



Domestic Air conditioner

TECHNICAL DATA

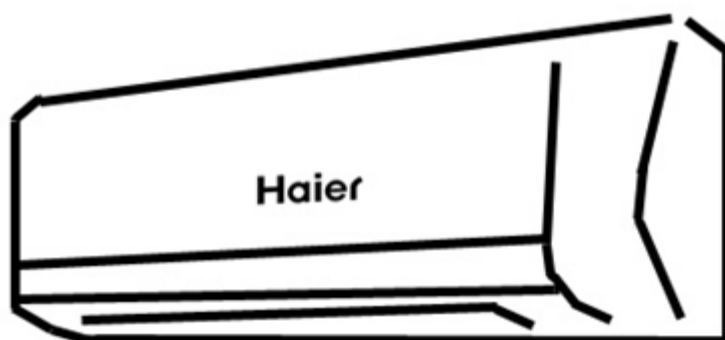
ON/OFF

Wall mounted Type Arc-Series

HSU-28HA03/R2

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.



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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°C " ,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-28HA03/R2
NOMINAL INPUT	Cooling	nominal	kW	0.1
	Heating	nominal	kW	0.1

NOMINALCAPACITY and NOMINAL INPUT				
Model				HSU-28HA03/R2
NORMINAL CAPACITY(3-4)	Cooling(1)	norm.	kw	7.8
	Heating(2)	norm.	kw	8.6
NORMINAL INPUT	Cooling	norm	kw	2.88
	Heating	norm.	kw	2.93
EER	Cooling			2.71
COP	Heating			2.93
ENERGY LABEL(7-8)	Cooling			D
	Heating			D
ANNUAL ENERGY CONSUMPTION(9)	Cooling		kwh	946

TECHNICAL SPECIFICATIONS				
INDOOR UNITS				HSU-28HA03/R2
DIMENSIONS	Unit	H	mm	224
		W	mm	1155
		D	mm	308
WEIGHT	Unit		kg	17.5
COLOR	Unit			white
SOUND LEVEL	Sound pressure (cooling/heating)(5)	high	dB(A)	47
		medium	dB(A)	45
		low	dB(A)	43
	Sound power(cooling/heating)(6)	high	dB(A)	47
FAN	Air flow rate(cooling/heating)	high	m ³ /min	17.6
		low	m ³ /min	15.8
		super low	m ³ /min	13.5
	Speed(cooling/heating)	steps		5steps,silent and auto
		high	rpm	1500
		medium	rpm	1340
		low	rpm	1180
	Type			Cross flow fan
	Motor output		W	35
HEAT EXCHANGER	Type			ML - φ7Hi - XA bube
	Rows x stages x fin pitch			2 x 10 x 1.4
AIR FILTER				Removable/washable/mildew proof
REMOTE CONTROLLER				YR-H03
TEMPERATURE CONTROL				Microcomputer control
PIPING CONNECTIONS(external diameter)		liquid	mm	Φ 9.52
		gas	mm	Φ 15.88
		drain	mm	Φ 16
INSULATION MATERIAL	Heat insulation type			both liquid and gas pipes

TECHNICAL SPECIFICATIONS				
OUTDOOR UNITS				HSU-28HA03/R2
NET DIMENSIONS (stop valve, and bottom support is not included)	Unit	H	mm	714
		W	mm	860
		D	mm	308
WEIGHT	Unit		kg	63.5
COLOR	Unit			white
SOUND LEVEL	Sound pressure(cooling/heating)(5)	high	dB(A)	58
	Sound power(cooling/heating)(6)	high	dB(A)	58
FAN	Air flow rate(cooling/heating)	high	m ³ /min	45
		low	m ³ /min	40
	Speed(cooling/heating)	high	rpm	830
		low	rpm	---
	Type			Propeller fan
	Motor output		W	35
HEAT EXCHANGER	Type		ML fin -Φ 9.52HI - XA tube	
	Row x stage x fin pitch		mm	2 x 14x1.4
REFRIGERANT CIRCUIT	Refrigerant type			R410a
	Refrigerant charge		kg	2.38
	Maximum allowable distance between indoor and outdoor		m	15
	Maximum allowable level difference		m	20
	Refrigerant control			---
COMPRESSOR	Type			Rotary Compressor
	Model			PA330X3CS-4MU1
	Motor output		w	2760
	Oil type			ESTER OIL VG74
	Oil charge volume		L	1.1
PIPING CONNECTIONS	liquid		mm	Φ9.52
	gas		mm	Φ15.88
	drain		mm	Φ16
INSULATION MATERIAL	Heat insulation type			both liquid and gas pipes

ELECTRICAL SPECIFICATIONS				
For combination indoor units+ outdoor units:				HSU-28HA03/R2
CURRENT	Nominal running current	cooling	A	12.6
		heating	A	12.8
	Maximum running current	cooling	A	15.7
		heating	A	16.0
	Starting current	cooling	A	63
		heating	A	63

For indoor units only:			HSU-28HA03/R2
POWER SUPPLY			VM
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase		1PH
	Frequency	Hz	50
	Voltage	V	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

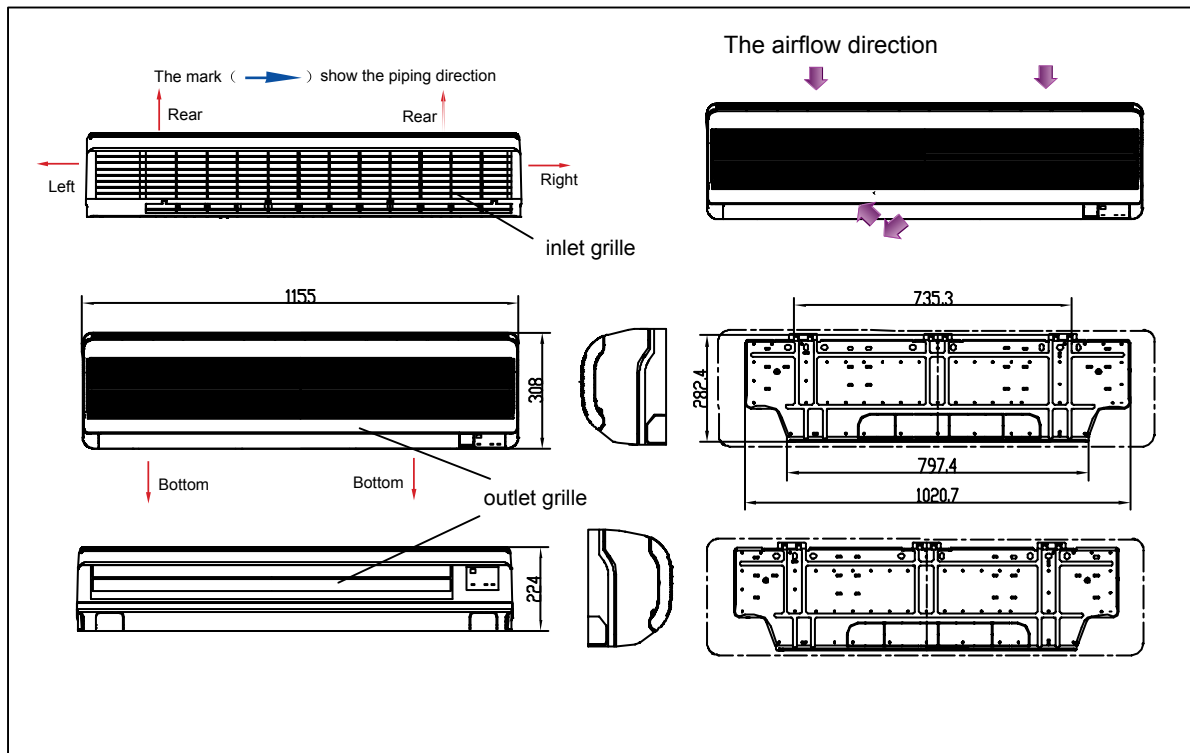
Model	HSU-28HA03/R2
YR-H03	Y
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4 Sensors lists

