Haier
Inspired living

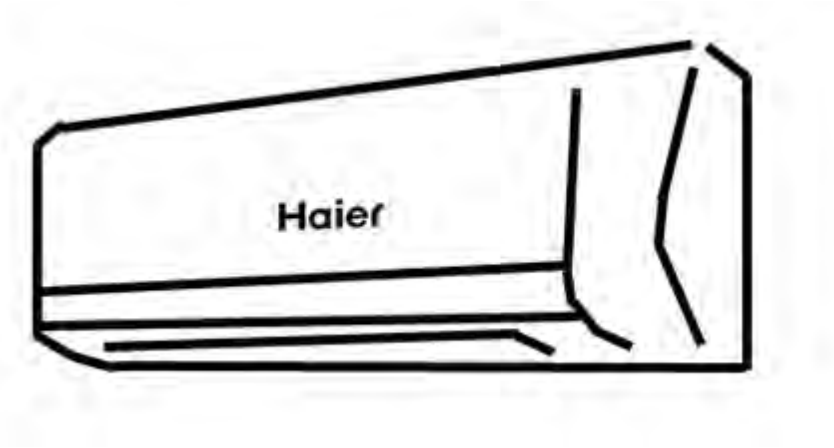
Domestic
Air conditioner

TECHNICAL DATA

ON/OFF

Wall mounted Type Arc-Series

HSU-18CK03
HSU-18HK03



CAUTION

1. READ THIS MANUAL CAREFULLY TO DIAGNOSE TROUBLE CORRECTLY BEFORE OFFERING SERVICE.
2. THIS MANUAL IS USED BY QUALIFIED APPLIANCE TECHNICIANS ONLY.
3. HAIER DOES NOT ASSUME ANY RESPONSIBILITY FOR PROPERTY DAMAGE OR PERSONAL INJURY FOR IMPROPER SERVICE PROCEDURES DONE BY ONE UNQUALIFIED PERSON.

Table of Contents

1 Features

- Healthy negative ion: make your room full of an abundance natural negative ions
- ESF filter : Trap harmful dust and remove unpleasant odors effectively
- DRY function: Make dehumidifying in the room when the unit is working in the "DRY" mode
- Anti-mold filter: Catches most small particles and remove unpleasant odors effectively
- Sleep mode: The setting temprature and the indoor noise can be adjusted to a more comfortable level when you set the "sleep mode"during night sleep
- 24 Hour timer: Use the timer function to set on,or off,or from on to off,or from off to on
- Auto restart: The function permits automatic return to previous peration conditions
- Easy clean design: The panel is easy to wash and the airflow vents can be detached without any special tools for quick cleaning of the inside of the air conditioner
- Auto mode According to the fixed temperature "26℃ " ,the unit will adjust the operation mode automatically.

2 Specifications

* This information was not available at the time of publication.

NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS				HSU-18CK03	HSU-18HK03
NOMINAL INPUT	Cooling	nominal	kW	0.1	0.1
	Heating	nominal	kW	------	0.1

NOMINALCAPACITY and NOMINAL INPUT					
Model				HSU-18CK03	HSU-18HK03
NORMINAL CAPACITY(3-4)	Cooling(1)	norm.	kw	4.8	4.8
	Heating(2)	norm.	kw	--	5.35
NORMINAL INPUT	Cooling	norm	kw	1.92	1.92
	Heating	norm.	kw	--	2.02
EER	Cooling			2.50	2.76
COP	Heating			--	2.85
ENERGY LABEL(7-8)	Cooling			--	--
	Heating			--	--
ANNUAL ENERGY CONSUMPTION(9)	Cooling		kwh	720	725

TECHNICAL SPECIFICATIONS						
INDOOR UNITS					HSU-18CK03	HSU-18HK03
DIMENSIONS	Unit		H	mm	265	
			W	mm	938	
			D	mm	182	
WEIGHT	Unit			kg	11	
COLOR	Unit				white	
SOUND LEVEL	Sound pressure (cooling/heating)(5)		high	dB(A)	46	46/47
			medium	dB(A)	44	44/45
			low	dB(A)	40	40/43
	Sound power(cooling/heating)(6)		high	dB(A)	56	56/58
FAN	Air flow rate(cooling/heating)		high	m^3/min	12.5	12.5/12.5
			low	m^3/min	10	10/10.5
			super low	m^3/min	8	8 /8.9
	Speed(cooling/heating)		steps		5steps,silent and auto	
			high	rpm	1250	1250/1250
			medium	rpm	1100	1100/1150
			low	rpm	950	950//1050
	Type				Cross flow fan	
	Motor output			W	26	
HEAT EXCHANGER	Type				ML - Φ 9.52Hi - XA bube	
	Rows x stages x fin pitch				2 x 10 x 1.4	
AIR FILTER					Removable/washable/mildew proof	
REMOTE CONTROLLER					YL-M07	
TEMPERATURE CONTROL					Microcomputer control	
PIPING CONNECTIONS(external diameter)			liquid	mm	6.35	
			gas	mm	12.7	
			drain	mm	16	
INSULATION MATERIAL	Heat insulation type				both liquid and gas pipes	

TECHNICAL SPECIFICATIONS						
OUTDOOR UNITS					HSU-18CK03	HSU-18HK03
NET DIMENSIONS	Unit	H		mm	543	
		W		mm	783	
		D		mm	255	
WEIGHT	Unit			kg	37	39
COLOR	Unit				white	
SOUND LEVEL	Sound pressure(cooling/heating)(5)	high		dB(A)	54	57/58
	Sound power(cooling/heating)(6)	high		dB(A)	64	67/68
FAN	Air flow rate(cooling/heating)	high		m^3/min	36	36/34
		low		m^3/min	---	---
	Speed(cooling/heating)	high		rpm	850	850
		low		rpm	---	---
	Type				Propeller fan	
	Motor output			W	35	
HEAT EXCHANGER	Type				ML - Φ9.52Hi - XA bube	
	Rows x stages x fin pitch				2 x 10 x 1.4	
REFRIGERANT CIRCUIT	Refrigerant type				R22	R22
	Refrigerant charge			kg	1.08	1.15
	Maximum allowable distance between indoor and outdoor			m	15	15
	Maximum allowable level difference			m	20	20
	Refrigerant control				---	---
COMPRESSOR	Type				Rotary Compressor	
	Model				MITSUBISHI TH338VEEC	
	Motor output			w	1875	
	Oil type				SUNISO 4GSI	
	Oil charge volume			L	0.52	
PIPING CONNECTIONS	liquid			mm	Φ 6.35	
	gas			mm	Φ 12.7	
	drain			mm	Φ 16	
INSULATION MATERIAL	Heat insulation type				both liquid and gas pipes	

ELECTRICAL SPECIFICATIONS					
For combination indoor units+ outdoor units:				HSU-18CK03	HSU-18HK03
CURRENT	Nominal running current	cooling	A	9.1	9.1
		heating	A	-----	9.4
	Maximum running current	cooling	A	11.8	11.8
		heating	A	-----	13.8
	Starting current	cooling	A	39	39
		heating	A	-----	39

For indoor units only:			HSU-18CK03	HSU-18HK03
POWER SUPPLY			VM	VM
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase		1PH	1PH
	Frequency	Hz	50	50
	Voltage	V	220~230	220~230

