Haier
Inspired living

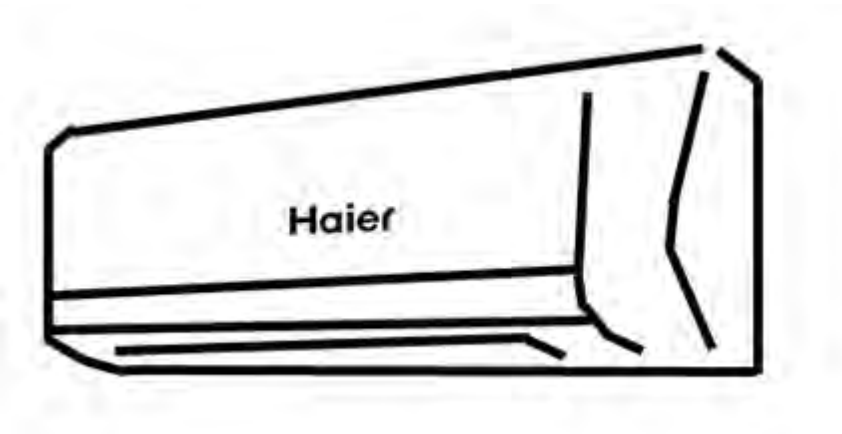
Domestic
Air conditioner

TECHNICAL DATA

ON/OFF

Wall mounted Type Arc-Series

HSU-07RD03
HSU-12HA03/Z1



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 CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS				HSU-07RD03	HSU-12HA03/Z1
NOMINAL INPUT	Cooling	nominal	kW	0.1	0.1
	Heating	nominal	kW	0.1	0.1

NOMINALCAPACITY and NOMINAL INPUT					
Model				HSU-07RD03	HSU-12HA03/Z1
NORMINAL CAPACITY(3-4)	Cooling(1)	norm.	kw	2.05	3.45
	Heating(2)	norm.	kw	2.3	3.65
NORMINAL INPUT	Cooling	norm	kw	0.77	1.25
	Heating	norm.	kw	0.75	1.28
EER	Cooling			2.66	2.76
COP	Heating			3.07	2.85
ENERGY LABEL(7-8)	Cooling			----	----
	Heating			----	----
ANNUAL ENERGY CONSUMPTION(9)	Cooling		kwh	307.5	530

TECHNICAL SPECIFICATIONS						
INDOOR UNITS					HSU-07RD03	HSU-12HA03/Z1
DIMENSIONS	Unit	H	mm		265	
		W	mm		795	
		D	mm		182	
WEIGHT	Unit			kg	7.2	8.6
COLOR	Unit				white	
SOUND LEVEL	Sound pressure (cooling/heating)(5)	high		dB(A)	37/39	44/47
		medium		dB(A)	35/37	40/43
		low		dB(A)	30/35	37/39
	Sound power(cooling/heating)(6)	high		dB(A)	47/49	54/57
FAN	Air flow rate(cooling/heating)	high		m^3/min	6.4/6.8	8.3/8.9
		low		m^3/min	5.6/5.7	8.0/8.3
		super low		m^3/min	5.1/5.4	6.8/6.9
	Speed(cooling/heating)	steps			5steps,silent and auto	
		high		rpm	1150/1200	1250/1350
		medium		rpm	1050/1100	1100/1200
		low		rpm	950/1000	950/1050
	Type				Cross flow fan	
	Motor output			W	19	28
HEAT EXCHANGGER	Type				ML fin - Φ9.52HI - XA tube	
	Row x stage x fin pitch			mm	2 x 8 x1.4	
AIR FILTER					Removable/washable/mildew proof	
REMOTE CONTROLLER					YR-05	YL-M07
TEMPERATURE CONTROL					Microcomputer control	
PIPING CONNECTIONS(external diameter)		liquid		mm	Φ 6.35	Φ 9.52
		gas		mm	Φ9.52	Φ 12.7
		drain		mm	Φ 16	Φ 16
INSULATION MATERIAL	Heat insulation type				both liquid and gas pipes	

TECHNICAL SPECIFICATIONS						
OUTDOOR UNITS					HSU-07RD03	HSU-12HA03/Z1
NET DIMENSIONS	Unit		H	mm	428	
			W	mm	700	
			D	mm	261	
WEIGHT	Unit			kg	28	32
COLOR	Unit				white	
SOUND LEVEL	Sound pressure(cooling/heating)(5)	high		dB(A)	51/52.5	52/53
	Sound power(cooling/heating)(6)	high		dB(A)	61/62.5	62/63
FAN	Air flow rate(cooling/heating)	high		m^3/min	7.8/8.3	8.3/8.7
		low		m^3/min	5.8/6.3	5.9/6.3
	Speed(cooling/heating)	high		rpm	800/830	860/880
		low		rpm	650/720	650/720
	Type				Propeller fan	
	Motor output			W	19	30
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	
	Refrigerant charge			kg	0.54	0.97
	Maximum allowable distance between indoor and outdoor			m	20	
	Maximum allowable level difference			m	10	
	Refrigerant control				----------	
COMPRESSOR	Type				rotary Compressor	
	Model				KH134VFRC	SUBJECT 48R313NL-5ESF
	Motor output			w	770	970
	Oil type				DIAMOND MS-56	SUNISO 4GSI
	Oil charge volume			L	0.27	0.52
PIPING CONNECTIONS	liquid			mm	Φ 6.35	
	gas			mm	Φ 9.52	
	drain			mm	Φ 16	
INSULATION MATERIAL	Heat insulation type				both liquid and gas pipes	

ELECTRICAL SPECIFICATIONS					
For combination indoor units+ outdoor units:				HSU-07RD03	HSU-12HA03/Z1
CURRENT	Nominal running current	cooling	A	3.6	6.0
		heating	A	3.6	6.1
	Maximum running current	cooling	A	3.9	7.0
		heating	A	4.1	7.1
	Starting current	cooling	A	16	34
		heating	A	16	34

For indoor units only:			HSU-07RD03	HSU-12HA03/Z1
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

