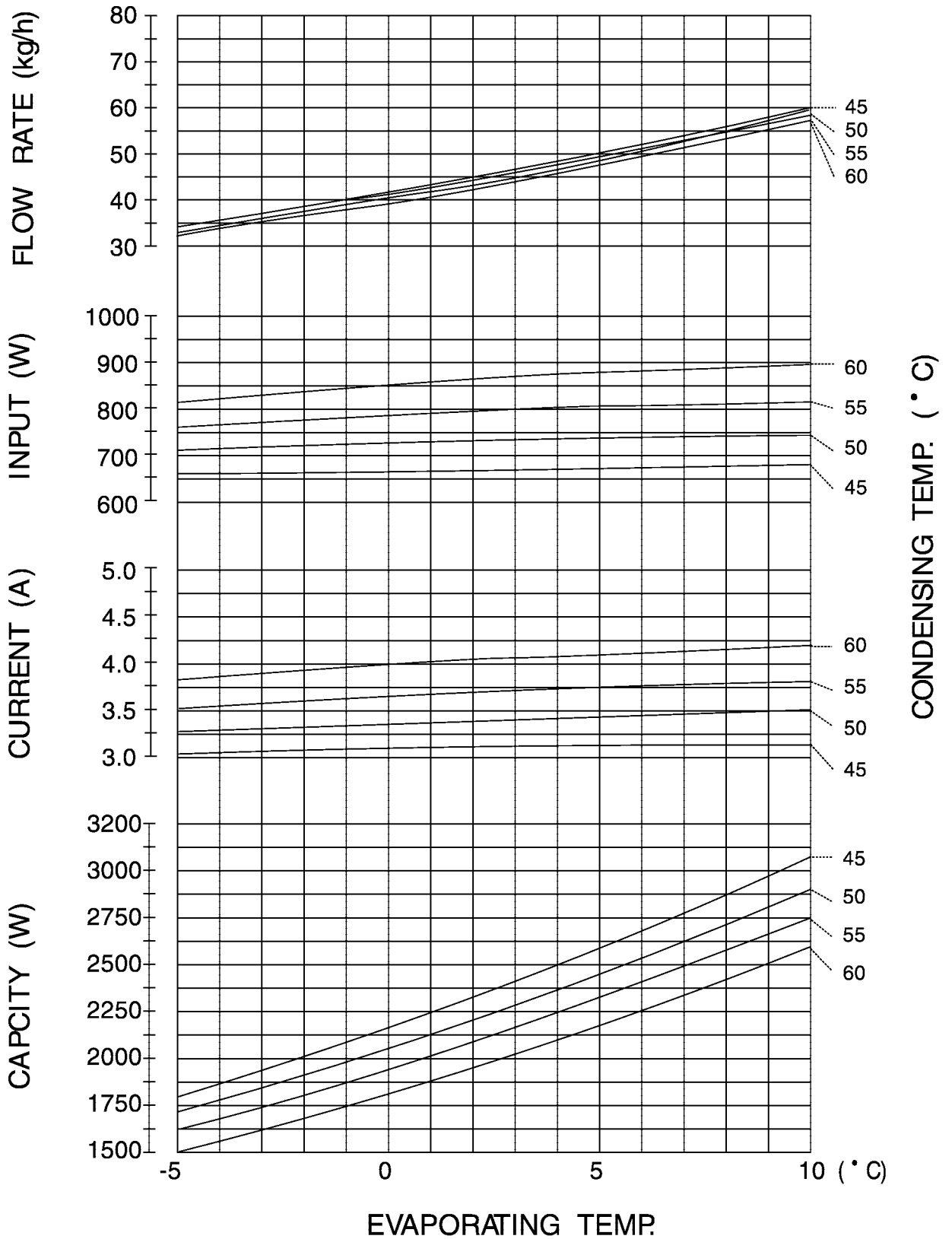


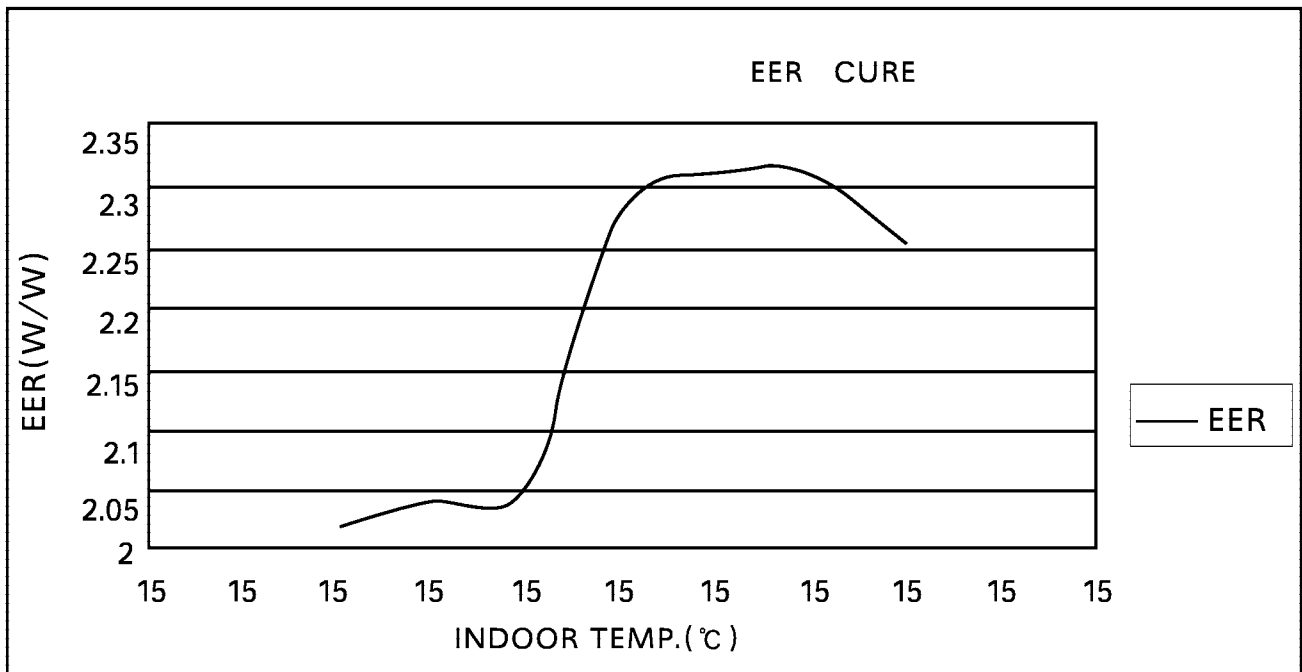