NOTES

1 Nominal cooling capacities are based on: indoor temperature 27°CDB/19°CWB * outdoor temperature 35°CDB * refrigerant piping length: 5m * level difference: 0m.
2 Nominal heating capacities are based on: indoor temperature 20°CDB * outdoor temperature 7°CDB/6°CWB * refrigerant piping length 5m (horizontal) * level difference 0m.
3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
4 Units should be selected on nominal capacity. Maximum capacity is limited to peak periods.
5 The sound pressure level is measured in an anechoic room at 1m distance from the unit. It is a relative value, depending on the distance and acoustic environment. For measuring conditions: please refer to item 8 of this chapter.
6 The sound power level is an absolute value indicating the ''power'' which a sound source generates.
7 Energy label: scale from A (most efficient) to G (less efficient).
8 The energy label Directive 2002/31/EC will enter into force once the relevant measurement standard will be published in the European official Standard.
9 Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions)

3 Remote controller lists

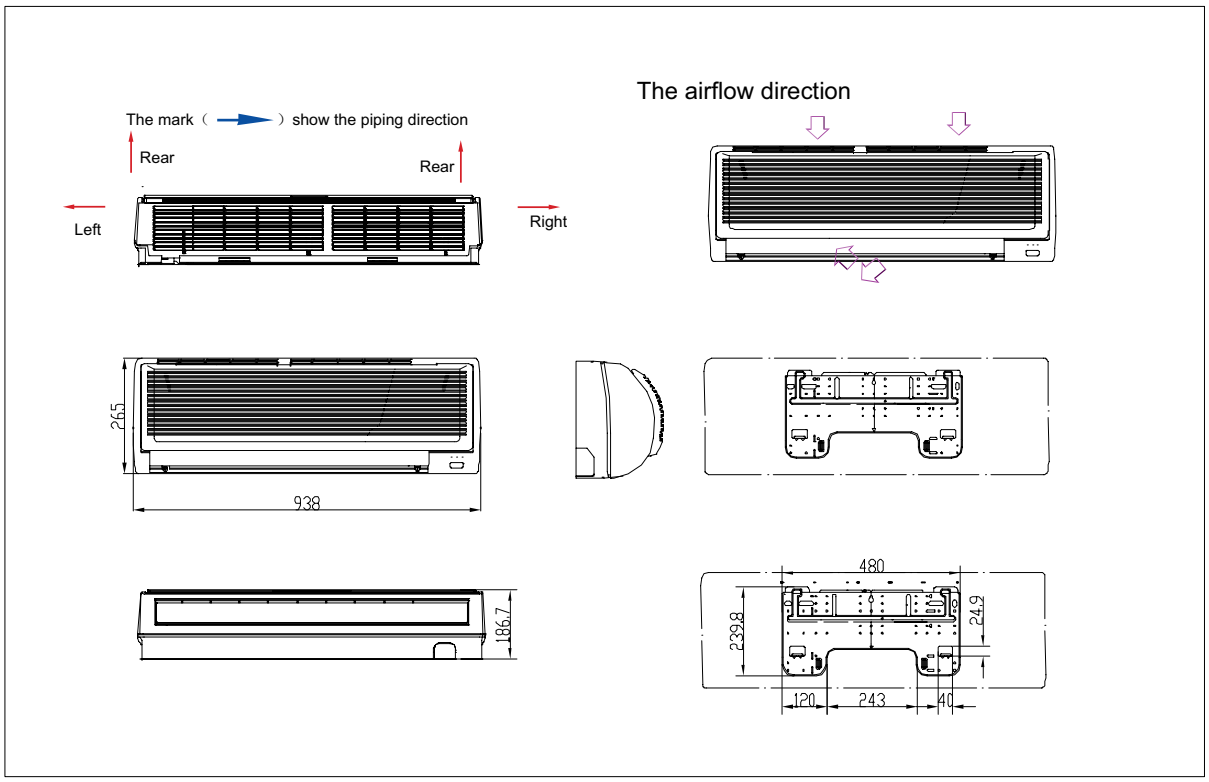
Model	HSU-18CK03	HSU-18HK03
YR-M07	Y	Y
YR-H10	Y	Y

4 Sensors lists

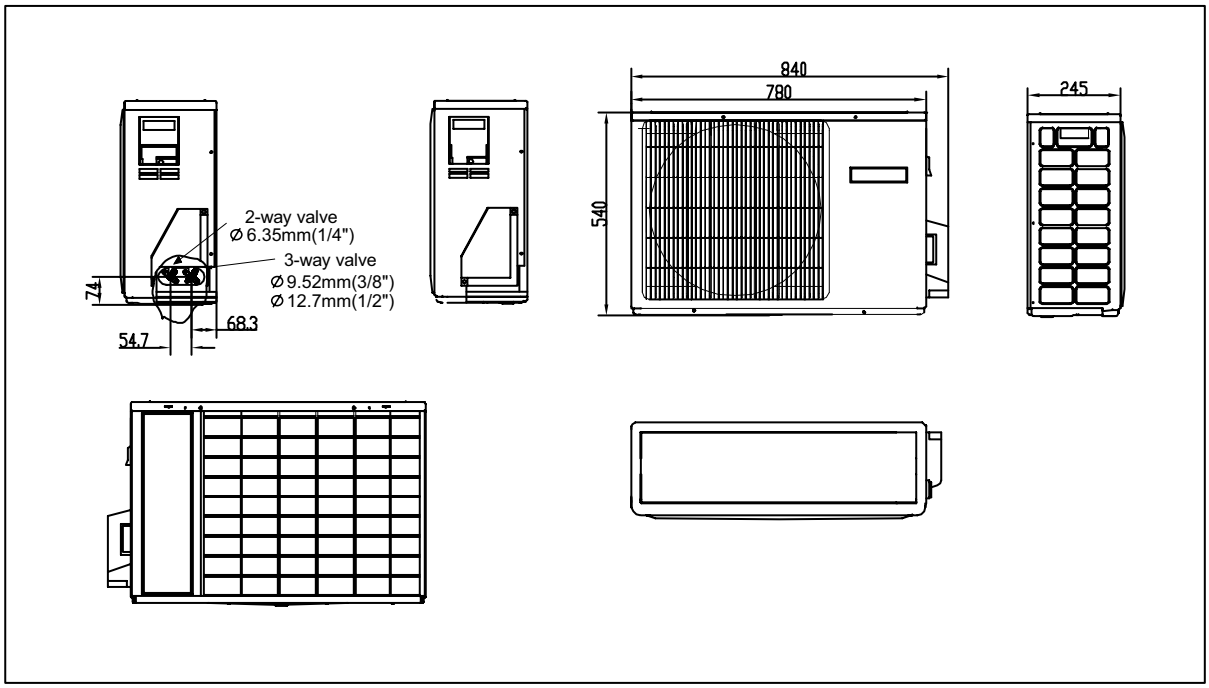
INDOOR UNIT		
type	Description	Qty
Room sensor	It's used for detecting room temperature	1
Pipe sensor	It's used for detecting temperature of evaporator	1

