



## Domestic Air conditioner

# ***TECHNICAL DATA***

## **ON/OFF**

### Wall mounted Type V-Series

HSU-09H03/VA(ZXF)  
HSU-12H03/VA(ZXF)



## 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



O2 fresh: It can bring the fresh air in when the machine is running in O2 fresh mode.



Healthy UV ray: UV ray generator can eliminate and prevent bacteria in air effectively



DRY function: Make dehumidifying in the room when the unit is working in the "DRY" mode .



Intelligent air:With twin-blade technology ,the airflow can be adjusted not to blow directly to human body , so preventing people from the air conditioner symptom .



Photocatalyst filter: Eliminates the air of a wide variety of odor-causing substances from cigarette smoke particles to chemical vapors



Bacteria-killing medium: 3-in-1 effect:Anti-Allergen , Anti-Bacteria



3D air flow: The 3D airflow is able to deliver the airflow horizontally and vertically



Auto mode: According to the fixed temperature "26C",the unit will adjust the operation mode automatically.



Sleep mode: The setting temperature and the indoor noise can be adjusted to a more comfortable level when you set the "sleep mode"during night sleep .



24Hour timer: Use the timer function to set on,or off,or from on to off,or from off to on .



4 Fan setting: Slect the fan speed LO,MED,HI,AUTO



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 .



Left&right flow: With specialized motor and flaps,the airflow can be adjusted



Child lock: Avoid the child's wrong operation on the remote controller .



## 2.Specifications

This information was not available at the time of publication

NOMINAL CAPACITY and NOMINAL INPUT					
Model			HSU-09H03/VA(ZXF)	HSU-12H03/VA(ZXF)	
NOMINAL CAPACITY(3-4)	Cooling(1)	norm.	kw	2.50	3.50
	Heating(2)	norm.	kw	2.90	3.90
NOMINAL INPUT	Cooling	norm	kw	0.91	1.25
	Heating	norm.	kw	0.88	1.35
EER	Cooling			2.75	2.80
COP	Heating			3.30	2.89
ENERGY LABEL(7-8)	Cooling			----	----
	Heating			----	----
ANNUAL ENERGY CONSUMPTION(9)	Cooling		kwh	396.5	530

TECHNICAL SPECIFICATIONS						
INDOOR UNITS				HSU-09H03/VA(ZXF)	HSU-12H03/VA(ZXF)	
DIMENSIONS	Unit	H	mm	265		
		W	mm	795		
		D	mm	182		
WEIGHT	Unit		kg	8.9		
COLOR	Unit				white	
SOUND LEVEL	Sound pressure (cooling/heating)(5)	high	dB(A)	38	39	
		medium	dB(A)	34	35	
		low	dB(A)	30	30	
	Sound power(cooling/heating)(6)	high	dB(A)	38	38	
FAN	Air flow rate(cooling/heating)	high	m <sup>3</sup> /min	7.5/9.0	9.5/10.5	
		low	m <sup>3</sup> /min	7.0/8.0	9.0/9.8	
		super low	m <sup>3</sup> /min	6.5/7.2	8.5/9.0	
	Speed(cooling/heating)	steps		5steps,silent and auto		
		high	rpm	1150	1300/1250	
		medium	rpm	1050	1100	
		low	rpm	950	950	
Type	Cross flow fan					
Motor output		W	16	16		
AIR FILTER	Removable/washable/mildew proof					
REMOTE CONTROLLER	YL-H65EN					
TEMPERATURE CONTROL	Microcomputer control					
PIPING CONNECTIONS(external diameter)	liquid	mm	Φ 6.35	Φ 6.35		
	gas	mm	Φ 9.52	Φ 12.7		
	drain	mm	Φ 16	Φ 16		
INSULATION MATERIAL	Heat insulation type			both liquid and gas pipes		
HEAT EXCHANGGER	TYPE			ML fin - Φ 9.52HI - XA tube		
	Row x stage x fin pinth		mm	2 x 8 x 1.4		