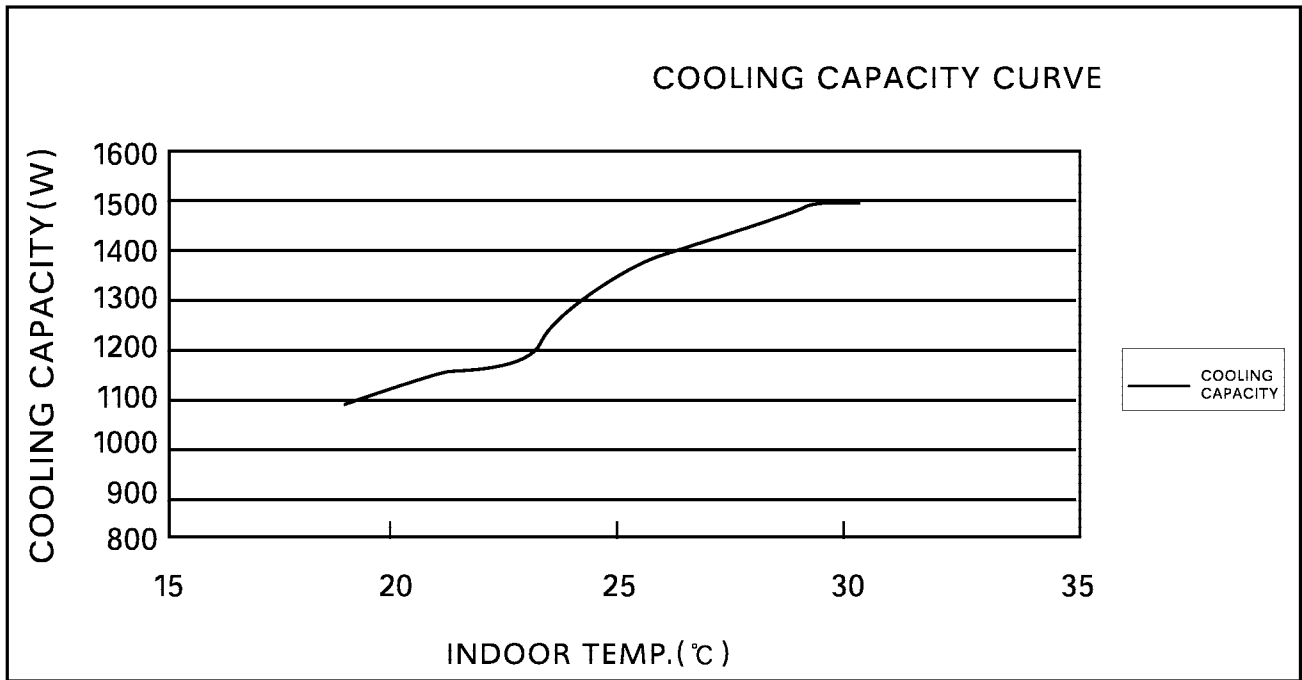
Curves of performance