5 Dimensional drawings

Indoor unit

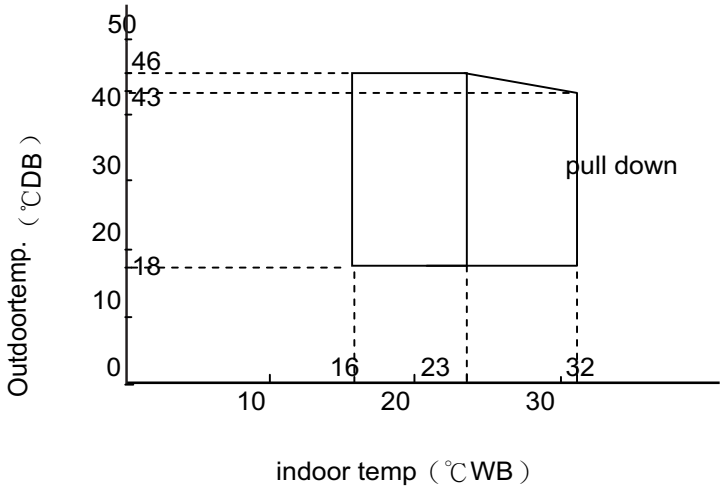


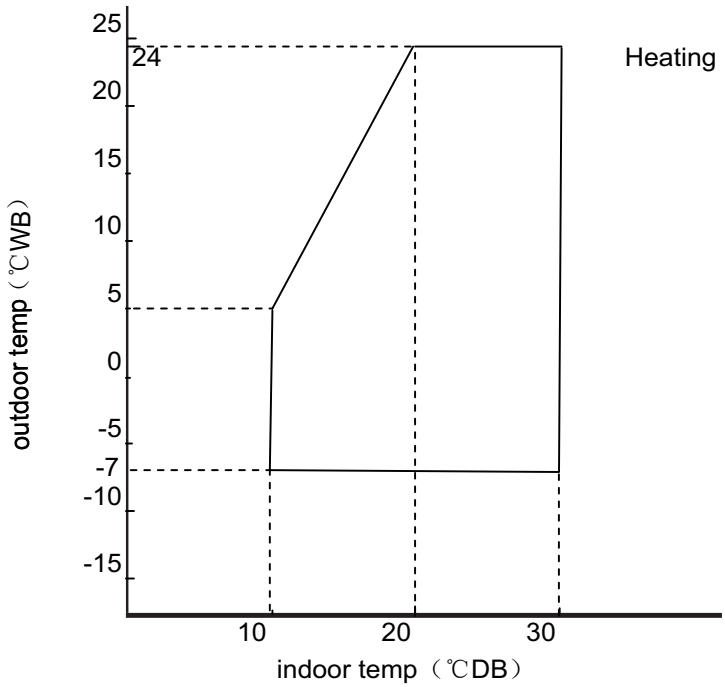
Outdoor unit



6 Operation range

The name of parts Cooling





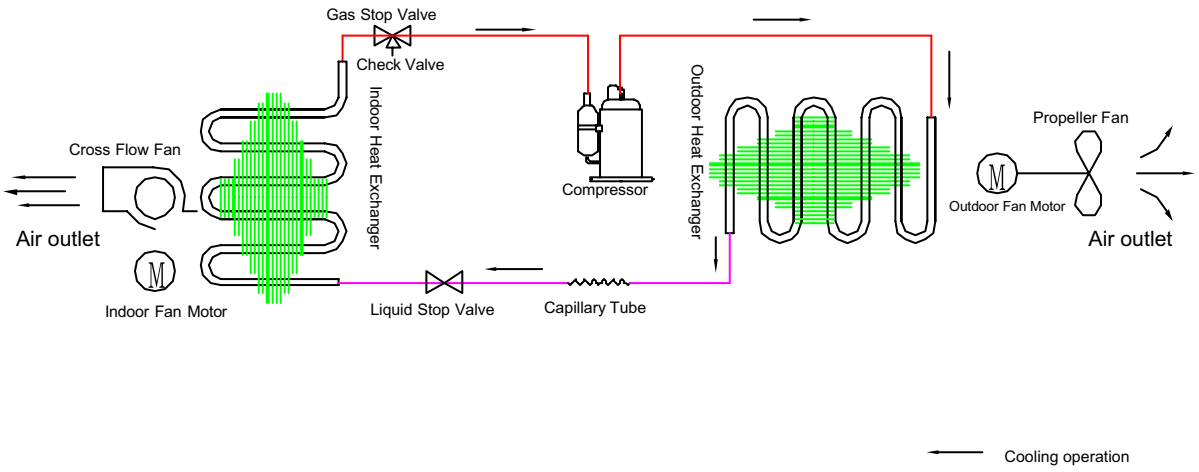
Notes：

The graphs are based on the following condition：

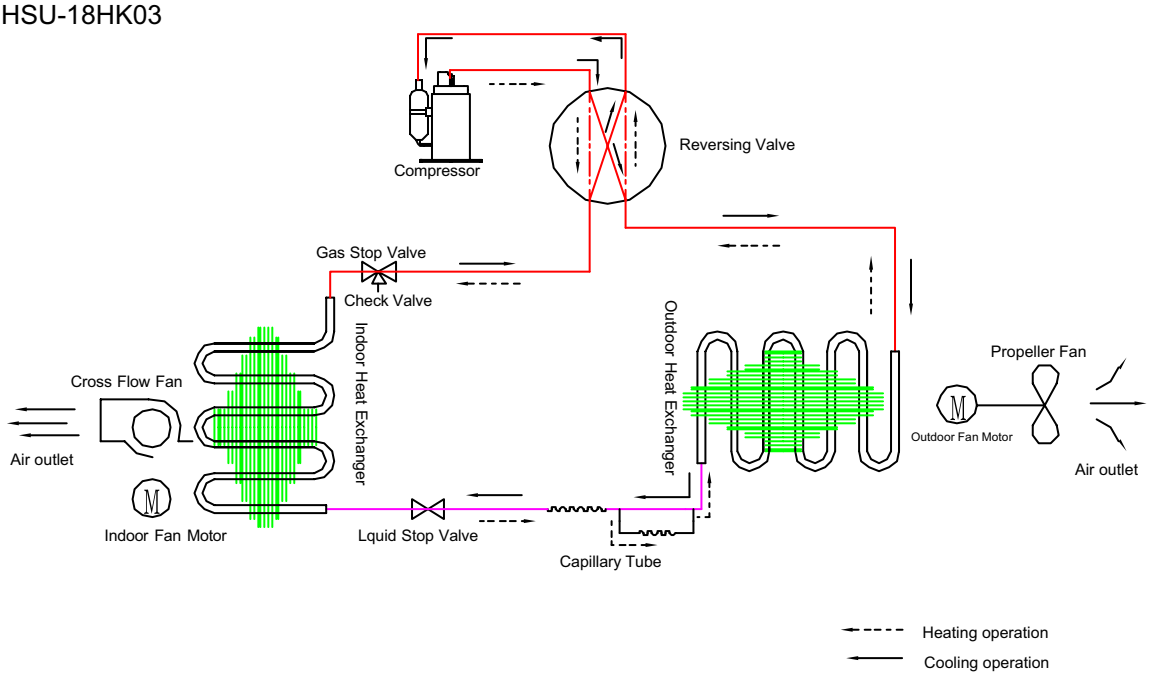
Equivalent piping length	7.5m
Level difference	0m
Air flow rate	high