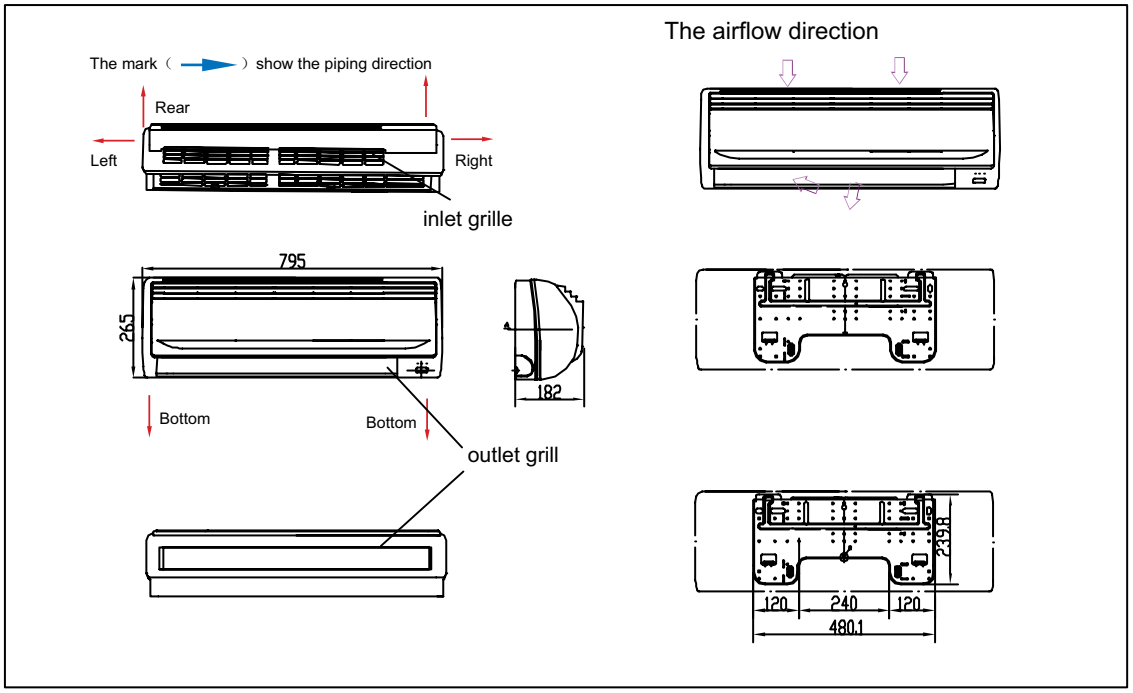
Model	HSU-07RD03	HSU-12HA03/Z1
YR-M07	N	Y
YR-H10	N	Y
YR-M05	Y	N
YR-H03	Y	N

4 Sensors lists

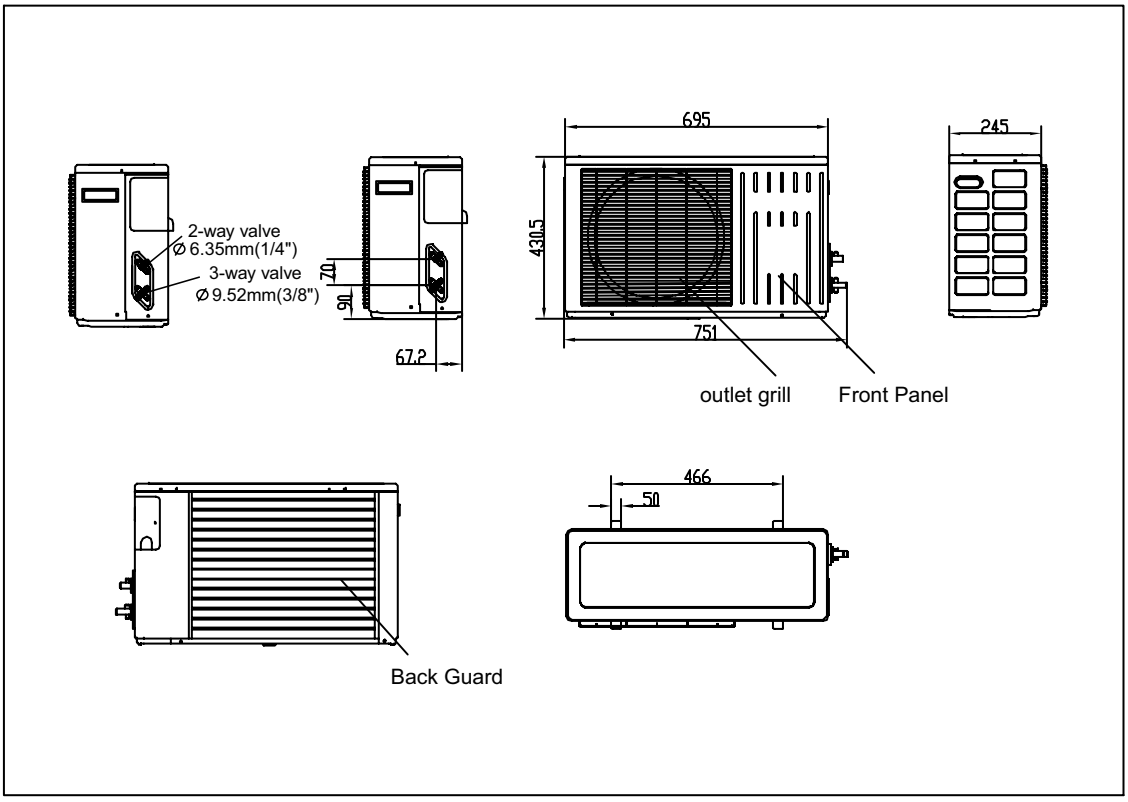
INDOOR UNIT		
type	Description	Qty
Room sensor	It's used for detecting room temperature	1
Pipe sensor	It's used for detecting temperature of evaporator	1