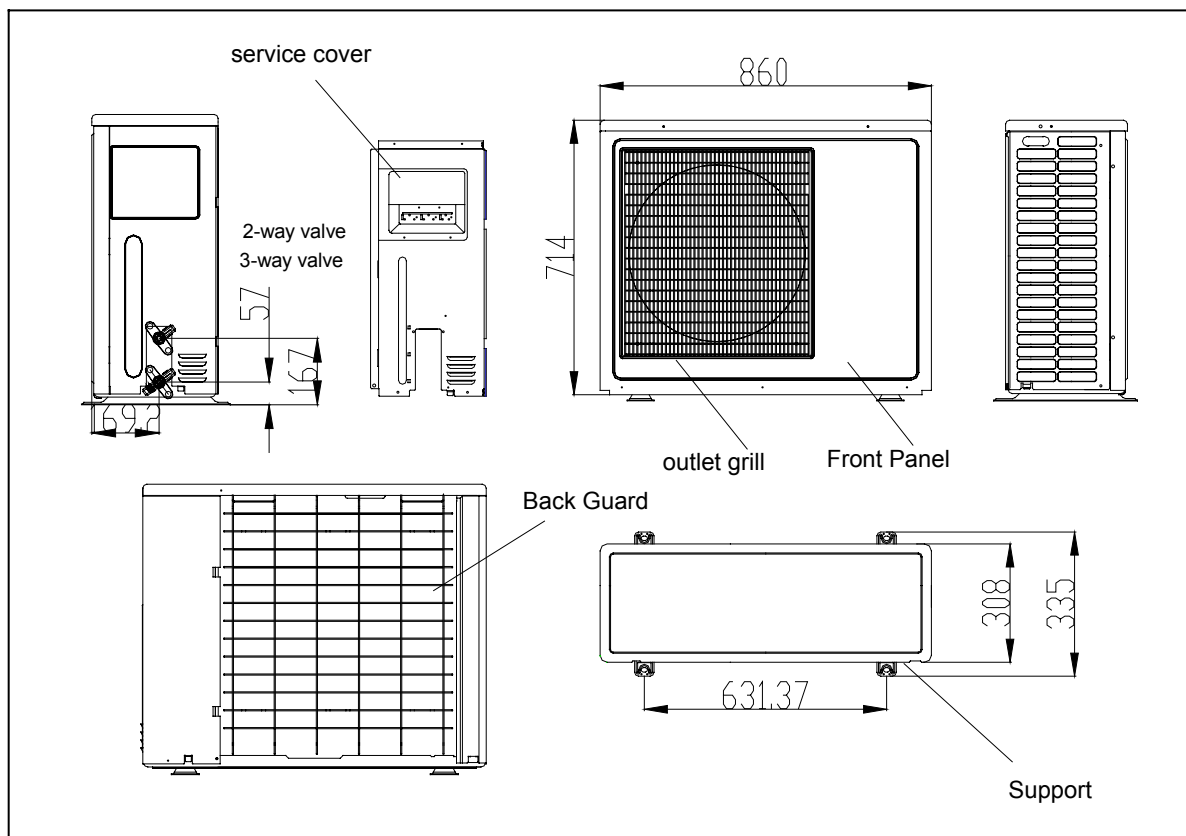
INDOOR UNIT		
type	Description	Qty
Room sensor	It's used for detecting room temperature	1
Pipe sensor	It's used for detecting temperature of evaporator	1

5 Dimensional drawings

Indoor unit



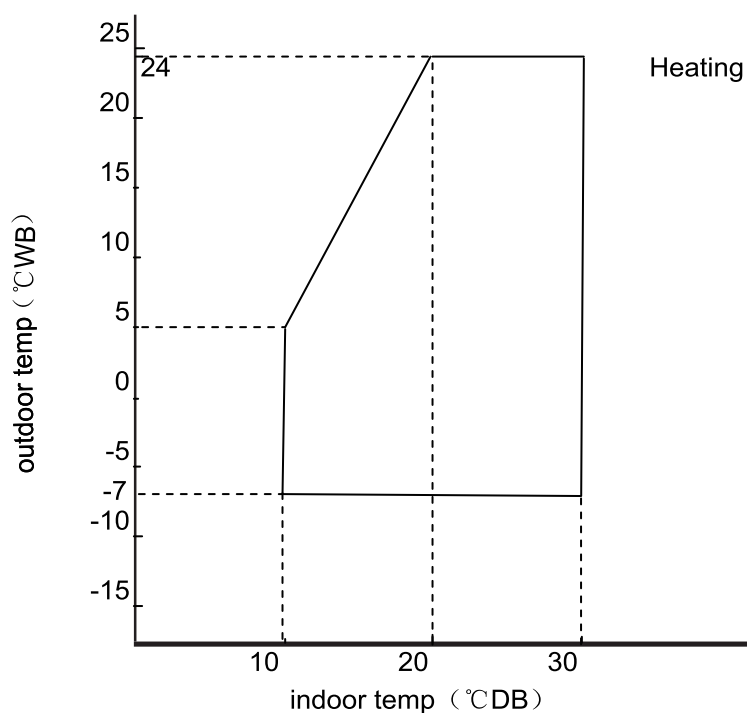
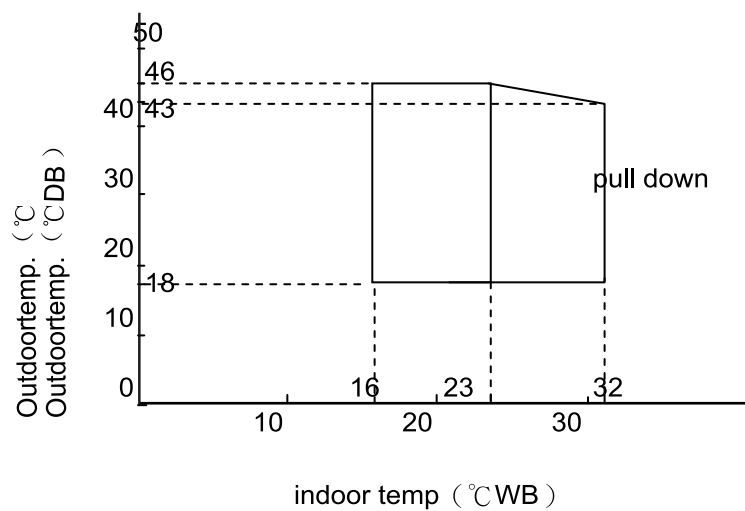
Outdoor unit