TECHNICAL SPECIFICATIONS					
OUTDOOR UNITS				HSU-09H03/VA(ZXF)	HSU-12H03/VA(ZXF)
NET DIMENSIONS (stop valve, and bottom support is not included)	Unit	H	mm	430	
		W	mm	695	
		D	mm	245	
WEIGHT	Unit		kg	28	33
COLOR	Unit	white			
SOUND LEVEL	Sound pressure(cooling/heating)(5)	high	dB(A)	48	50
	Sound power(cooling/heating)(6)	high	dB(A)	48	50
FAN	Air flow rate(cooling/heating)	high	m <sup>3</sup> /min	21	23
		low	m <sup>3</sup> /min	---	---
	Speed(cooling/heating)	high	rpm	980	800
		low	rpm	600	500
	Type	Propeller fan			
	Motor output		W	80	80
REFRIGERANT CIRCUIT	Refrigerant type	R22			
	Refrigerant charge		kg	0.74	0.95
	Maximum allowable distance between indoor and outdoor		m	7	
	Maximum allowable level difference		m	5	
	Refrigerant control	-----			
COMPRESSOR	Type	rotary Compressor			
	Model			2P18S225ANC	PH240
	Motor output		w	780	950
	Oil type			SUNISO 4GSI	SUNISO 4GSI
	Oil charge volume		L	0.27	0.52
PIPING CONNECTIONS	liquid		mm	Φ 6.35	
	gas		mm	Φ 9.52/ Φ 12.7	
	drain		mm	Φ 18	
INSULATION MATERIAL	Heat insulation type			both liquid and gas pipes	
HEAT EXCHANGGER	TYPE			ML - Φ 9.52HI - XAbube	
	Row x stage x fin pinth		mm	2 x 8 x 1.4	

ELECTRICAL SPECIFICATIONS					
For indoor units only:				HSU-09H03/VA(ZXF)	HSU-12H03/VA(ZXF)
CURRENT	Nominal running current	cooling	A	0.15	0.15
		heating	A	0.15	0.15
	Maximum running current	cooling	A	0.15	0.15
		heating	A	0.15	0.15

For combination indoor units+ outdoor units:				HSU-09H03/VA(ZXF)	HSU-12H03/VA(ZXF)
CURRENT	Nominal running current	cooling	A	4.2	5.8
		heating	A	4.1	6.3
	Maximum running current	cooling	A	5.6	7.7
		heating	A	6.3	8.9
	Starting current	cooling	A	32	45
		heating	A	32	45

For indoor units only:				HSU-09H03/VA(ZXF)	HSU-12H03/VA(ZXF)
POWER SUPPLY				VM	VM
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1PH	1PH
	Frequency	Hz		50	50
	Voltage	V		220V~	220V~

## 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 via a microphone at a certain distance from the unit. For measuring conditions: please refer to item 6 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

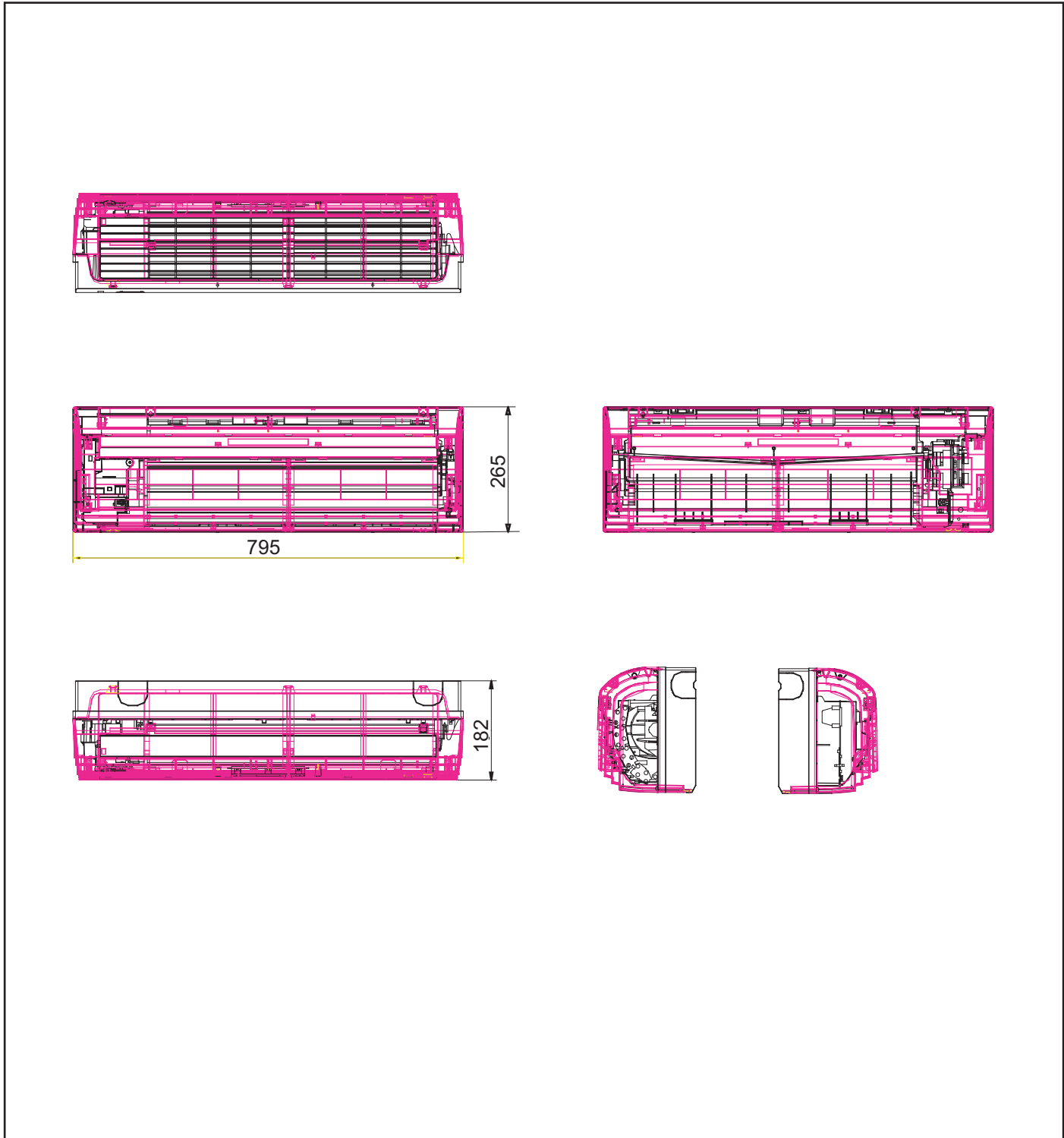
Model	HSU-09H03/VA(ZXF)	HSU-12H03/VA(ZXF)
YR-H65	Y	Y
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### 4 Sensors lists