5 Dimensional drawings

Indoor unit

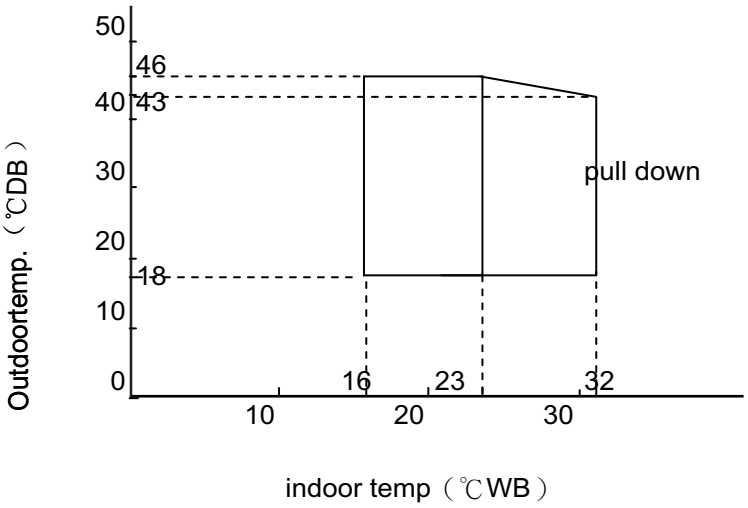


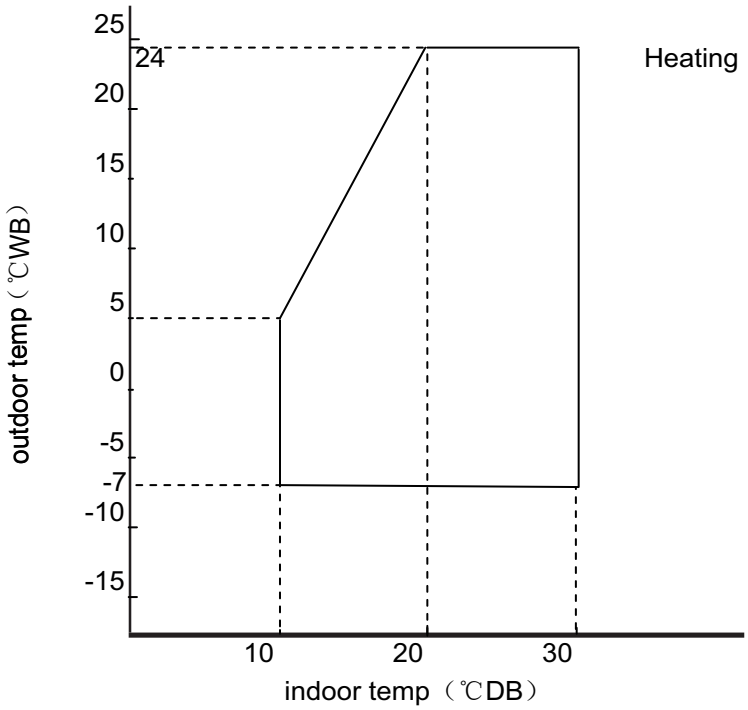
Outdoor unit



6 Operation range

The name of parts Cooling





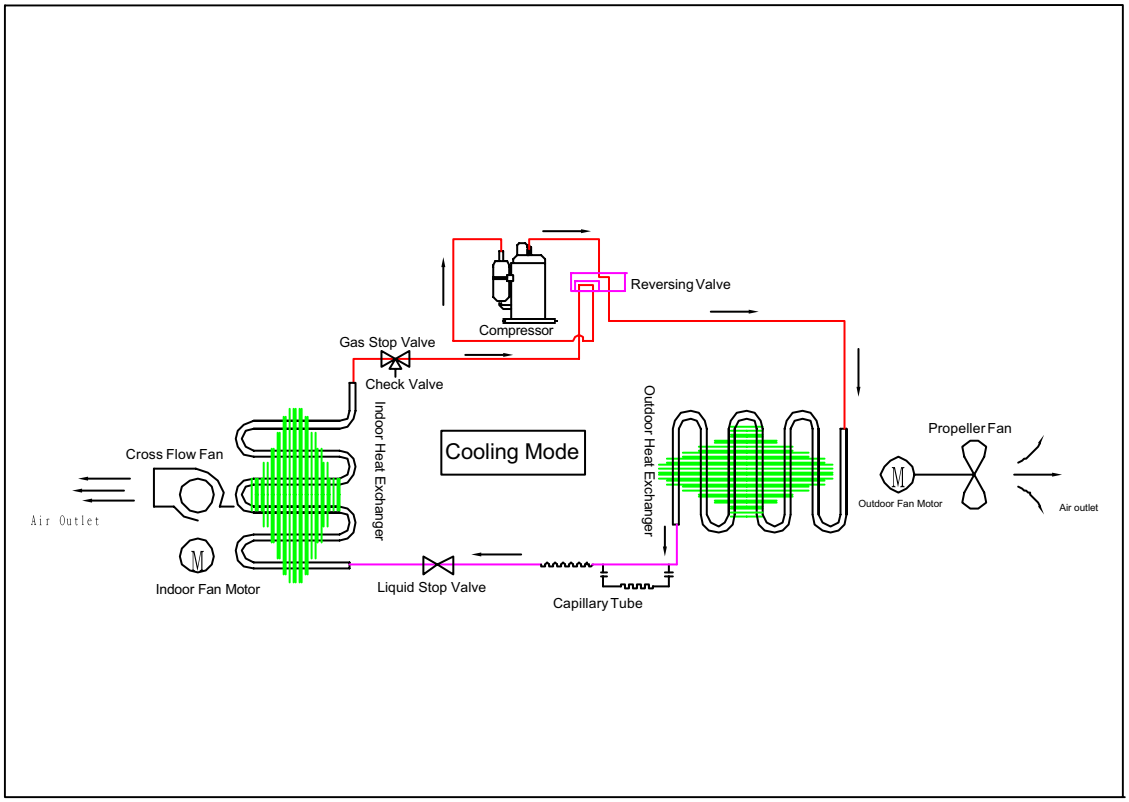
Notes：

The graphs are based on the following condition：

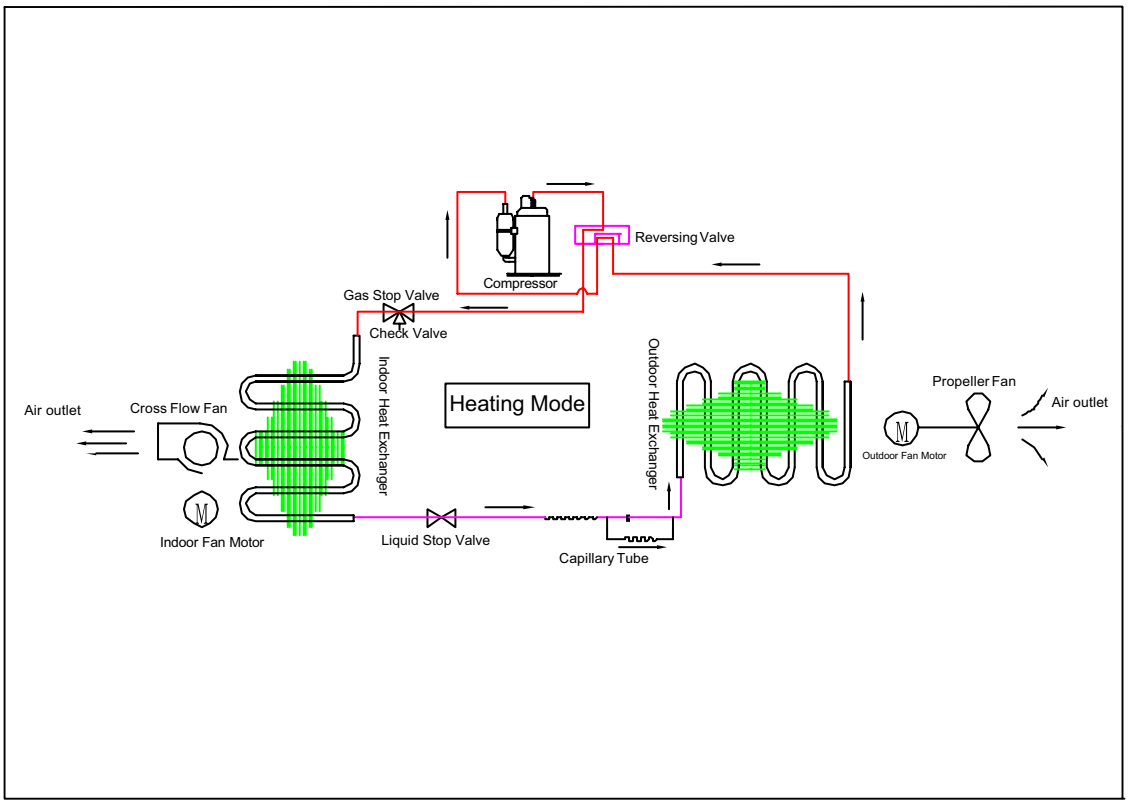
Equivalent piping length	7.5m
Level difference	0m
Air flow rate	high