6 Operation range

The name of parts

Cooling

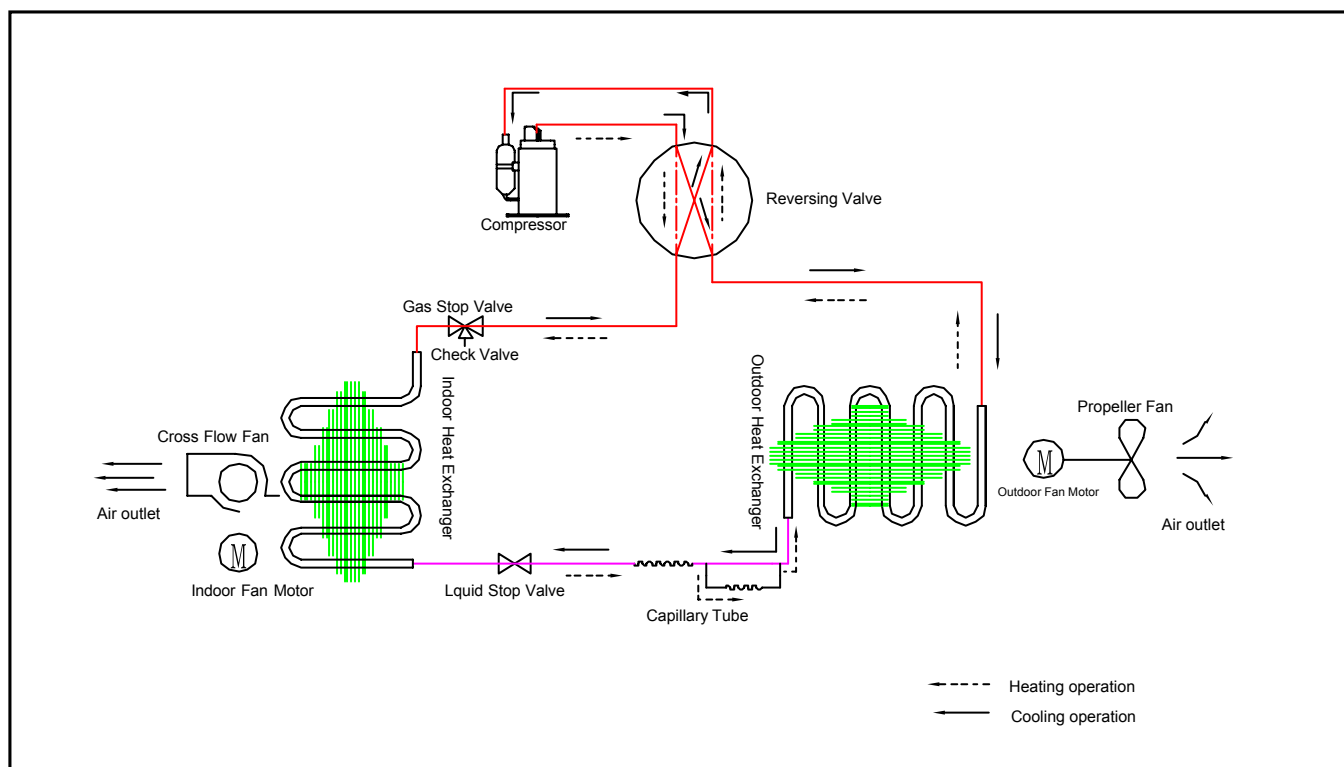


Notes:

The graphs are based on the following condition:

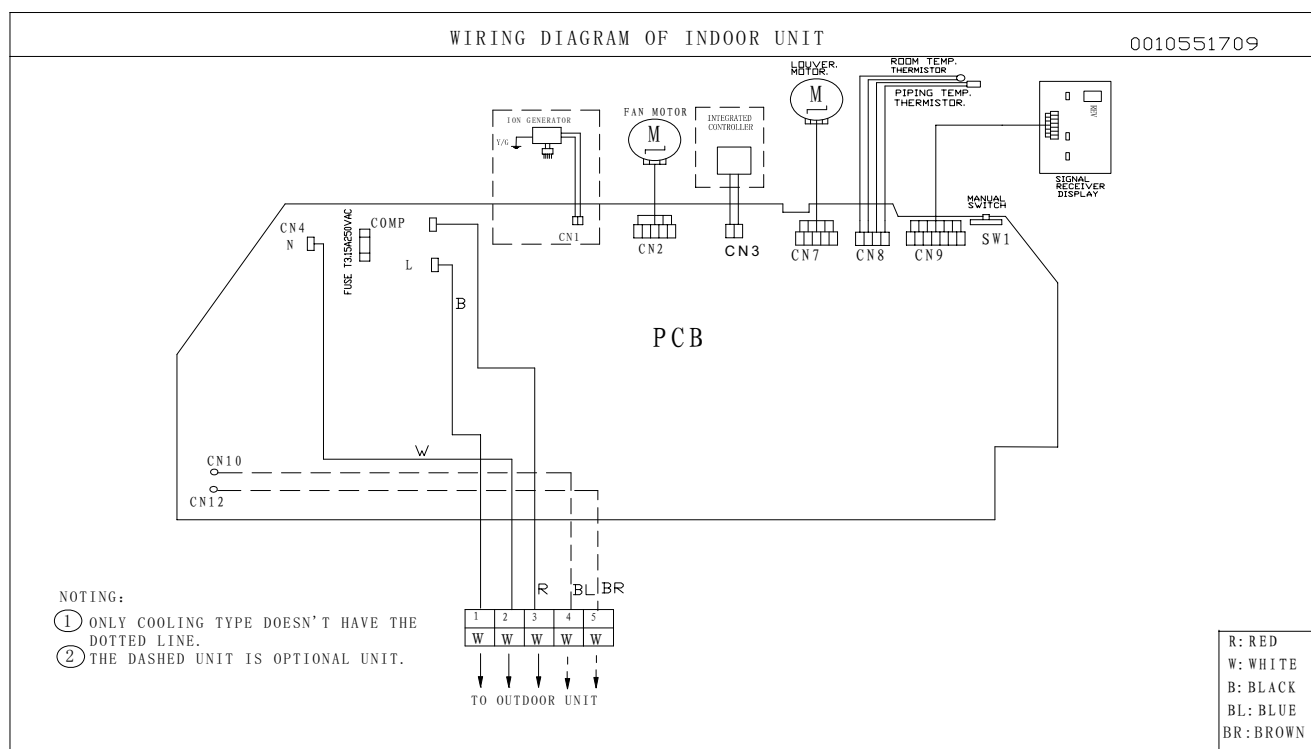
Equivalent piping length	7.5m
Level difference	0m
Air flow rate	high