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

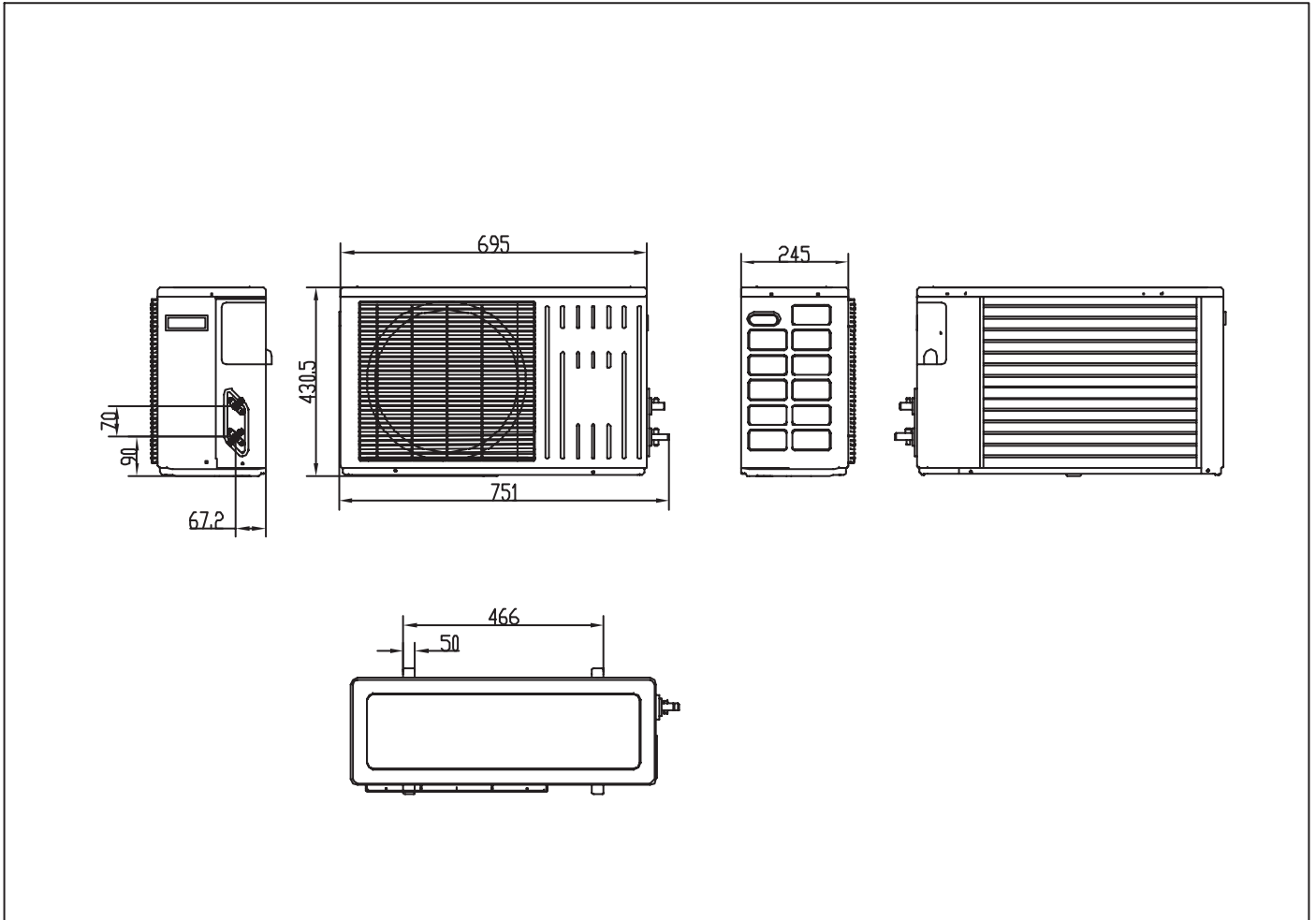
# 5 Dimensional drawings

Indoor unit





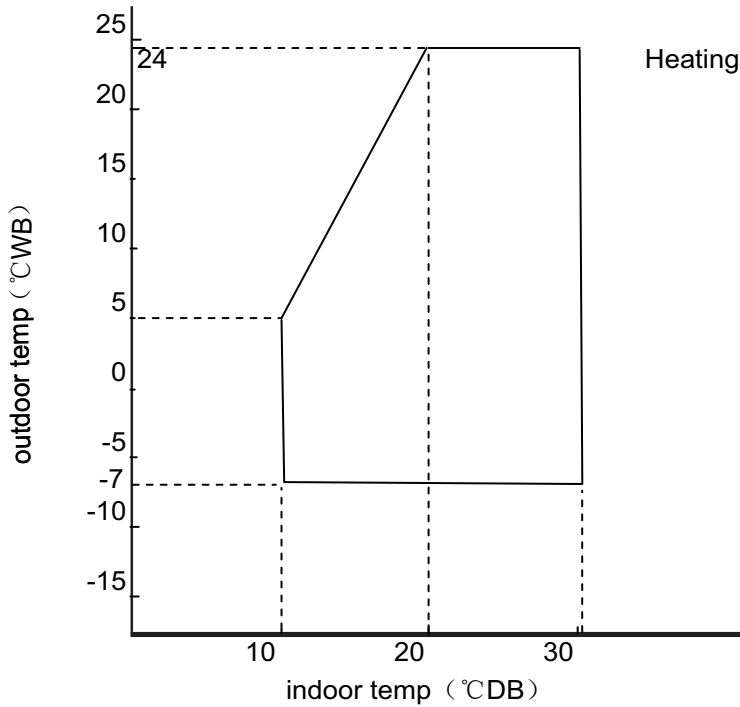
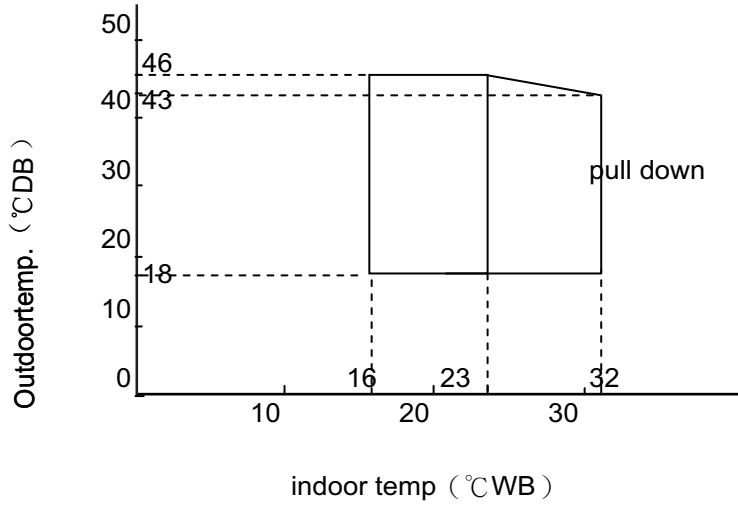
# Outdoor unit