Compressor model: PH150X1C-8DTC2

Machine model: HSM-08CC03/R1

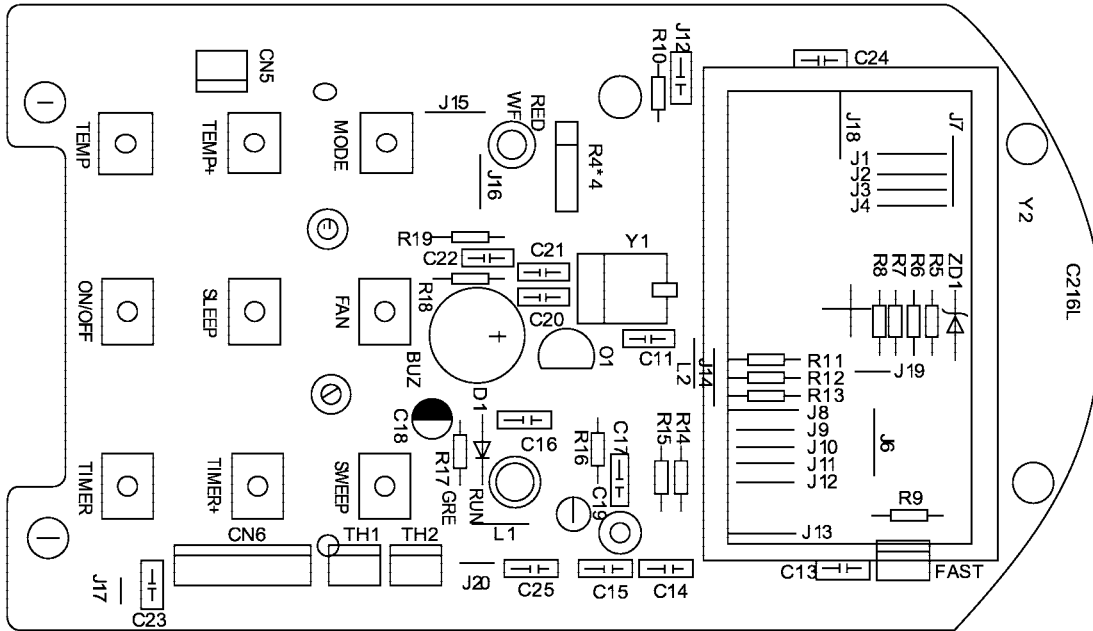
220V-- 50Hz-- 1PHASE
 SUCTION GAS TEMP-- 35 (° C)
 UNDER COOL ----- 8.3 (K)
 AMBIENT TEMP ----- 35 (° C)
 RUNNING CAPACITOR--25MFD





List of main material for PCB

12.2 PCB of panel



No.	Name	Model&Spec.	Single machine	Remarks
1	Carbon-film resistor	100Ω 1/4W ±5%	1	
2	Carbon-film resistor	200Ω 1/4W ±5%	3	
3	Carbon-film resistor	510Ω 1/4W ±5%	2	
4	Carbon-film resistor	1K 1/4W ±5%	3	
5	Carbon-film resistor	10K 1/4W ±5%	3	
6	Carbon-film resistor	100K 1/4W ±5%	3	
7	Carbon-film resistor	1M 1/4W ±5%	1	
8	Precision resistance	4.3K 1/4W ±5%	2	
9	Exclusion	A103 10K 5P	1	
10	Electrolytic capacitor	47μ F/16V	1	
11	Electrolytic capacitor	100μ F/16V	1	
12	Electrolytic capacitor	470μ F/16V	1	
13	Electrolytic capacitor	1000μ F/25V	1	
14	Ceramic capacitor	104 ±20%	18	
15	Ceramic capacitor	30P ±20%	2	
16	Diode	IN4148	1	
17	Diode	IN4001	4	
18	Triode	9013EBC	1	
19	Voltage-regulator diode	3V	1	
20	Light-emitting diode	φ 3 Red, green	1 each	
21	Crystal oscillator	4.19MHz	1	
22	Integrated package	7805	1	
23	IC	uPD75P3036	1	
24	IC	2003	1	
25	Inductance	330μ H	2	
26	Buzzer	HDK	1	
27	Piezoresistor	500NR-10D	1	Heatshrinkable tube

List of main material for PCB

12.2 PCB of panel

No.	Name	Model&Spec.	Single machine	Remarks
28	High-voltage capacitor	0.1 μ F250V	1	
29	Protective tube	3.15A/250V	1	Sheathing
30	Protective tube seat		2	
31	Pin	6.3X0.8	6	
32	Needle file	VH-7	1	
33	Needle file	XH-7	1	
34	Needle file	XH-3	1	
35	Needle file	VH-3	1	
36	Needle file	S-EH-2	3	
37	Needle file	S-EH-7	1	
38	Needle file	S-XH-2	1	Row needle
39	Press key	6×6×5 mm	9	
40	Relay	AJM12113	1	
41	Relay	OJE-SH-112DM	4	
42	LCD		1	
43	PCB	C216L	1	
44	PCB	C226W	1	
45	Temperature response head	Length of the glass tube 55cm	1	ϕ 4 sheathing, heat-shrinkable tube
46	Temperature response head	Length of the copper tube 68cm	11	ϕ 4 sheathing
47	Wire bundle	YD-7	21	
48	Jumper	10mm	1	
49	Jumper	5mm	1	

Sincere Forever

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