7 Piping diagramme

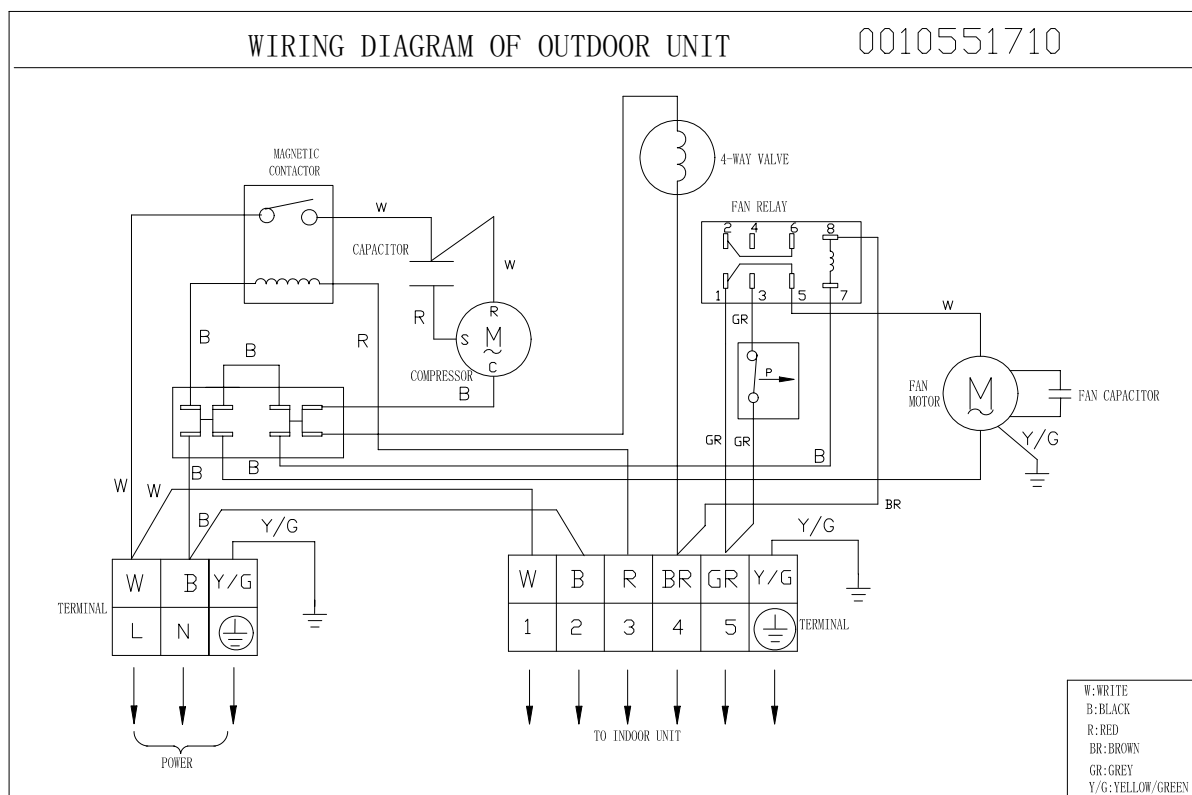


8. Wiring Diagrams

Indoor



Outdoor



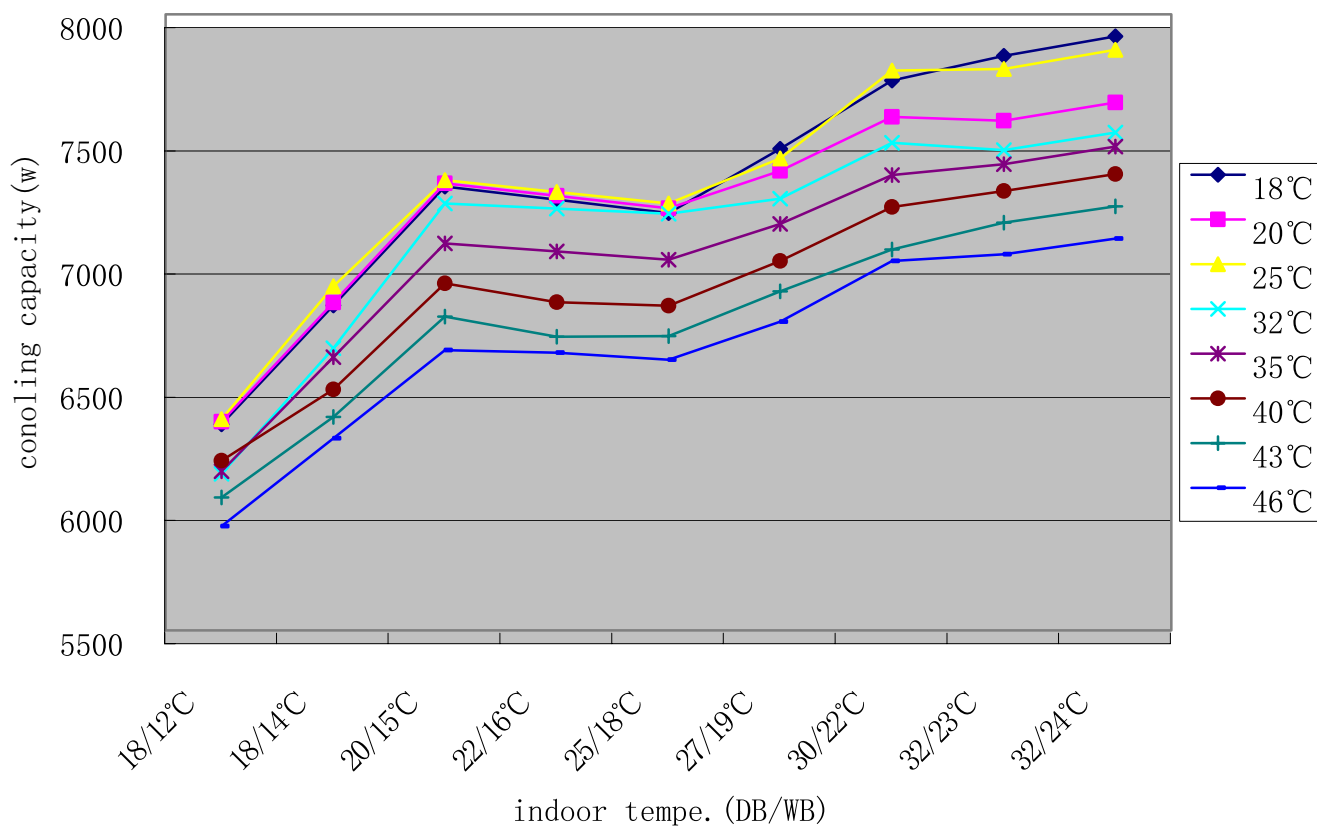
9 Capacity tables and curves diagrams

HSU-28HA03/R2 performance curves

cooling capacity and indoor/outdoor temp.curves

indoor temp.	outdoor temp. (humidity 46%)							
DB/WB	18°C	20°C	25°C	32°C	35°C	40°C	43°C	46°C
18/12°C	6336	6347	6357	6136	6146	6189	6039	5923
18/14°C	6819	6830	6897	6645	6608	6478	6366	6280
20/15°C	7301	7314	7327	7232	7070	6909	6773	6637
22/16°C	7247	7263	7280	7212	7037	6831	6692	6627
25/18°C	7194	7213	7232	7191	7004	6818	6695	6599