# 6 Operation range

The name of parts

Cooling

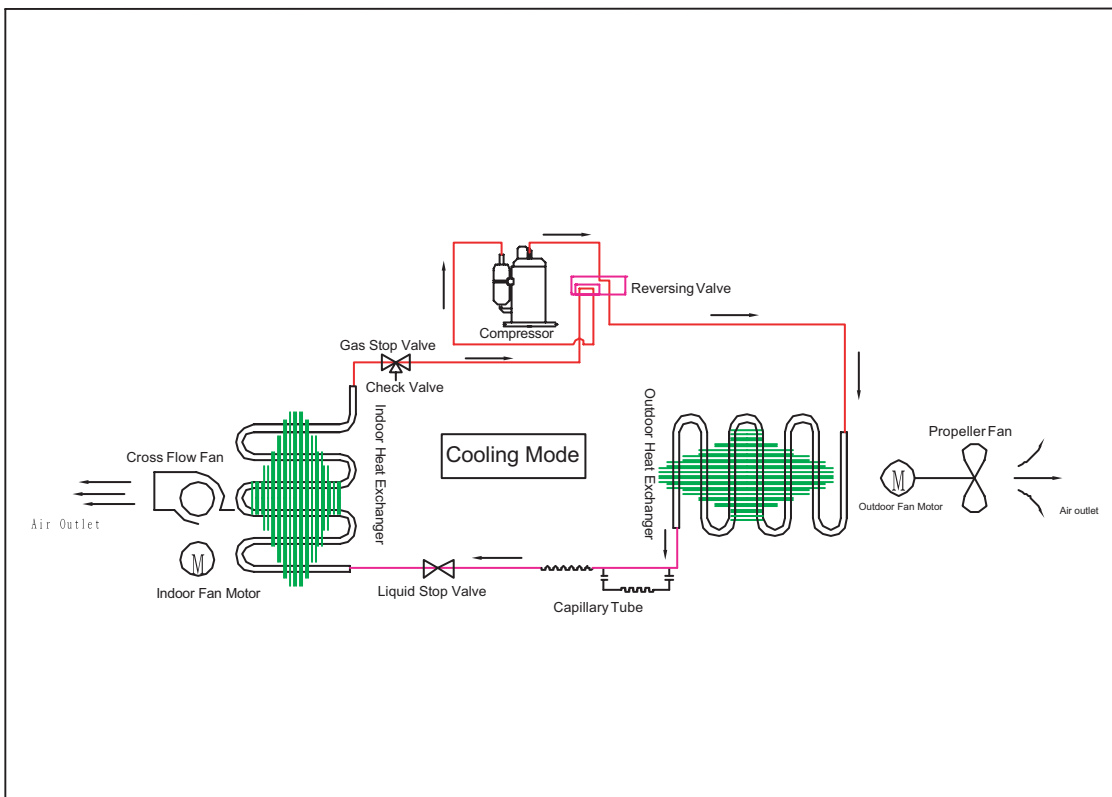


Notes:

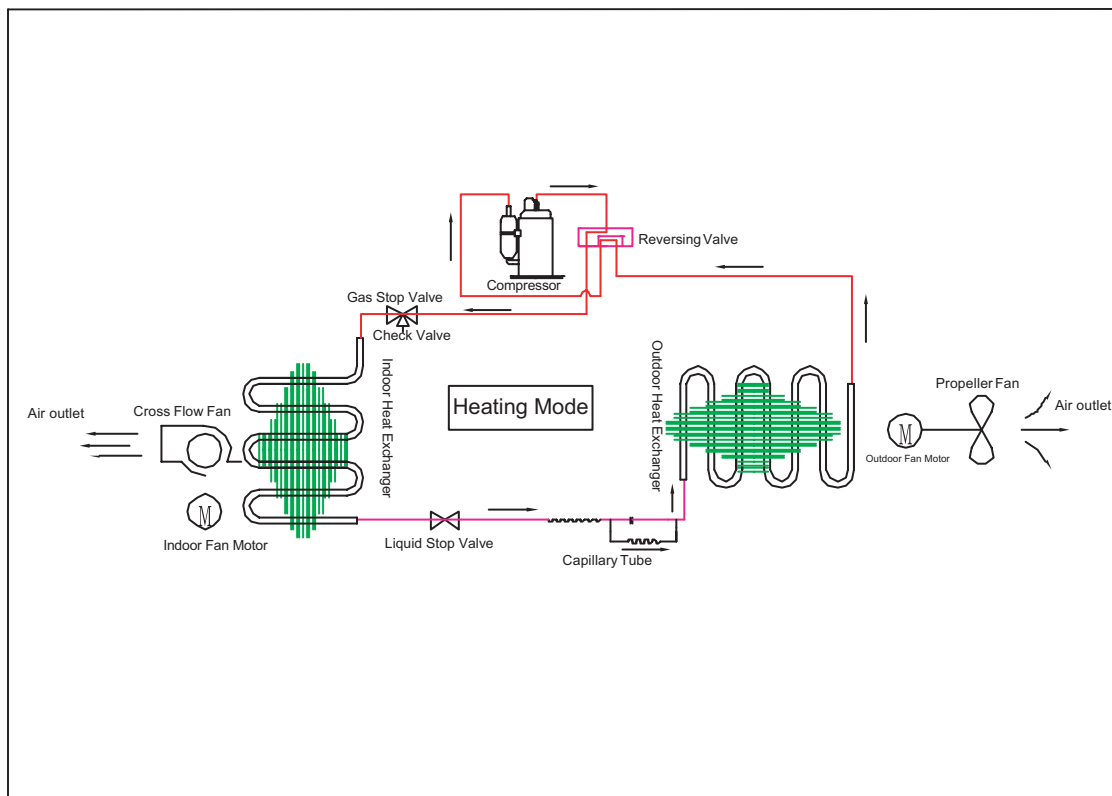
- The graphs are based on the following condition:
- Equivalent piping length      7.5m
- Level difference                  0m
- Air flow rate                      high