7 Piping diagrams

Cooling mode



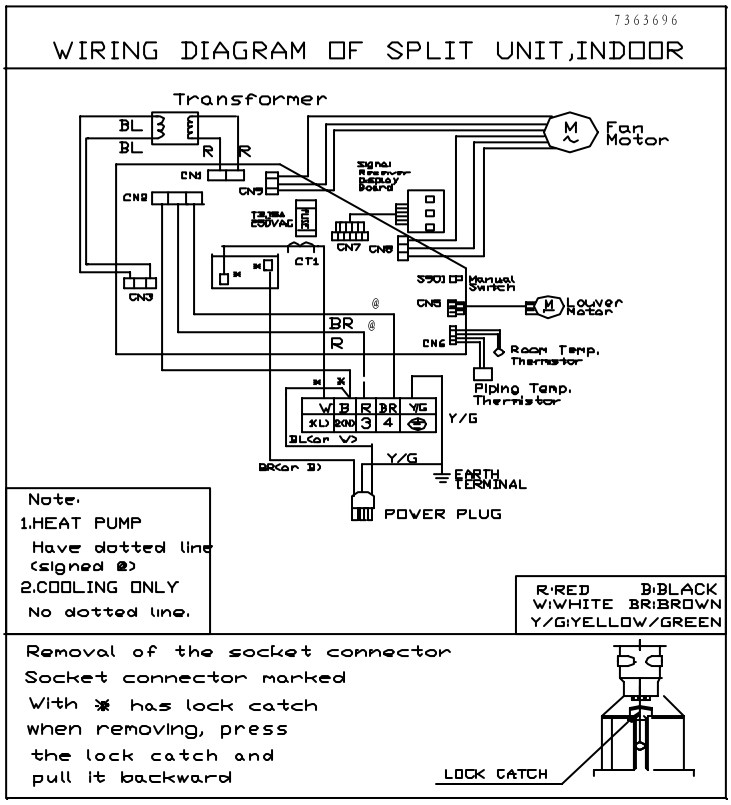
Heating mode



8 Wiring diagrams

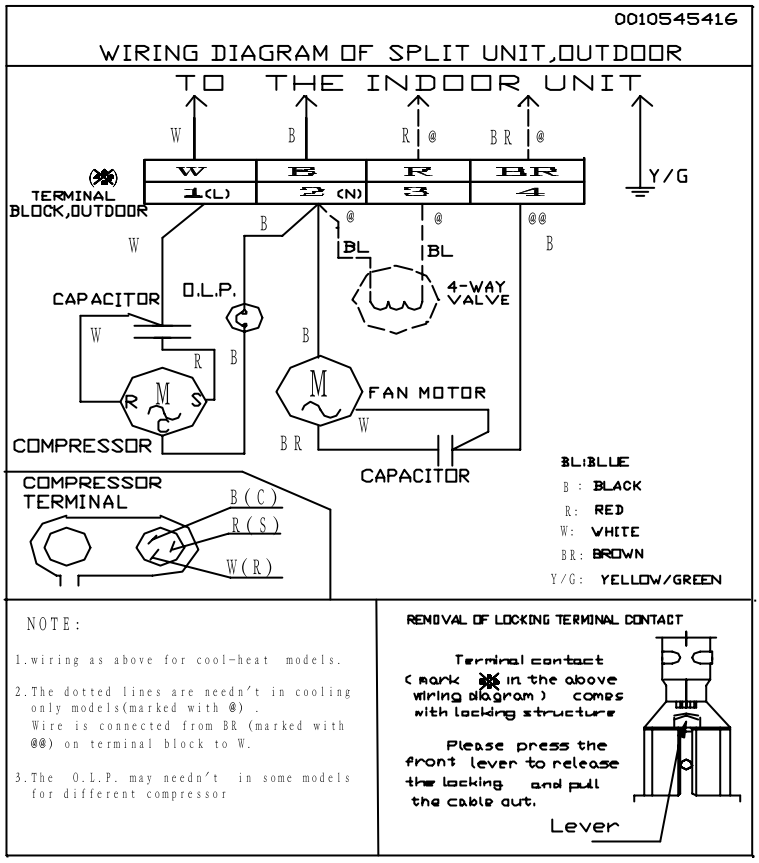
HSU-07RD03

Indoor unit

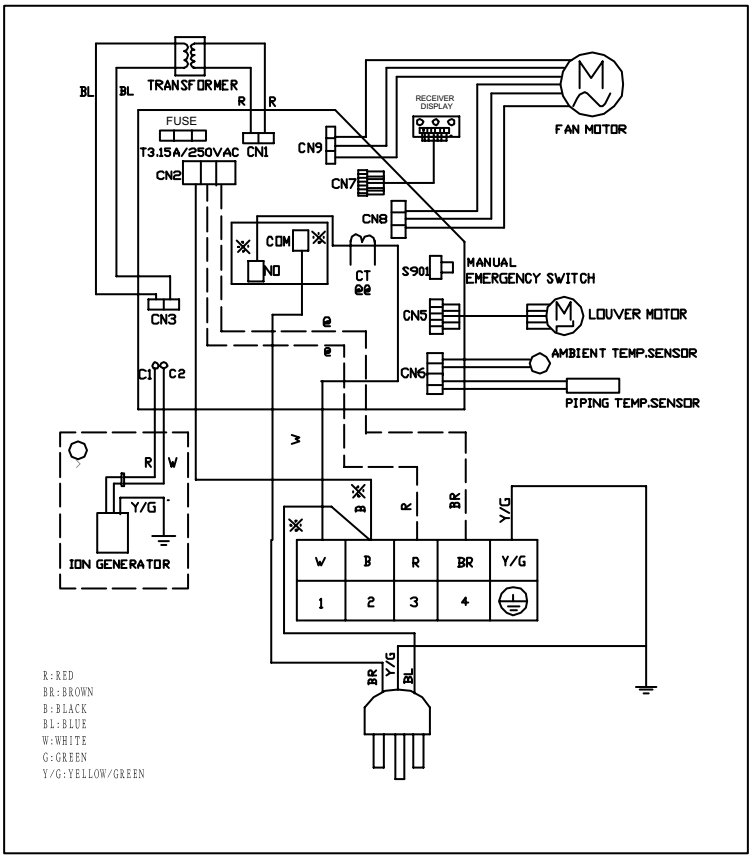


HSU-07RD03

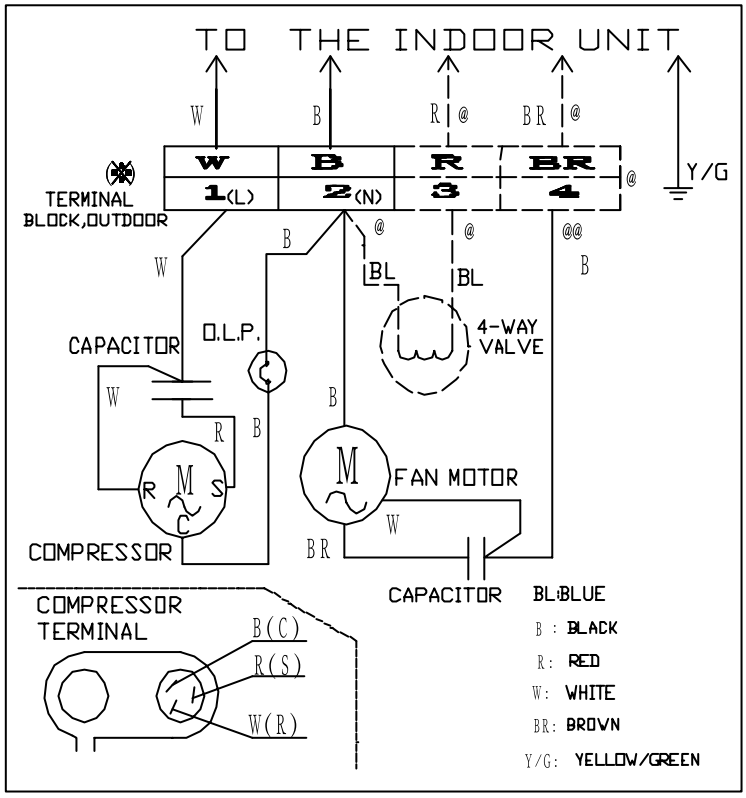
Outdoor unit



HSU-12HA03/Z1
Indoor unit

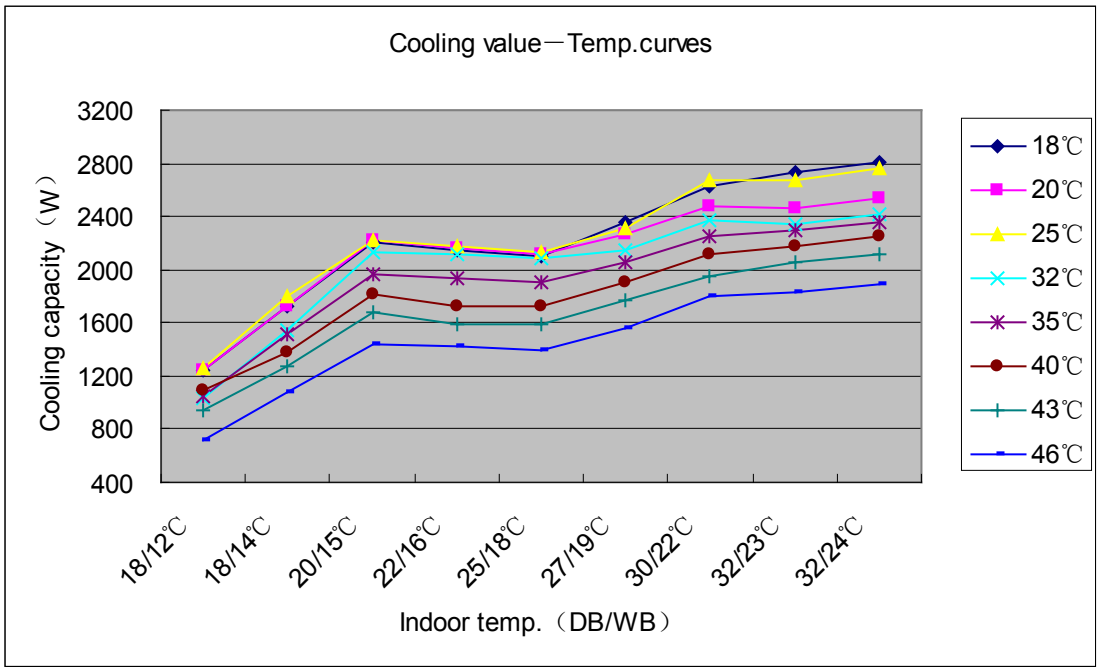


HSU-12HA03/Z1
Outdoor unit

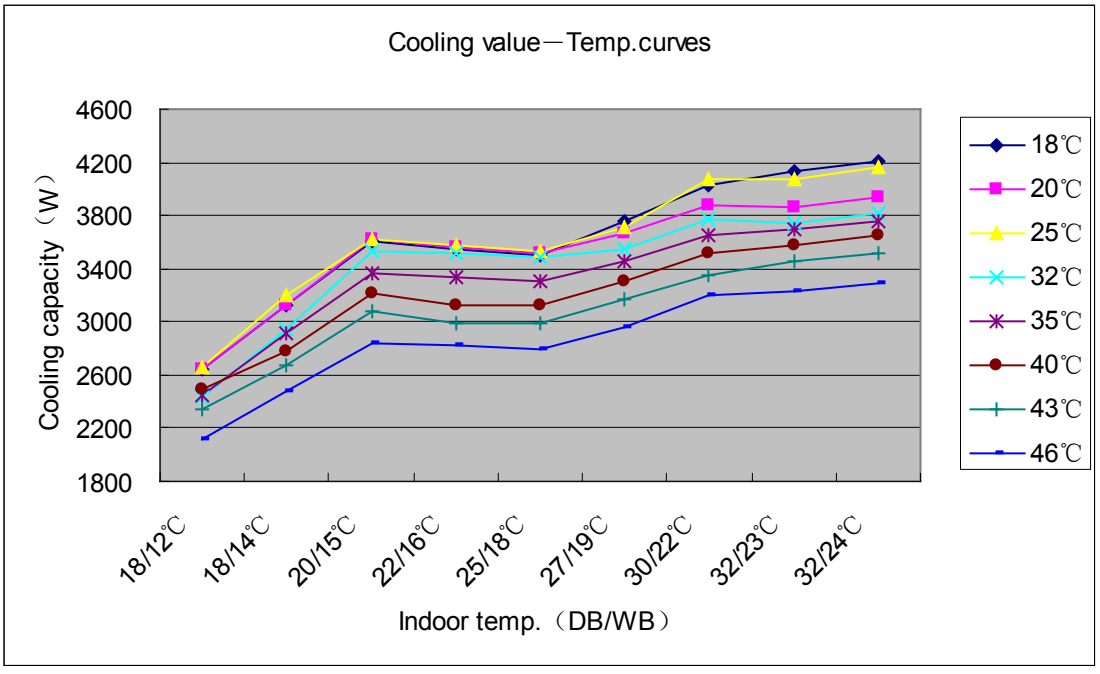


9 Capacity tables and curves diagrams

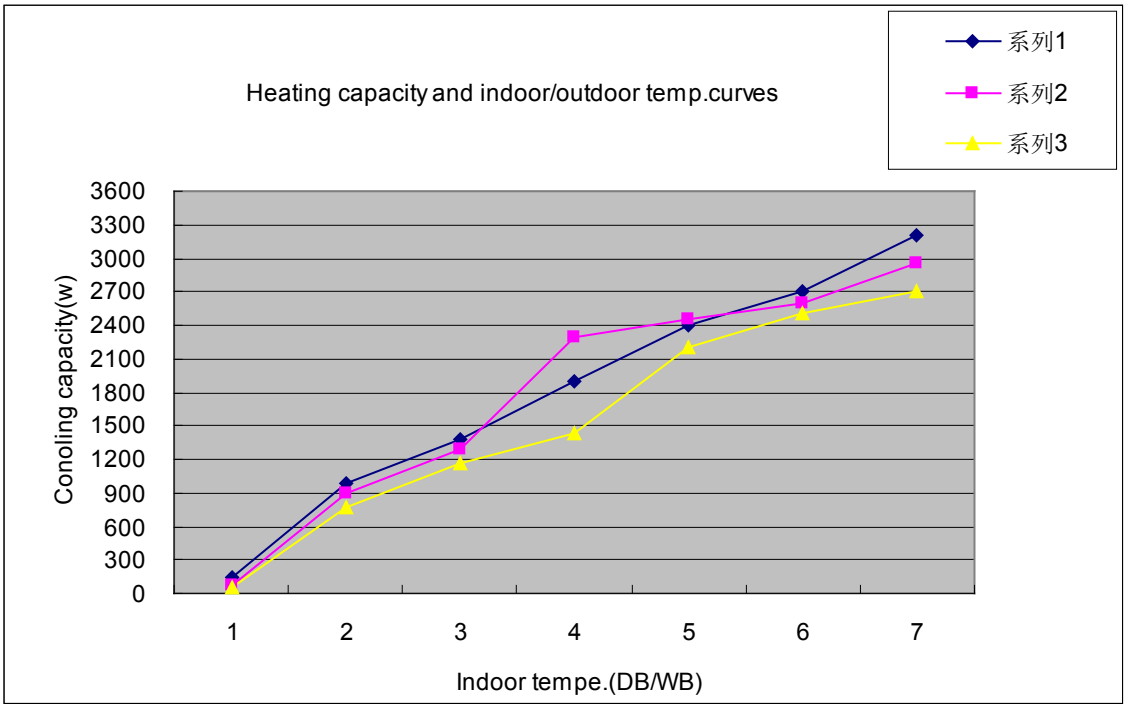
HSU-07RD03 performance curves cooling value-temerature talbe								
indoor temp	outdoor temp.(humidity 46%)							
DB/WB	18℃	20℃	25℃	32℃	35℃	40℃	43℃	46℃
18/12℃	1236	1247	1257	1036	1046	1089	939	723
18/14℃	1719	1730	1797	1545	1508	1378	1266	1080
20/15℃	2201	2214	2227	2132	1970	1809	1673	1437
22/16℃	2147	2163	2180	2112	1937	1731	1592	1427
25/18℃	2094	2113	2132	2091	1904	1718	1595	1399
27/19℃	2355	2265	2315	2152	2050	1899	1776	1552
30/22℃	2632	2484	2672	2378	2248	2118	1946	1799
32/23℃	2732	2468	2678	2349	2292	2183	2055	1827
32/24℃	2811	2542	2756	2421	2363	2251	2120	1890