27/19°C	7455	7365	7415	7252	7150	6999	6876	6752
30/22°C	7732	7584	7772	7478	7348	7218	7046	6999
32/23°C	7832	7568	7778	7449	7392	7283	7155	7027
32/24°C	7911	7642	7856	7521	7463	7351	7220	7090

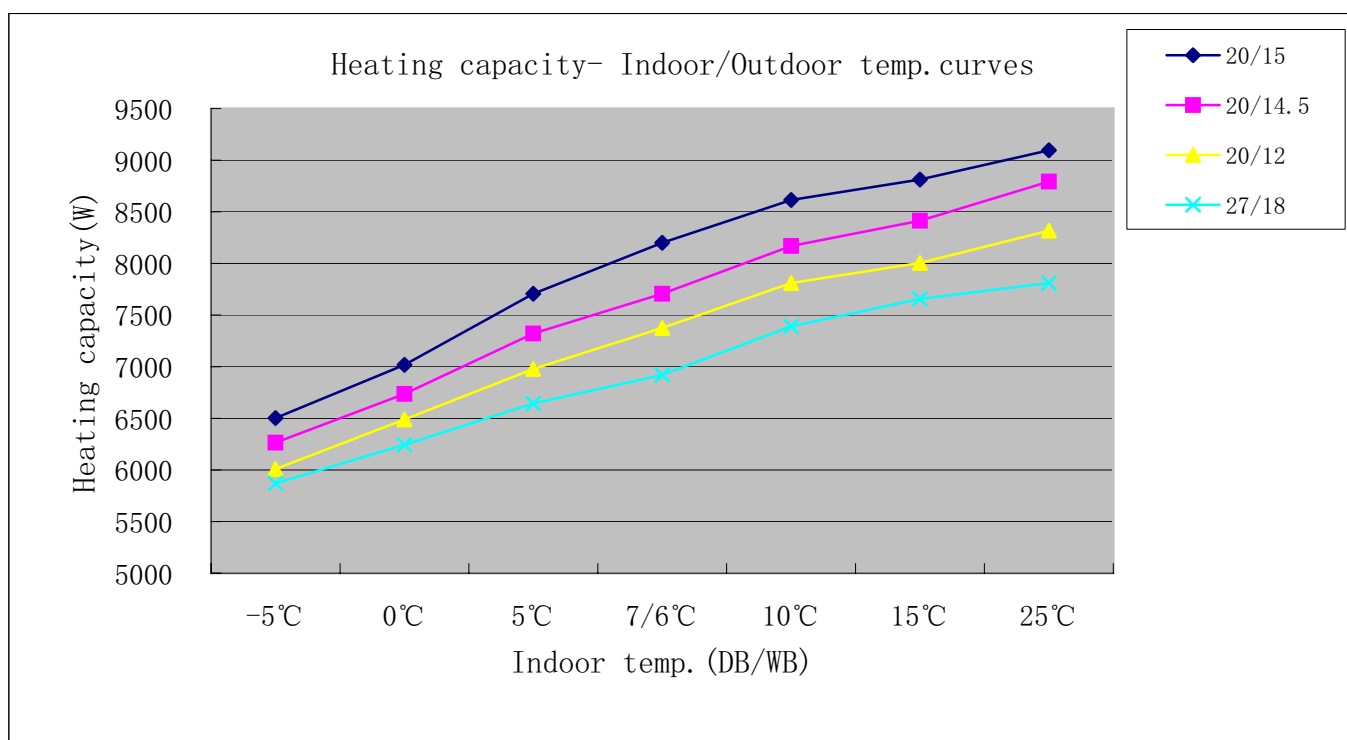
cooling value-temp. curves



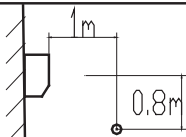
HSU-28HA03/R2 performance curves

Heating capacity and indoor/outdoor temp. curves

DB/WB	20/15	20/14.5	20/12	27/18
-5°C	6502	6264	6009	5870
0°C	7018	6736	6489	6245
5°C	7707	7321	6977	6643
7/6°C	8200	7707	7375	6920
10°C	8614	8169	7811	7390
15°C	8814	8414	8006	7657
25°C	9096	8793	8318	7810