7 Piping diagrams

HSU-18CK03



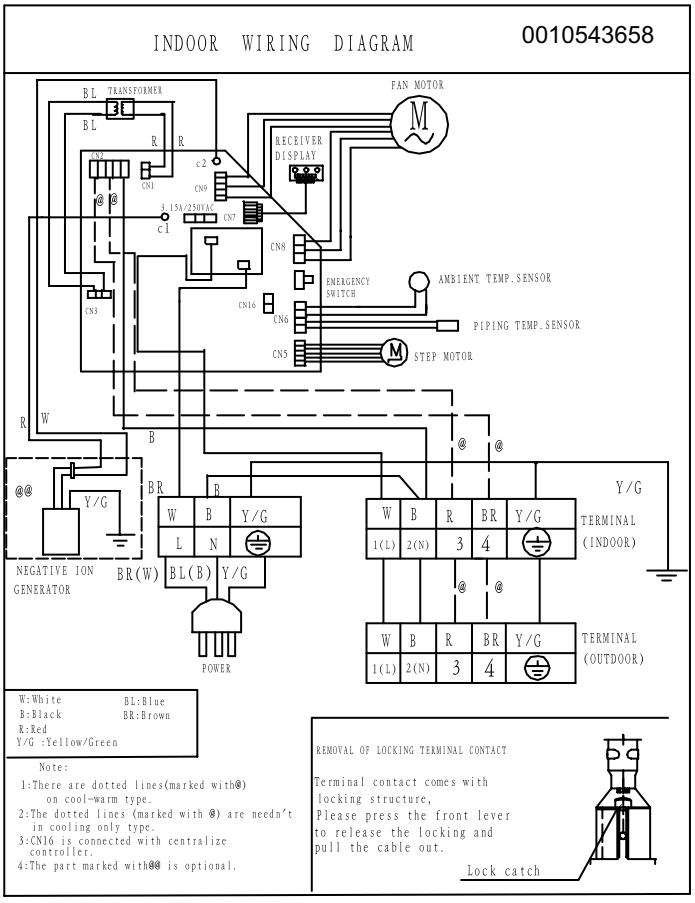
HSU-18HK03



8 Wiring diagrams

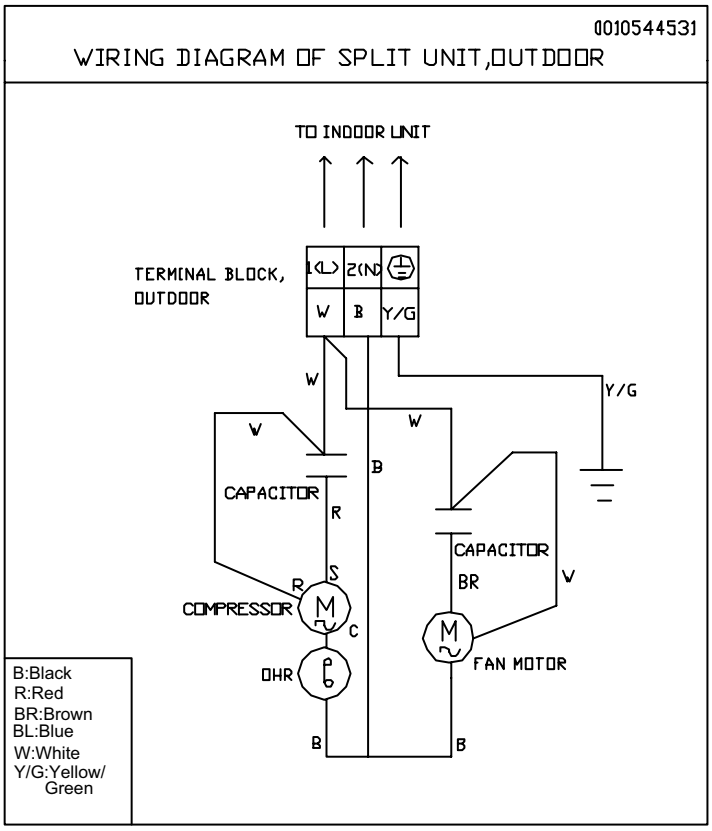
HSU-18CK03

Indoor unit

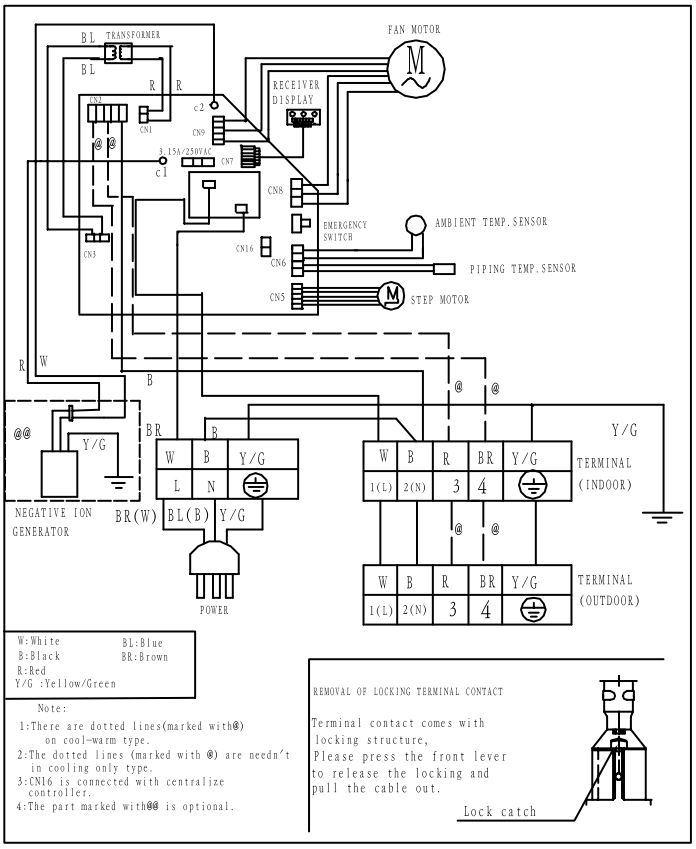


HSU-18CK03

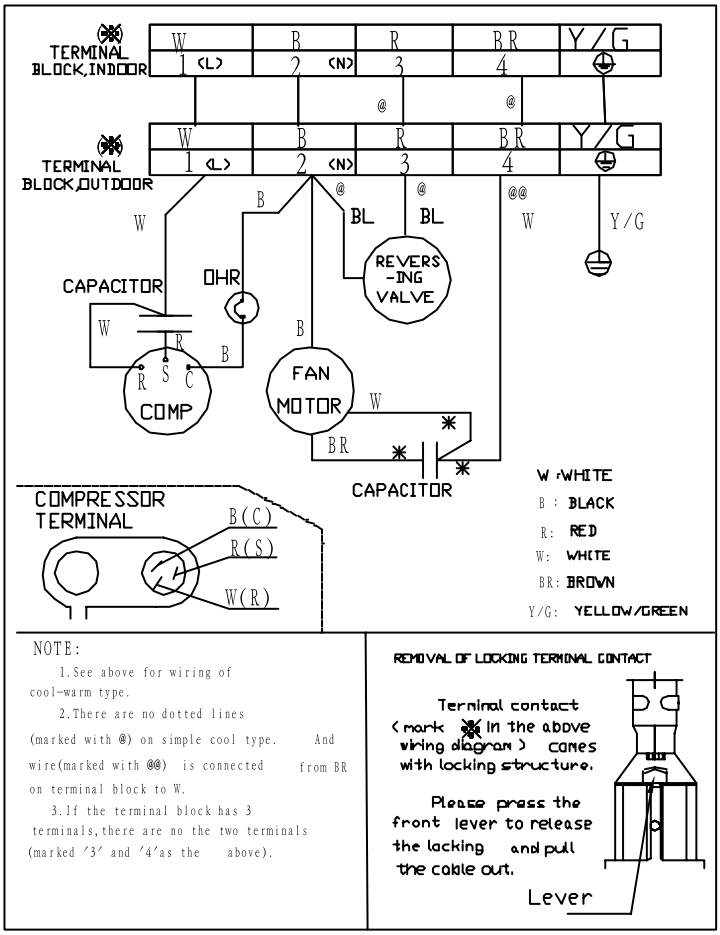
Outdoor unit



HSU-18HK03
Indoor unit

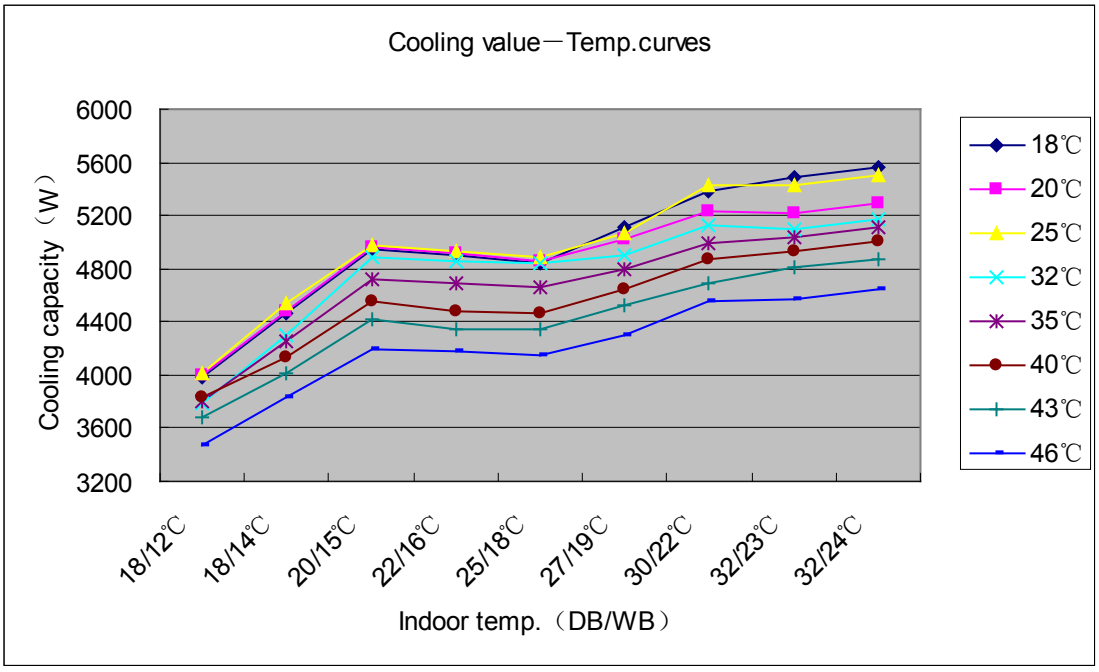


HSU-18HK03
Outdoor unit



9 Capacity tables and curves diagrams

HSU-18CK03 performance curves								
cooling value-temerature talbe								
indoor temp	outdoor temp.(humidity 46%)							
DB/WB	18℃	20℃	25℃	32℃	35℃	40℃	43℃	46℃
18/12℃	3986	3997	4007	3786	3796	3839	3689	3473