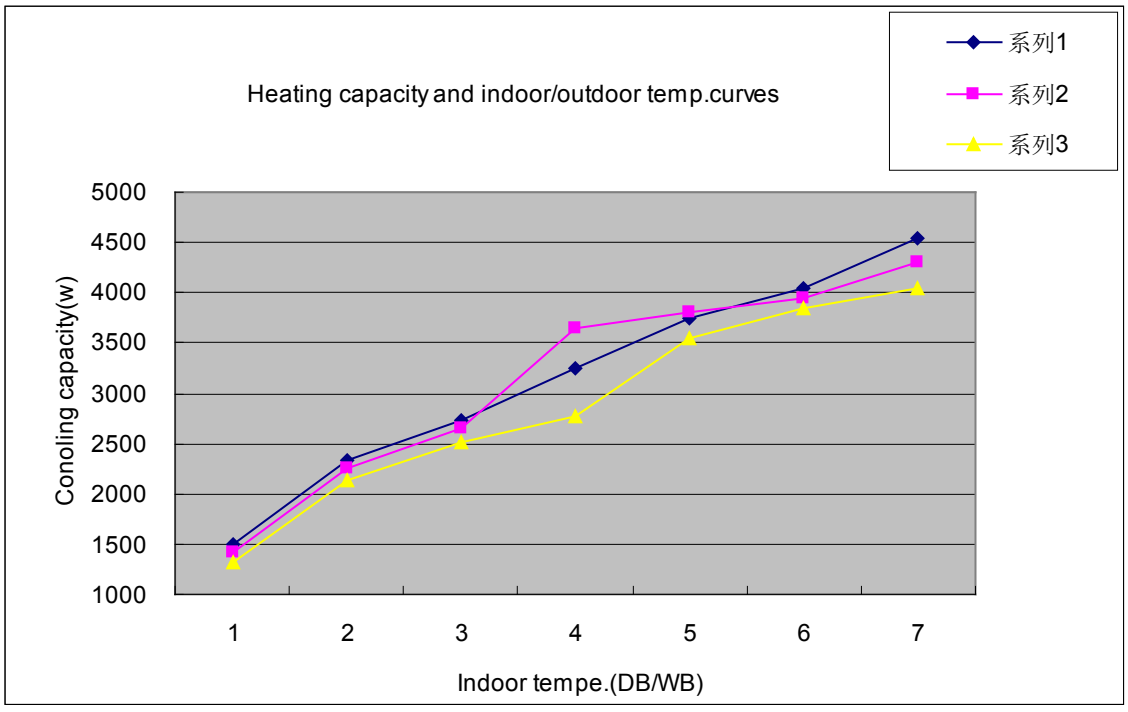
HSU-12HA03/Z1 performance curves								
cooling value-temerature talbe								
indoor temp	outdoor temp.(humidity 46%)							
DB/WB	18℃	20℃	25℃	32℃	35℃	40℃	43℃	46℃
18/12℃	2636	2647	2657	2436	2446	2489	2339	2123
18/14℃	3119	3130	3197	2945	2908	2778	2666	2480
20/15℃	3601	3614	3627	3532	3370	3209	3073	2837
22/16℃	3547	3563	3580	3512	3337	3131	2992	2827
25/18℃	3494	3513	3532	3491	3304	3118	2995	2799
27/19℃	3755	3665	3715	3552	3450	3299	3176	2952
30/22℃	4032	3884	4072	3778	3648	3518	3346	3199
32/23℃	4132	3868	4078	3749	3692	3583	3455	3227
32/24℃	4211	3942	4156	3821	3763	3651	3520	3290



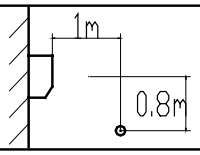
HSU-07RD03 performance curves			
heating capacity and indoor/outdoor temp.curves			
outdoor temp.	indoor temp.(humidity 46%)		
DB/WB	15℃	20℃	25℃
-15℃	145	72	50
-5℃	984	898	775
5℃	1386	1294	1169
7/6℃	1899	2300	1428
15℃	2400	2450	2200
20℃	2700	2600	2500
25℃	3200	2950	2700



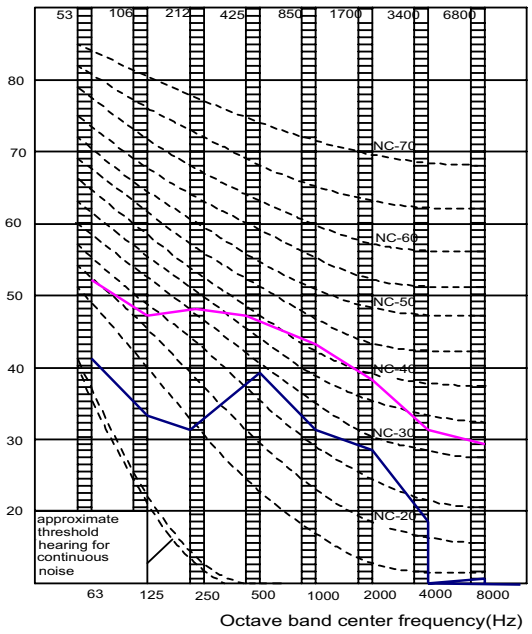
HSU-12HA03/Z1 performance curves			
heating capacity and indoor/outdoor temp.curves			
outdoor temp.	indoor temp.(humidity 46%)		
DB/WB	15℃	20℃	25℃
-15℃	1495	1422	1325
-5℃	2334	2248	2125
5℃	2736	2644	2519
7/6℃	3249	3650	2778
15℃	3750	3800	3550
20℃	4050	3950	3850
25℃	4550	4300	4050