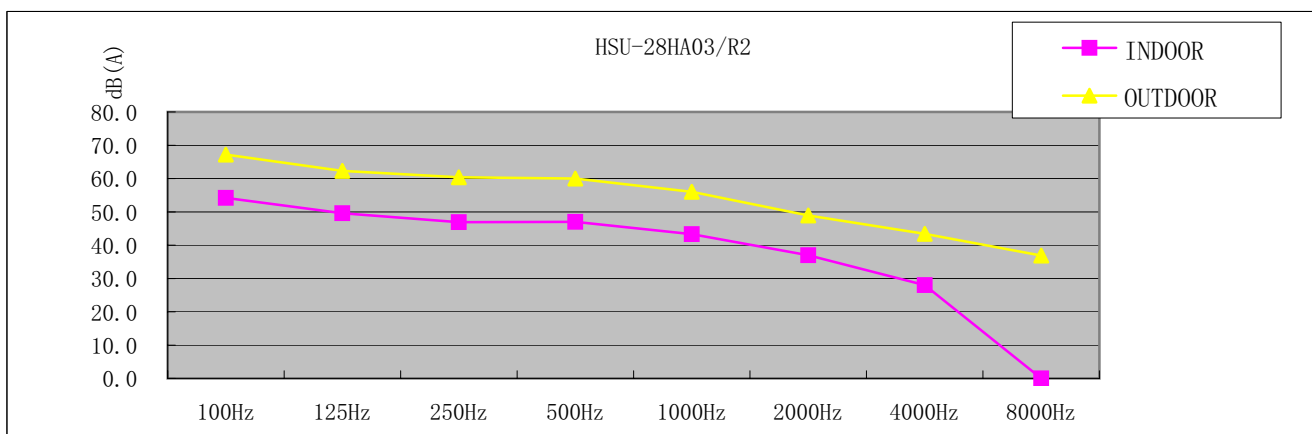


10 Sound level

Model	Sound presure level			Measuring location Location of microphone	sound power level (cooling/heating)
	230 ~ V,50Hz				
	Cooling/heating				
	H	L	SL		
HSU-28HA03/R2	47	45	43		58

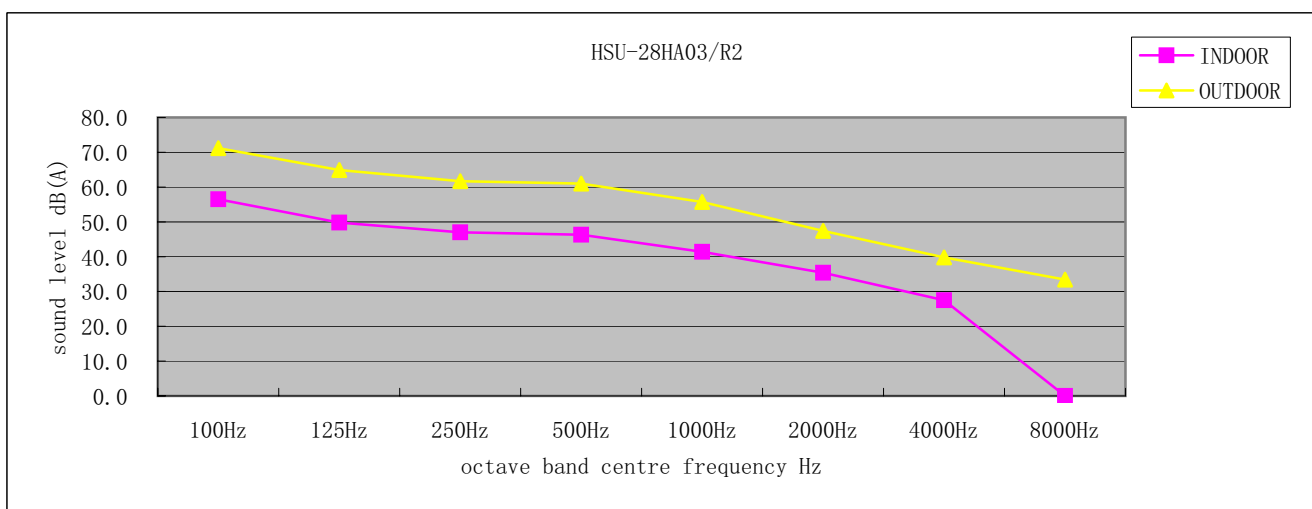
Sound level data and pressure spectrum(cooling)

HSU-28HA03/R2	100Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
INDOOR	54.2	49.6	46.9	47.0	43.3	37.0	28.0	0.0
OUTDOOR	67.2	62.3	60.4	60.0	56.0	48.9	43.4	36.9



Sound level data and pressure spectrum(heating)

HSU-28HA03/R2	100Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
INDOOR	56.5	49.8	47.0	46.3	41.4	35.4	27.5	0.0
OUTDOOR	71.2	64.9	61.7	61.0	55.7	47.4	39.8	33.4



11 Accessories

Standard accessories

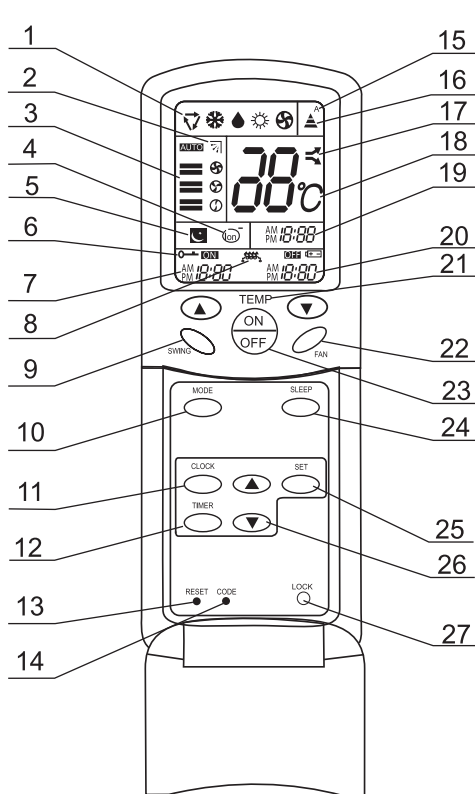
Standard name	HSU-28HA03/R2
Drain hose	1
Plastic bag	1
screw assembly	1
Air purifier	2
Battery	2
Mounting plate	1
Remote controller	1
Installation manual	1
Operation manual	1

12 Control systems

Parts and Functions

Buttons and display of the remote controller.

If the unit which you purchased has not health function, remote controller should like the following figure:



1. Mode display

AUTO
COOL
DRY
HEAT
FAN

2. SWING display

3. FAN SPEED display

4. HEALTH display

5. SLEEP display

6. LOCK display

7. TIMER ON display

8. AUXILIARY HEAT display

9. SWING

10. MODE

Used to select AUTO, COOL, DRY, HEAT and FAN

11. CLOCK

Used to set correct time

12. TIMER

Used to select TIMER ON, TIMER OFF

13. RESET

Used to reset the controller back to normal condition.

14. 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

15. CODE display

16. SIGNAL SENDING display

17. POWER/SOFT display

18. TEMP. display

19. CLOCK display

20. TIMER OFF display

21. TEMP

Used to select your desired temperature

22. FAN

Used to select fan speed

23. POWER ON/OFF

Used for unit start or stop

24. SLEEP

Used to select sleep mode

25. SET

Used to confirm timer and clock settings

26. HOUR

Used to set clock and timer settings

27. LOCK

Used to lock buttons and LCD display.