18/14℃	4469	4480	4547	4295	4258	4128	4016	3830
20/15℃	4951	4964	4977	4882	4720	4559	4423	4187
22/16℃	4897	4913	4930	4862	4687	4481	4342	4177
25/18℃	4844	4863	4882	4841	4654	4468	4345	4149
27/19℃	5105	5015	5065	4902	4800	4649	4526	4302
30/22℃	5382	5234	5422	5128	4998	4868	4696	4549
32/23℃	5482	5218	5428	5099	5042	4933	4805	4577
32/24℃	5561	5292	5506	5171	5113	5001	4870	4640



HSU-18HK03 performance curves								
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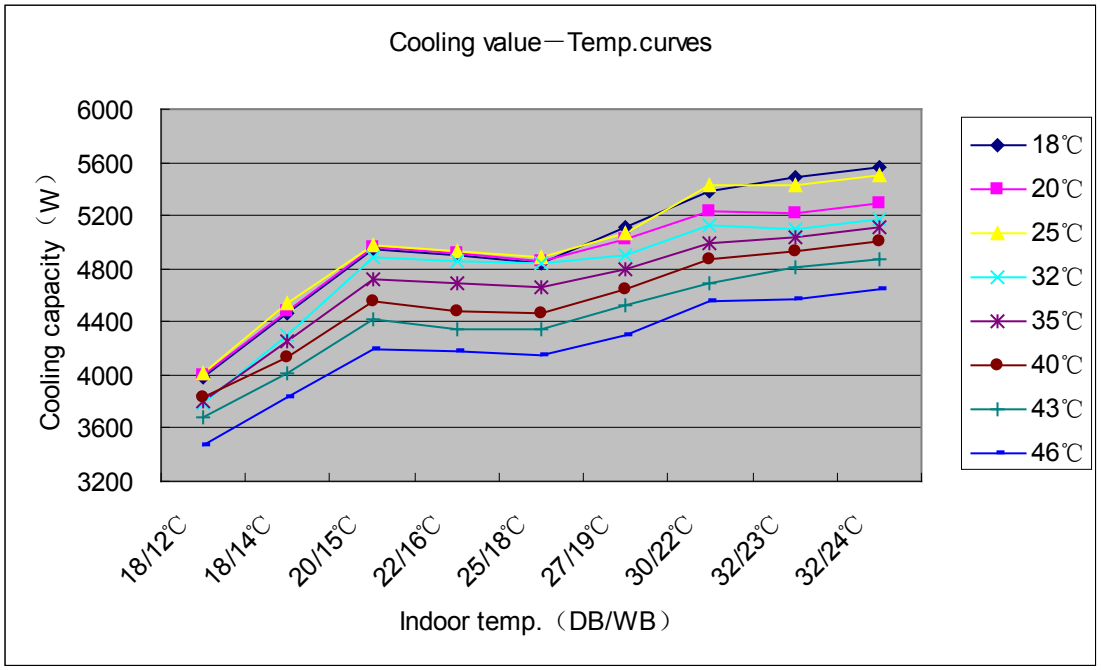
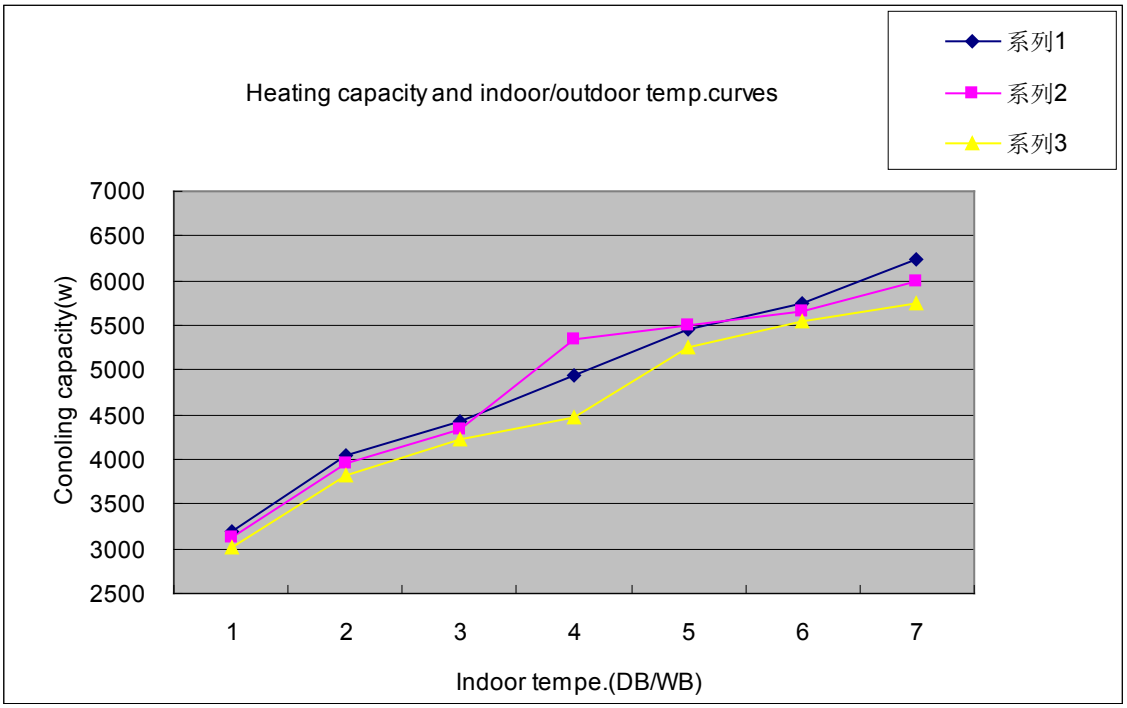
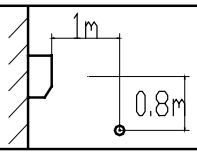