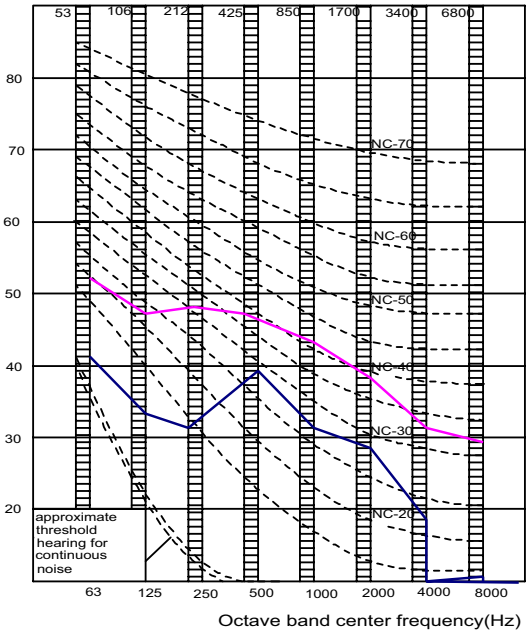
10 Sound level

Model	Sound presure level			Measuring location Location of microphone	sound power level (cooling/heating)
	220~230V,50Hz Cooling/heating				
	H	L	SL		
HSU-07RD03	37/39	35/38	30/35		51/61
HSU-12HA03/Z1	44/46	40/45	37/38		52/62

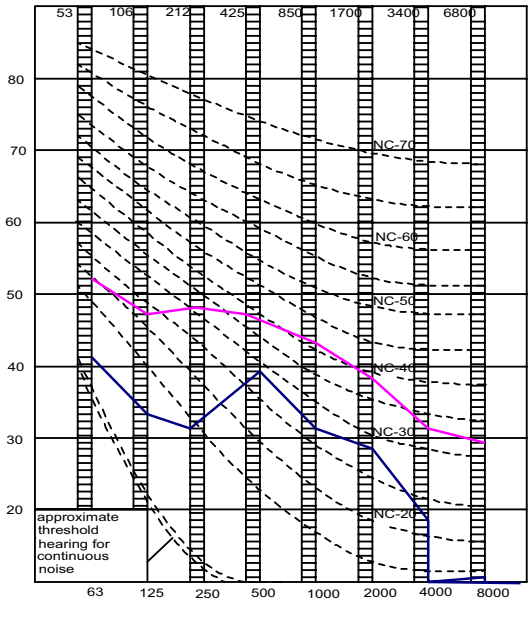
HSU-07RD03 cooling



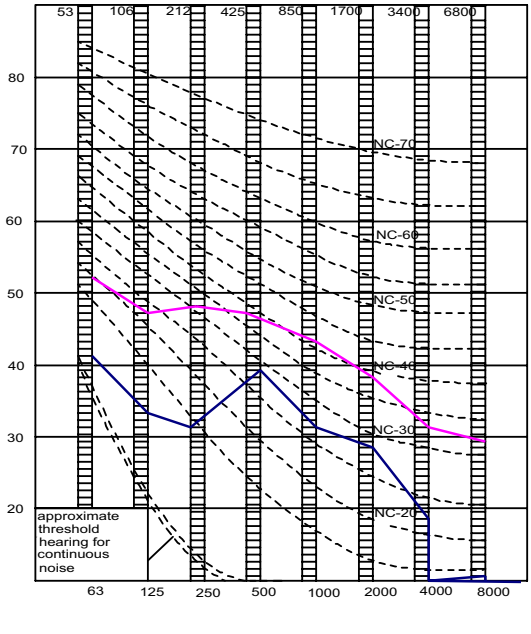
HSU-07RD03 heating



HSU-12HA03/Z1 cooling



HSU-12HA03/Z1 heating



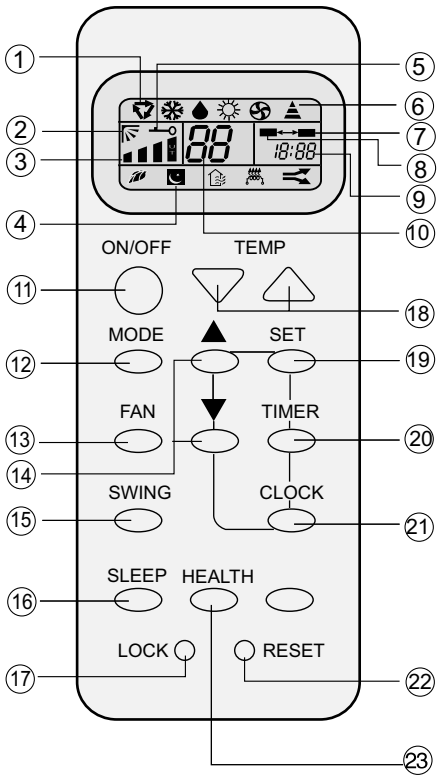
11 Accessories

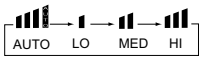
Standard accessories

Standard name	HSU-07RD03	HSU-12HA03/Z1
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

HSU-07RD03



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.
23. HEALTH
    Used to set healthy operation

Note:
For some models without negative ion function don't have the "HEALTH" button.

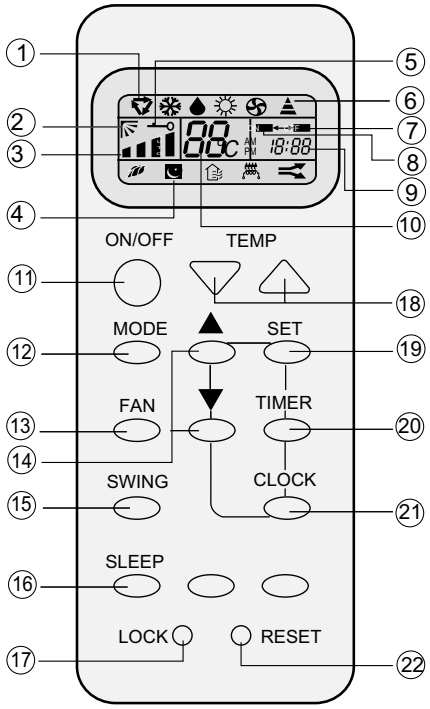
Clock set

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.

HSU-12HA03/Z1



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
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    Used to select fan speed LO, MED, HI, AUTO
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    Used to set clock and timer setting.
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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.

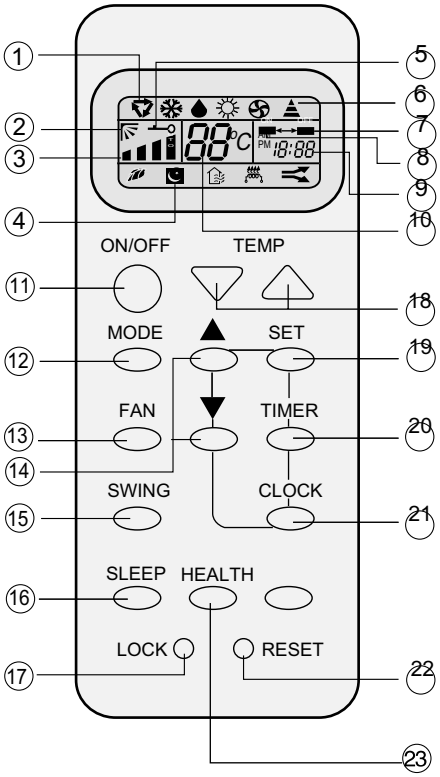
NOTE: Cooling only unit do not have displays and functions related with heating

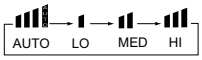
Hints

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

HSU-12HA03/Z1

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



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.
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.