NOTE: (1) The following functions and related displays are not available: AUXILIARY HEAT display, POWER/SOFT display, HEALTH display.

(2) If the Air conditioner don't have the function of the code, press code B can cause it not available.

(3) Cooling only unit do not have functions and displays related with heating.

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.

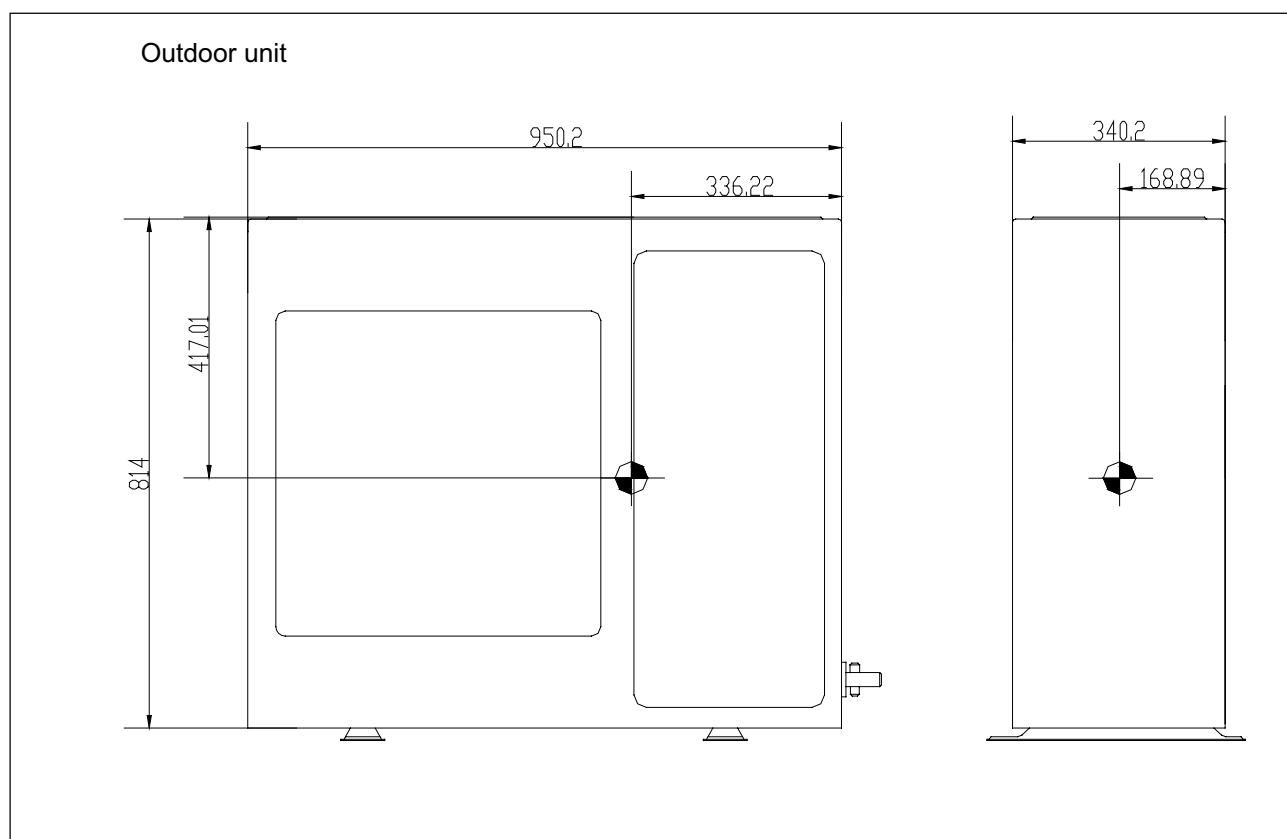
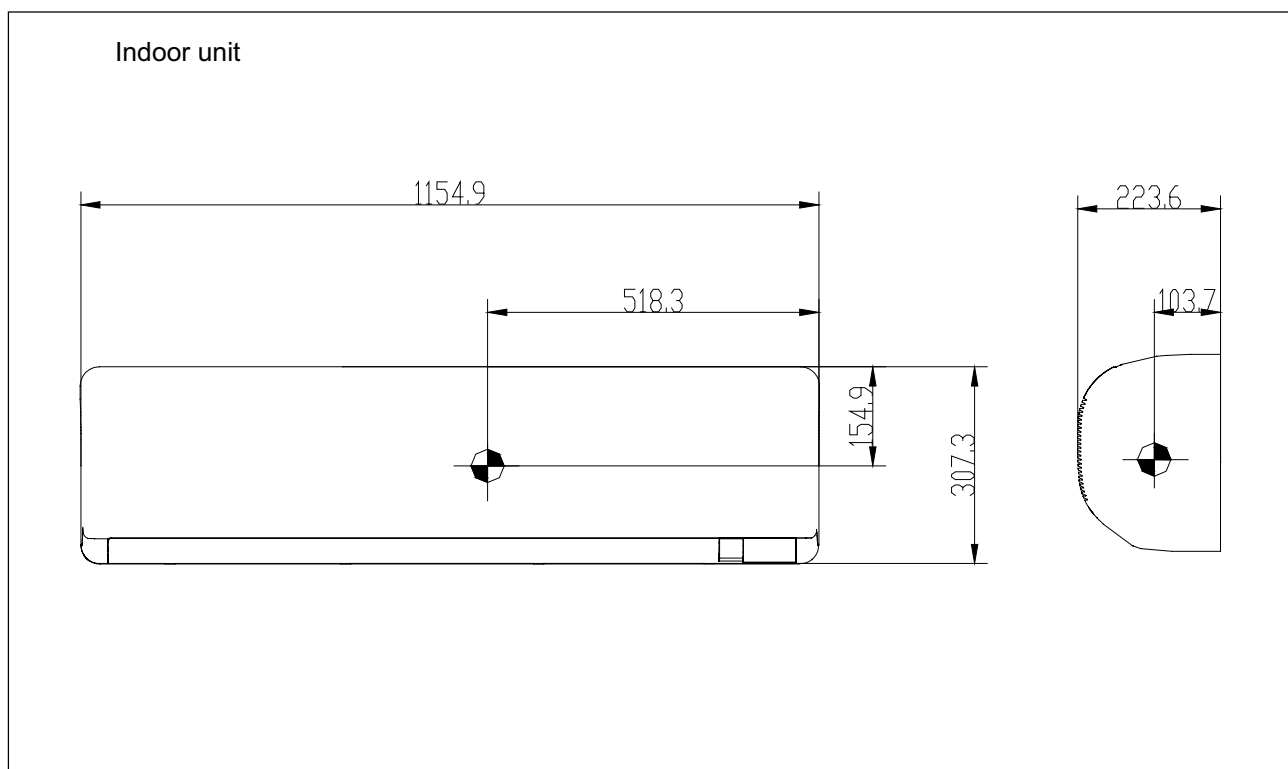
Press or to set correct time. Each press will increase or decrease 1min. If the button is kept depressed, time will change quickly.