HSU-18HK03 performance curves			
heating capacity and indoor/outdoor temp.curves			
outdoor temp.	indoor temp.(humidity 46%)		
DB/WB	15℃	20℃	25℃
-15℃	3195	3122	3025
-5℃	4034	3948	3825
5℃	4436	4344	4219
7/6℃	4949	5350	4478
15℃	5450	5500	5250
20℃	5750	5650	5550
25℃	6250	6000	5750

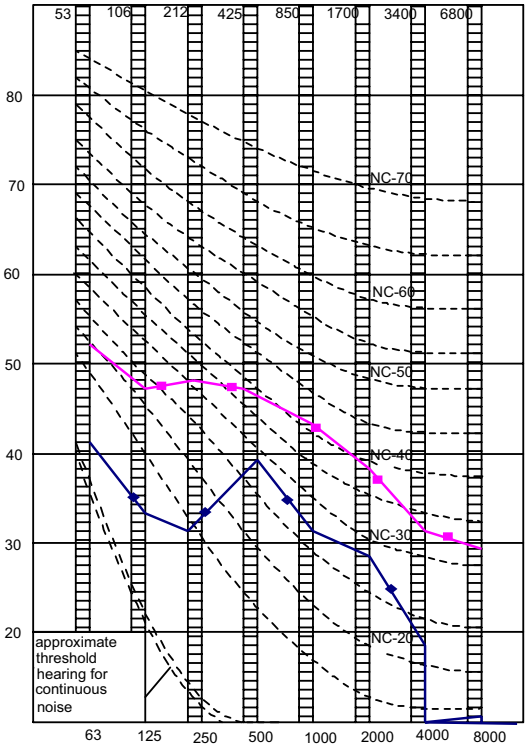


10 Sound level

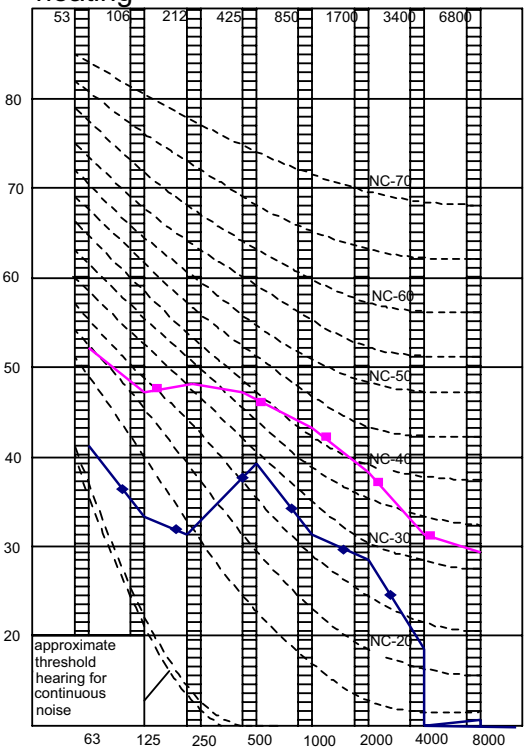
Model	Sound presure level			Measuring location Location of microphone	sound power level (cooling/heating)
	220~230V,50Hz Cooling/heating				
	H	L	SL		
HSU-18CK03	39	38	35		51
HSU-18HK03	44/46	40/45	37/38		52/62

HSU-18HK03

cooling



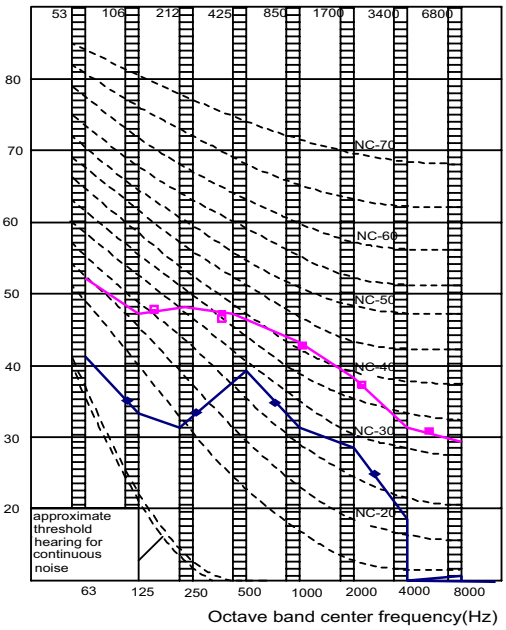
heating



INDOOR
OUTDOOR

HSU-18CK03

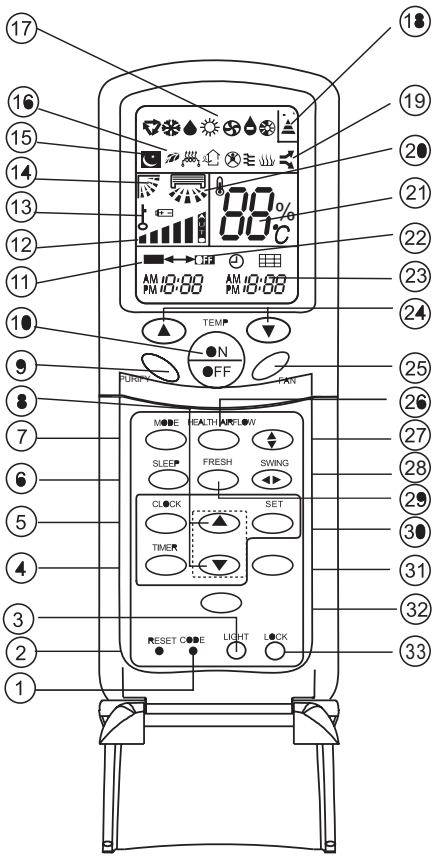
cooling

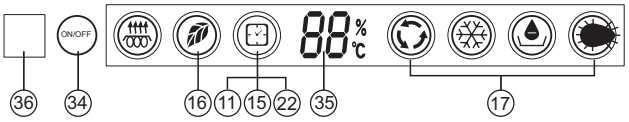


11 Accessories

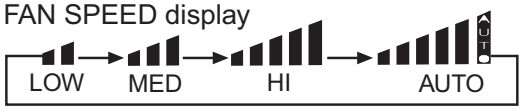
Standard name	HSU-18CK03	HSU-18HK03
Drain hose	1	1
Plastic bag	1	1
screw assembly	1	1
Air purifier	2	2
Battery	2	2
Mounting plate	1	1
Remote controller	1	1
Installation manual	1	1
Operation manual	1	1

12 Control systems





11. TIMER ON display
12. FAN SPEED display



13. LOCK display
14. SWING UP/DOWN display
15. SLEEP display
16. HEALTH display
17. Operation mode display

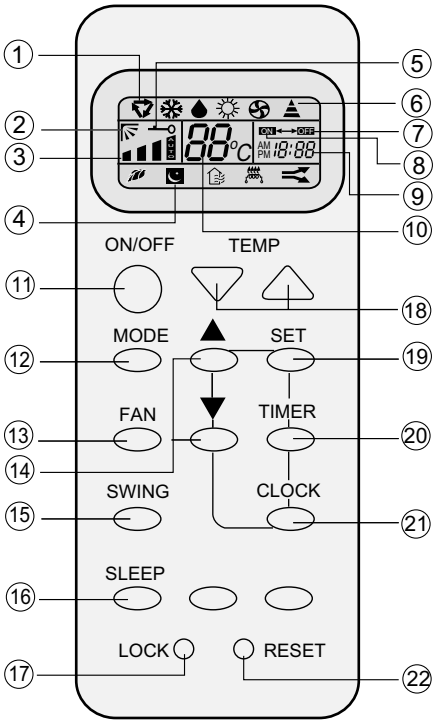
Operation mode	AUTO	COOL	DRY	HEAT	FAN
Remote controller					
Display board					