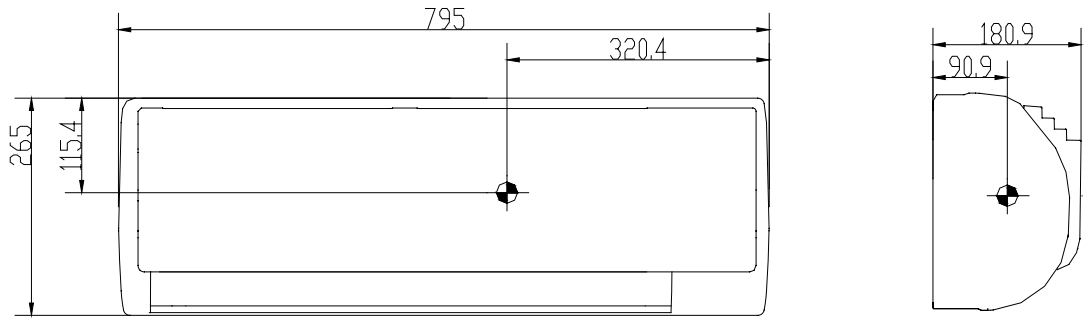
NOTE: Cooling only unit do not have displays and functions related with heating

Hints

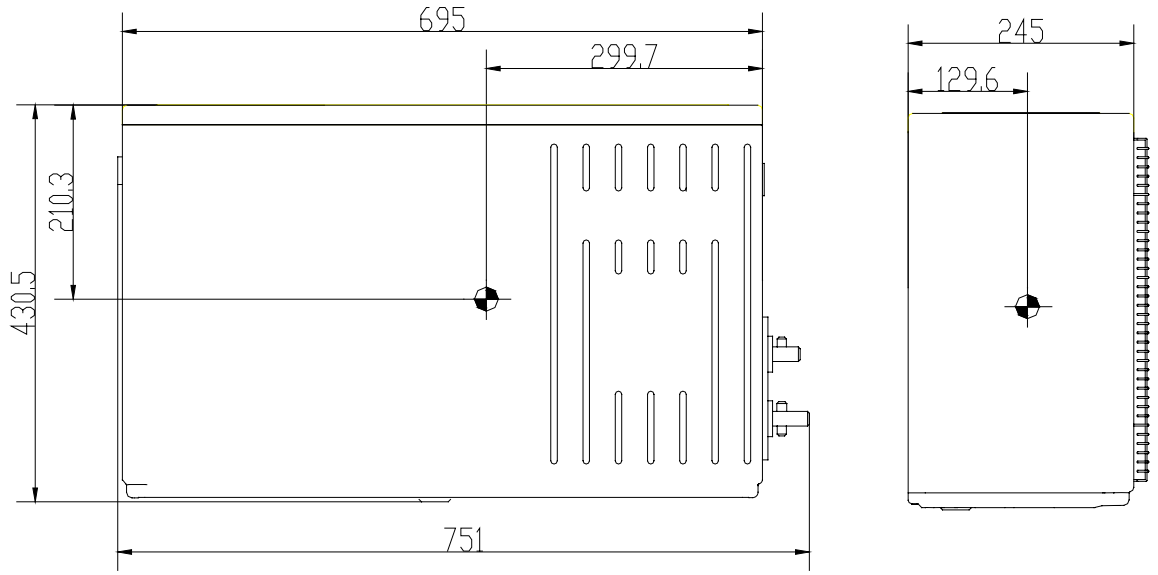
After replacing with new batteries, remote controller will conduct self-check, displaying all information on LCD. Then, it will become normal.

13 Center of gravity

Indoor unit



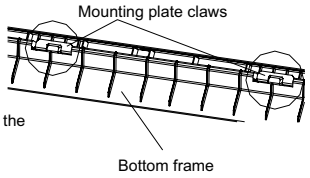
Outdoor unit

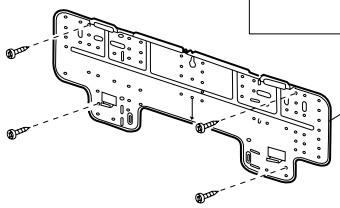


14 Installation

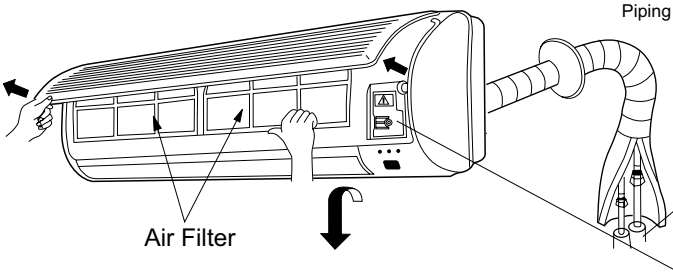
Indoor

■ 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 .

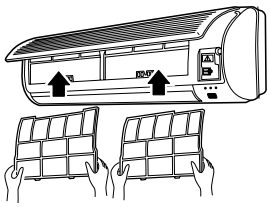




The mounting plate should be installed on a wall which can support the weight of the indoor unit.



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.

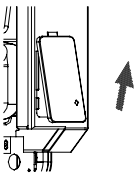
Push up the filter's center tab slightly until it is released from the stopper, and remove the filter downward.

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



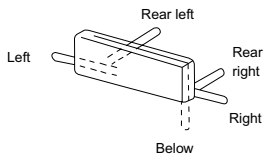
Remove the screws on the service lid.
Slide the service lid leftward.
Rotate the service lid upward

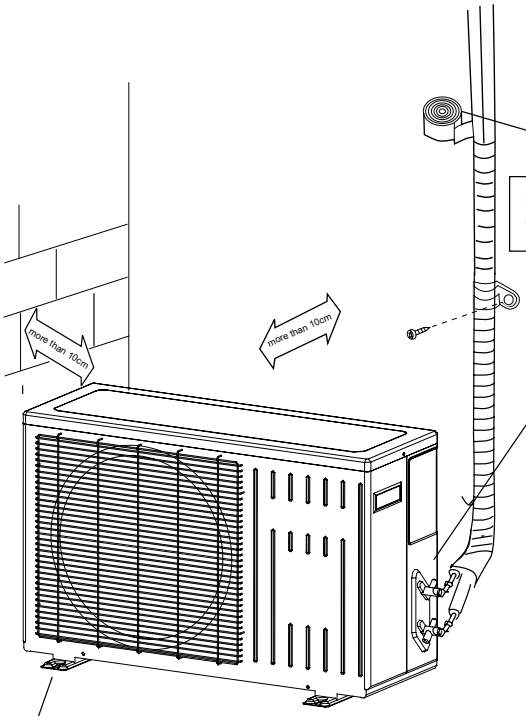
Outdoor

Model	26/28 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. 9.52/12.7
Liquid pipe	O.D. 6.35

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

Arrangement of piping directions

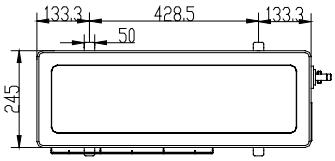




Wrap the installation pipe with the finishing tape from bottom to top Model 25 / 35 class

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

Haier Group

Haier Industrial Park, No.1, Haier Road
266101, Qingdao, China
E-mail: hractech@haier.com
Tel: +86 532 87636957
Http://www.haier.com

Edited by: Guo Xia

Signed by: Zhang Lizhi

Approved by: Zhu Zhenxue