After time setting is confirmed, press **SET**, "AM" and "PM" stop flashing, while clock starts working.

Hints

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

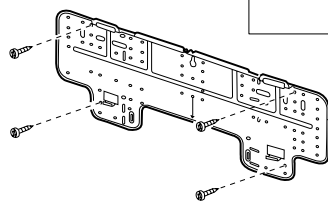
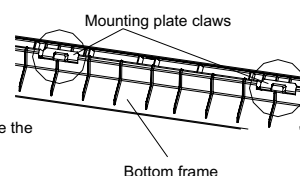
13 Center of gravity



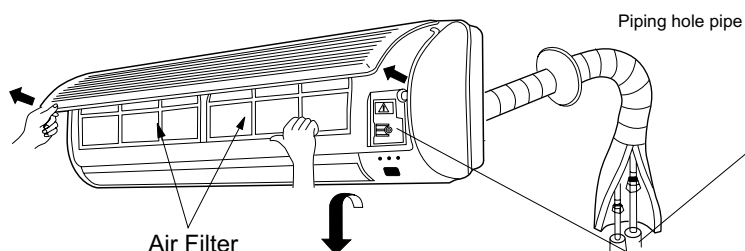
14 Installation

Indoor

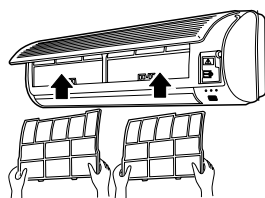
- How to attach the indoor unit.
Hook the claws of the bottom frame to the mounting plate.
If the claws are difficult to hook ,remove the front panel.
- How to remove the indoor unit.
Push up the marked area (at the lower part of the front panel) to release the the claws . If it is difficult to release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

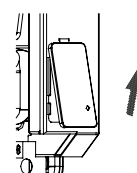
Push up the filter's center tab slightly until it is released from the stopper, and remove the filter downward.

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



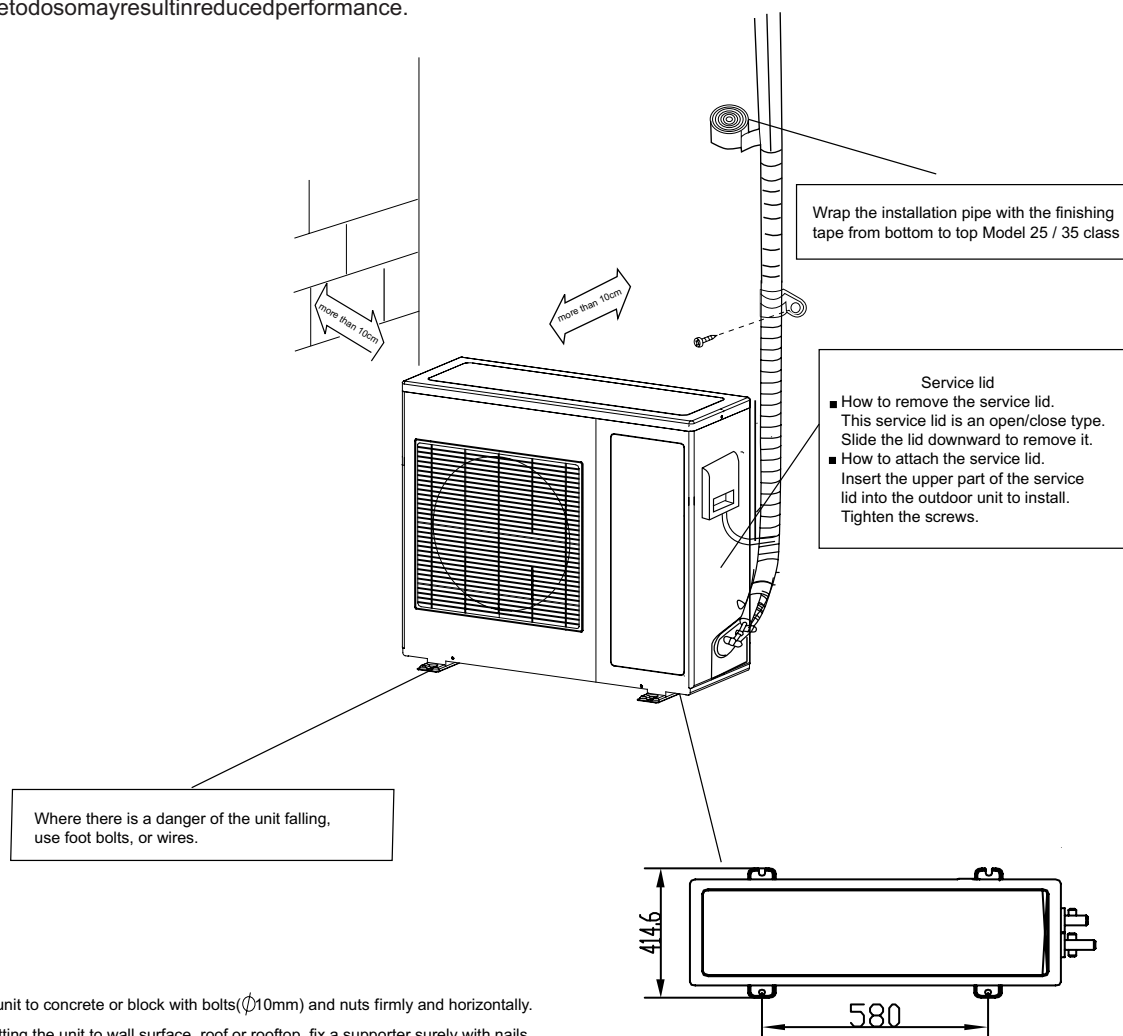
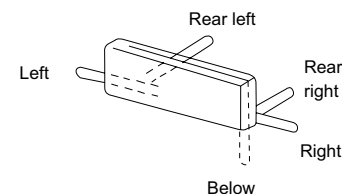
Remove the screws on the service lid.
Slide the service lid leftward.
Rotate the service lid upward

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. 15.88
Liquid pipe	O.D. 9.52

*Be sure to add the proper amount of additional refrigerant.
Failure to do so may result in reduced performance.

Arrangement of piping directions



- Fix the unit to concrete or block with bolts($\phi 10\text{mm}$) 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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