18.Singal sending display
19. POWER/SOFT display
20. Left/right air flow display
21. TEMP display
Remote controller: to display the TEMP. setting.
22. TIMER OFF display
23. CLOCK display
24. TEMP button
Used to select your desired temperature.
25. FAN button
Used to select fan speed: LOW,MED, HI, AUTO.
26. HEALTH AIRFLOW button
Used to set the health airflow mode.
27. SWING UP/DOWN button
Used to select up or down air sending direction.
28. SWING LEFT/RIGHT button
Used to select left/right air flow.
29. FRESH button
Use to set fresh air function.
30. SET button
Used to confirm timer and clock settings.
31. POWER/SOFT button
Used to set power/soft function.
32. TEMP./HUMIDITY DISPLAY button
Used for the display panel to choose displaying the actual temperature or the actual humidity at present.
33. LOCK
Used to lock buttons and LCD display. If pressed, the other buttons will be disabled and the lock condition display appears. Press it once again, lock will be canceled and lock condition display disappears.
34. ON/OFF button
Used to set ON/OFF operation and test operation.
35. Ambient temp.display
When receiving the remote control signal, display the set temperature and in the rest time the room temperature is displayed and this room temperature is only for reference.
36. Remote signal receiver

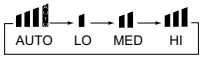
1.CODE
Used to select CODE A or B with a press,A or B will be displayed on LCD.
Please select A without special explanation.
2.RESET
When the remote controller appears abnormal, use a sharp pointed article to press this button to reset the remote controller normal.
3.LIGHT button
Control the lightening and extinguishing of the indoor LED display board.
4. TIMER button
Used to select TIMER ON, TIMER OFF, TIMER ON-OFF.
5. CLOCK button
Used to set correct time.
6. SLEEP button
Used to select sleep mode.
7. MODE button

8. HUMIDITY
Used for adjusting humidity or clock time and timed time.
9. Purify button
Used to set air ionization purify and healthy function.
10. ON/OFF button
Used for unit start and stop.

About temperature/humidity display key:
1.under the constant temperature dehumidification mode, for the first time to enter, then the remote controller displays the set temperature, the display panel displays the actual temperature, press this key, the temperature /humidity won't alternate. After adjusting the set temperature, press this key again, the remote controller will display the set temperature or the set humidity, and the display will display the actual temperature or the actual humidity at the same time.
2.Under the other modes, press this key, the display panel will display the actual humidity at present for a certain time, then the actual humidity will automatically switch back to display temperature. The display of the remote controller won't change.



1. Mode display
   AUTO
   COOL
   DRY
   HEAT
   FAN
2. SWING display
3. FAN SPEED display



4. SLEEP display
5. LOCK display
6. SIGNAL SENDING
7. TIMER OFF display
8. TIMER ON display
9. CLOCK display
10. TEMP display
11. POWER ON/OFF
    Used for unit start and stop.
12. MODE
    Used to select AUTO run, COOL, DRY, HEAT and FAN operation
13. FAN
    Used to select fan speed LO, MED, HI, AUTO
14. HOUR
    Used to set clock and timer setting.
15. SWING
    Used to set auto fan direction.
16. SLEEP
    Used to select sleep mode.
17. LOCK
    Used to lock buttons and LCD display.
18. TEMP.
    Used to select your desired temp.
19. SET
    Used to confirm timer and clock settings.
20. TIMER
    Used to select TIMER ON, TIMER OFF, TIMER ON-OFF
21. CLOCK
    Used to set correct time
22. RESET
    Used to reset the controller back to normal condition.

Clock set

When unit is started for the first time and after replacing batteries in remote controller, clock should be adjusted as follows:
Press CLOCK button, "AM" or "PM" flashes.
Press △ or ▽ to set correct time. Each press will increase or decrease 1min. If the button is kept depressed, time will change quickly.
After time setting is confirmed, press SET, "AM "and "PM" stop flashing, while clock starts working.

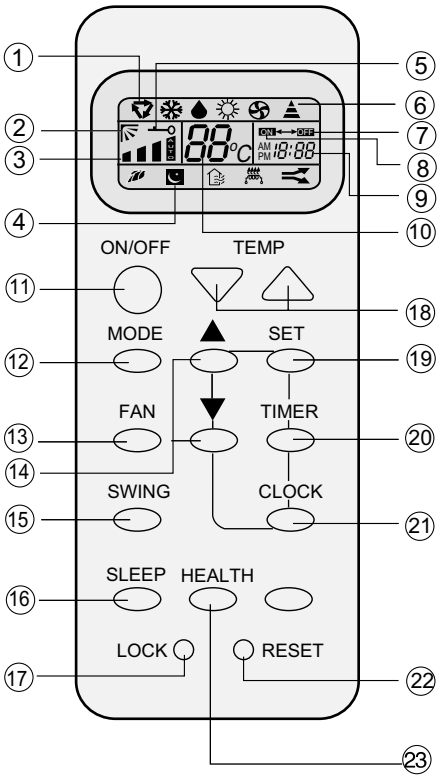
NOTE: Cooling only unit do not have displays and functions related with heating

Hints

After replacing with new batteries, remote controller will conduct self-check, displaying all information on LCD. Then, it will become normal.

Buttons and display of the remote controller.

If the unit which you purchased has healthy function, Remote controller should like the following figure:



1. Mode display
   AUTO
   COOL
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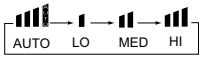
   FAN
2. SWING display
3. FAN SPEED display 

4. SLEEP display
5. LOCK display
6. SIGNAL SENDING
7. TIMER OFF display
8. TIMER ON display
9. CLOCK display
10. TEMP display
11. POWER ON/OFF
    Used for unit start and stop.
12. MODE
    Used to select AUTO run, COOL, DRY, HEAT and FAN operation
13. FAN
    Used to select fan speed LO, MED, HI, AUTO
14. HOUR
    Used to set clock and timer setting.
- -15. SWING
    Used to set auto fan direction.
16. SLEEP
    Used to select sleep mode.
17. LOCK
    Used to lock buttons and LCD display.
18. TEMP.
    Used to select your desired temp.
19. SET
    Used to confirm timer and clock settings.
20. TIMER
    Used to select TIMER ON, TIMER OFF, TIMER ON-OFF
21. CLOCK
    Used to set correct time
22. RESET
    Used to reset the controller back to normal condition.
23. HEALTH
    Used to set healthy operation

BRIEF INTRODUCTION TO HEALTH OPERATION

The anion generator in the air conditioner can generate a lot of anion to effectively balance the quantity of position and anion in the air and also to kill bacteria and speed up the dust sediment in the room and finally clean the air in the room.