# 7 Piping diagrams

## Cooling mode

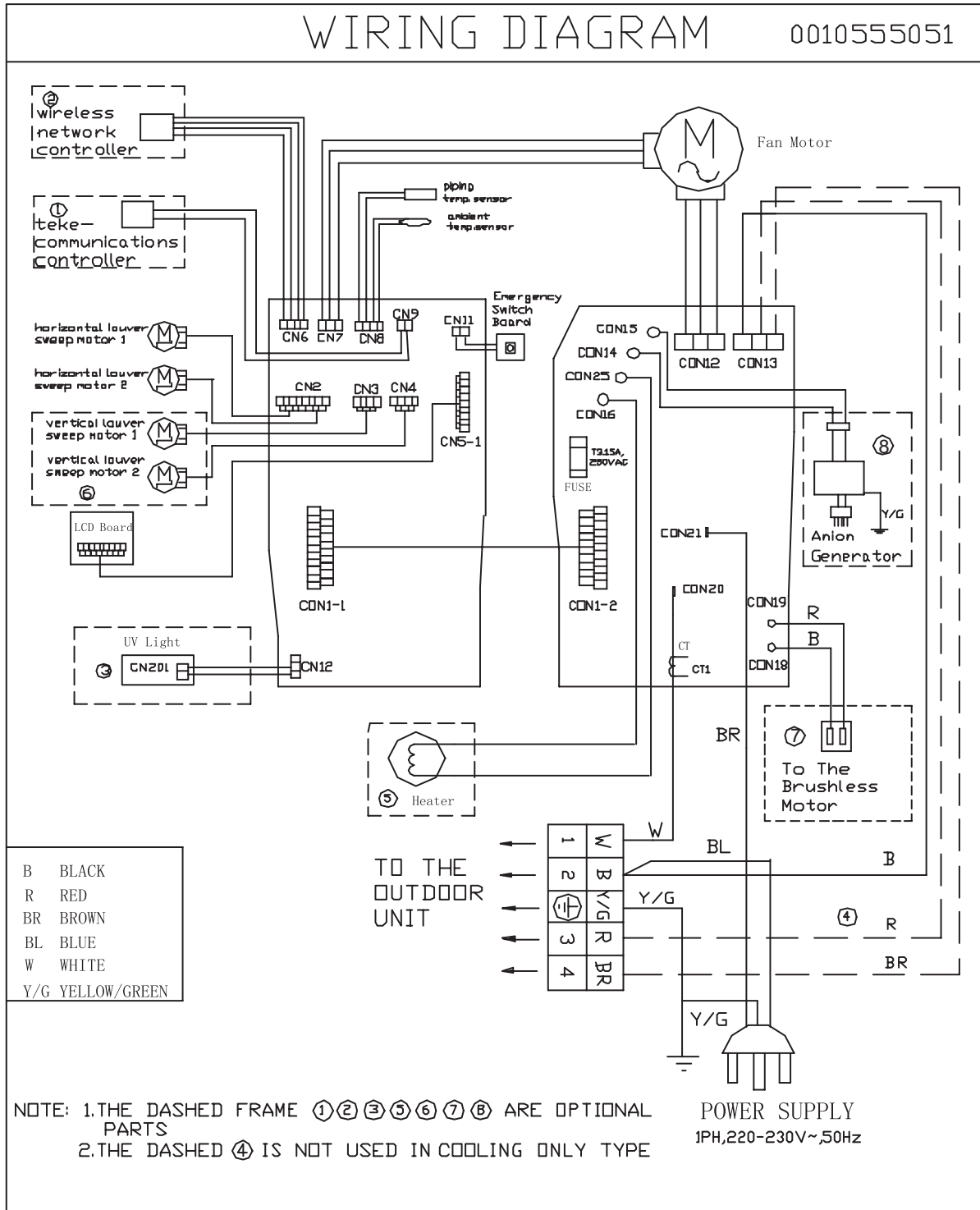


## Heating mode

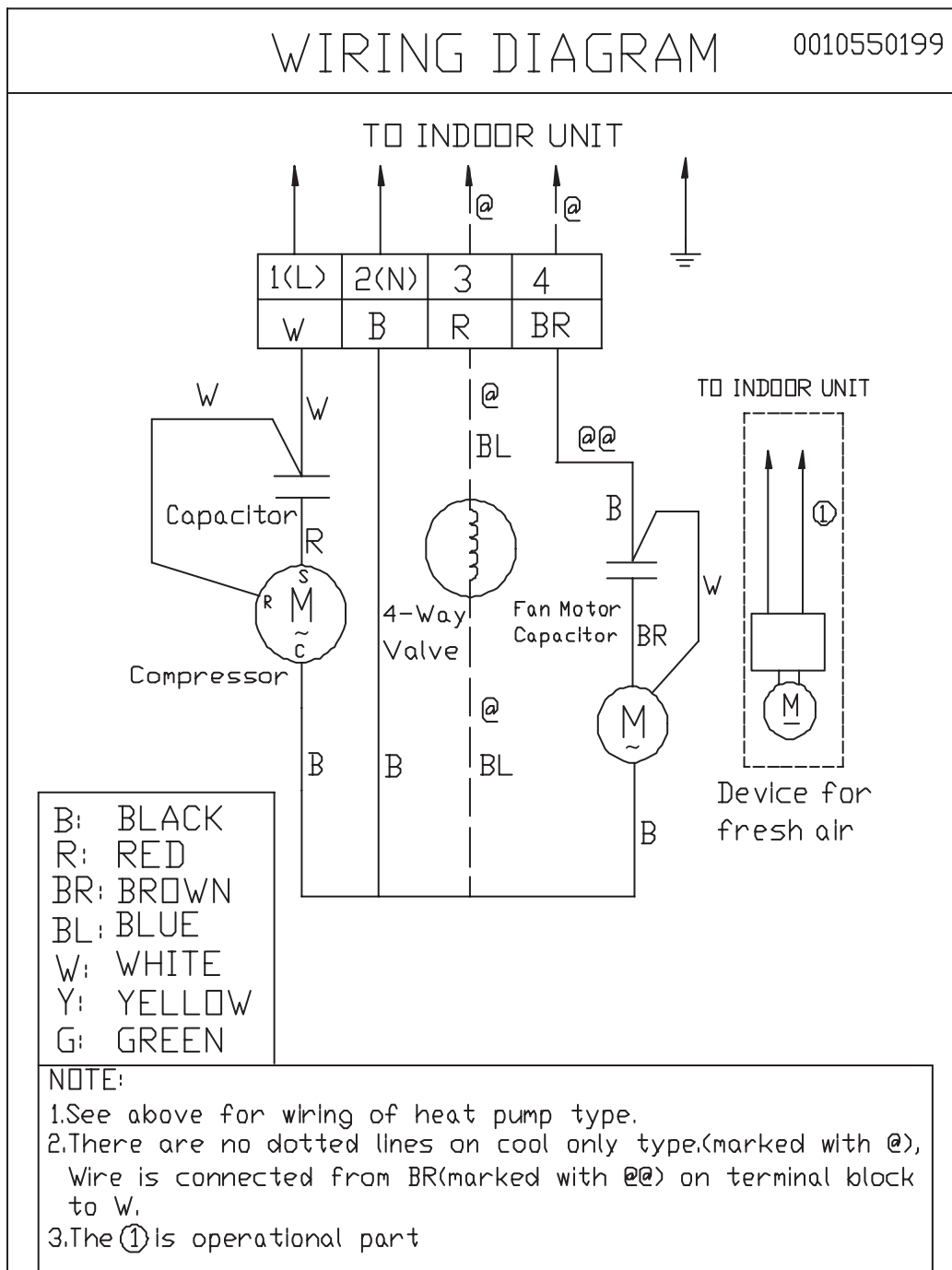


# 8 Wiring