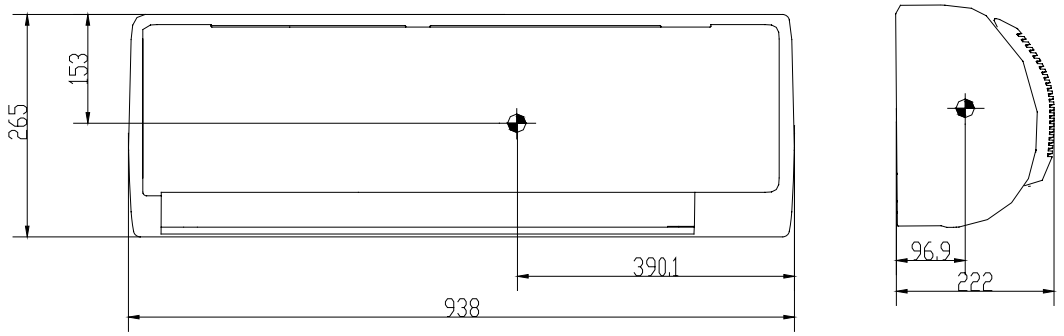
NOTE: Cooling only unit do not have displays and functions related with heating

Hints

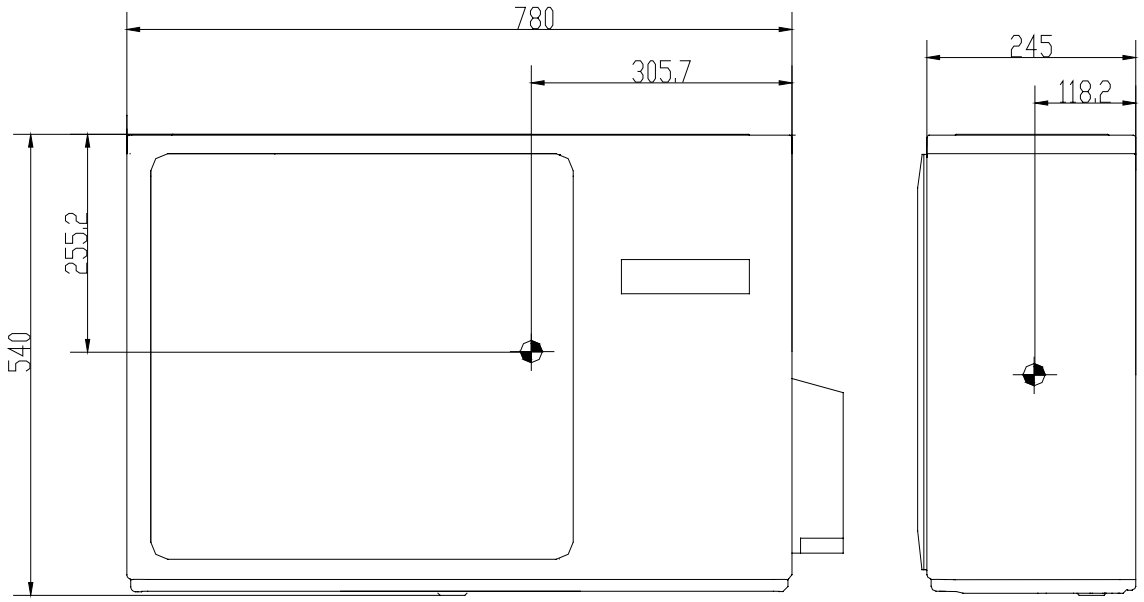
After replacing with new batteries, remote controller will conduct self-check, displaying all information on LCD. Then, it will become normal.

13 Center of gravity

Indoor unit



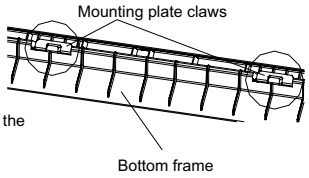
Outdoor unit

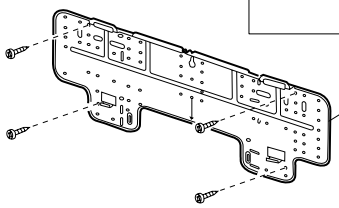


14 Installation

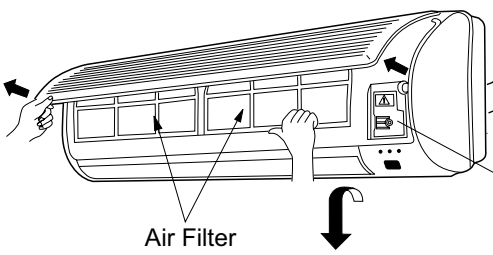
Indoor

■ How to attach the indoor unit.
Hook the claws of the bottom frame to the mounting plate.
If the claws are difficult to hook ,remove the front panel.
■ How to remove the indoor unit.
Push up the marked area (at the lower part of the front panel) to release the the claws . If it is difficult to release ,remove the front panel .

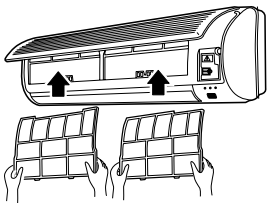




The mounting plate should be installed on a wall which can support the weight of the indoor unit.



Cut thermal insulation pipe to an appropriate length and wrap it with tape, making sure that no gap is left in the insulation pipe's cut line .



How to remove the air filter.

Open the inlet grille by pulling it upward.

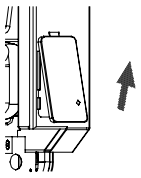
Push up the filter's center tab slightly until it is released from the stopper, and remove the filter downward.

How to Attach the air filter.

Attach the filter correctly so that the "FRONT" indication is facing to the front.Make sure that the filter is completely fixed behind the stopper.If the right and left filters are not attached correctly, that may cause defects.

Close the inlet grille.

Service lid
The service lid is an open/close type



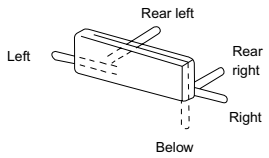
Remove the screws on the service lid.
Slide the service lid leftward.
Rotate the service lid upward

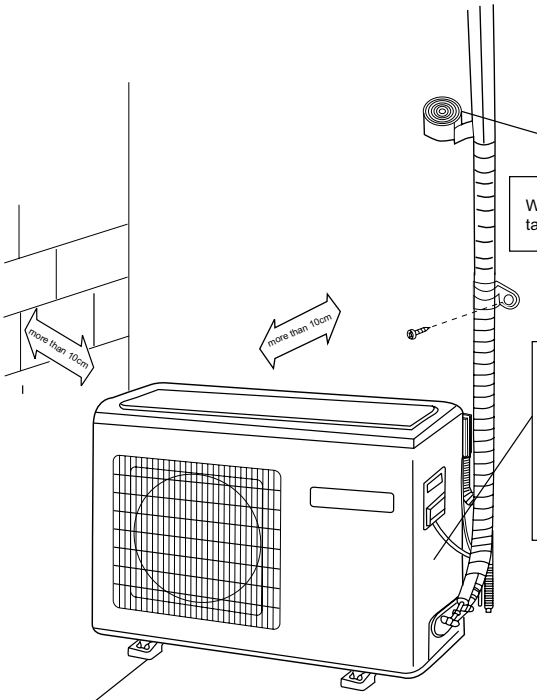
Outdoor unit

Model	35/40 class
Max.allowable length	Cooling only：20m Heat pump：25m
Max.allowable height	15m
Additional refrigerant required for refrigerant pipe exceeding 5m in length	16g/m
Gas pipe	O.D. 12.7
Liquid pipe	O.D. 6.35

*Be sure to add the proper amount of additional refrigerant.
Failuretodosomayresultinreducedperformance.

Arrangement of piping directions

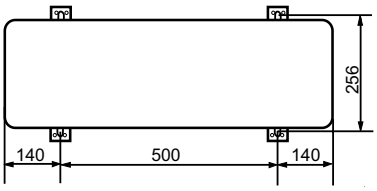




Wrap the installation pipe with the finishing tape from bottom to top Model 25 / 35 class

Service lid
- How to remove the service lid.
  This service lid is an open/close type.
  Slide the lid downward to remove it.
- How to attach the service lid.
  Insert the upper part of the service lid into the outdoor unit to install.
  Tighten the screws.

Where there is a danger of the unit falling, use foot bolts, or wires.



- Fix the unit to concrete or block with bolts(ϕ10mm) and nuts firmly and horizontally.
- When fitting the unit to wall surface, roof or rooftop, fix a supporter surely with nails or wires in consideration of earthquake and strong wind. The distance between the indoor unit and the floor should be more than 2m
- If vibration may affect the house, fix the unit by attaching a vibration-proof mat.

Sincere Forever

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