diagrams

## Indoor unit

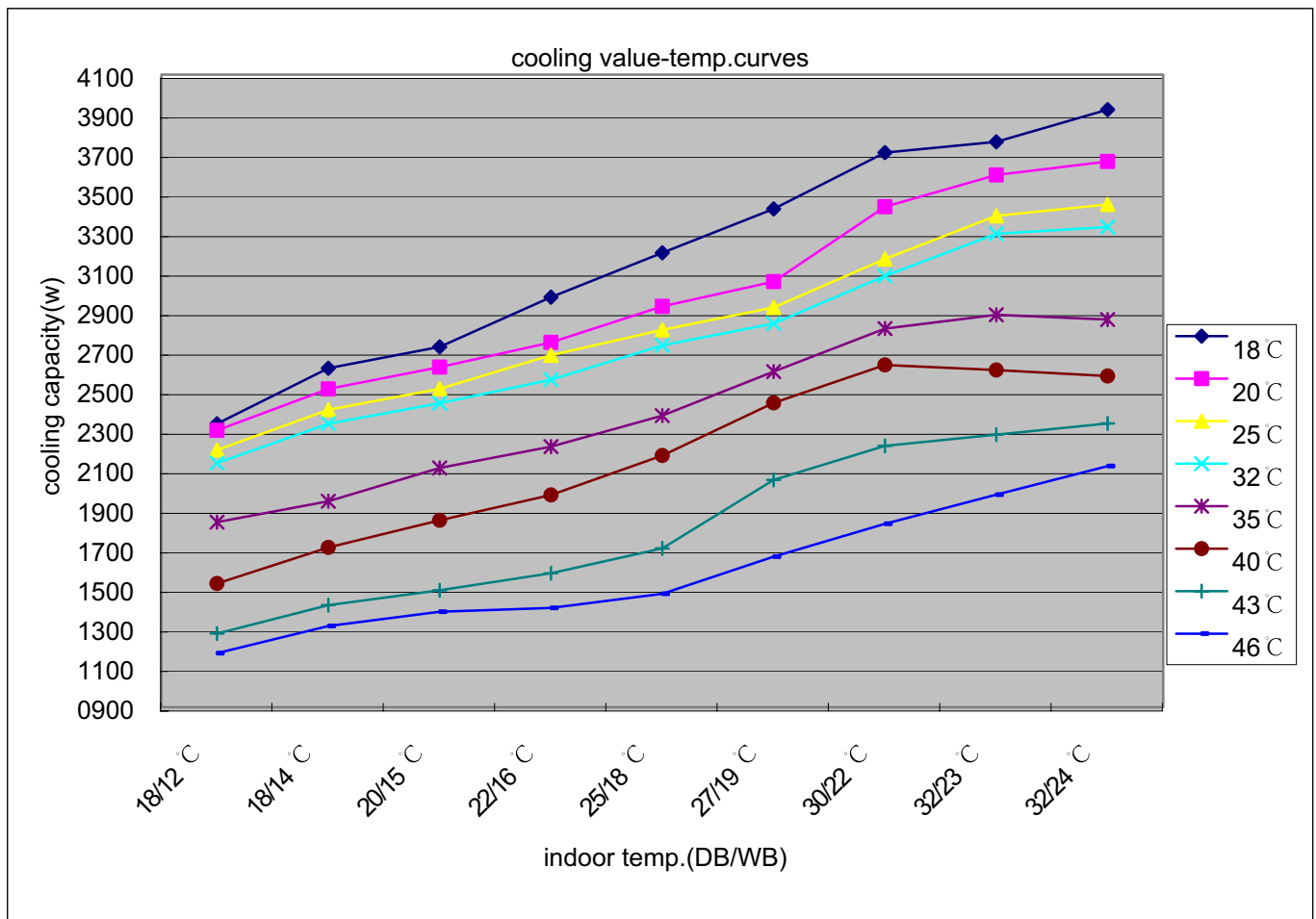


Outdoor unit

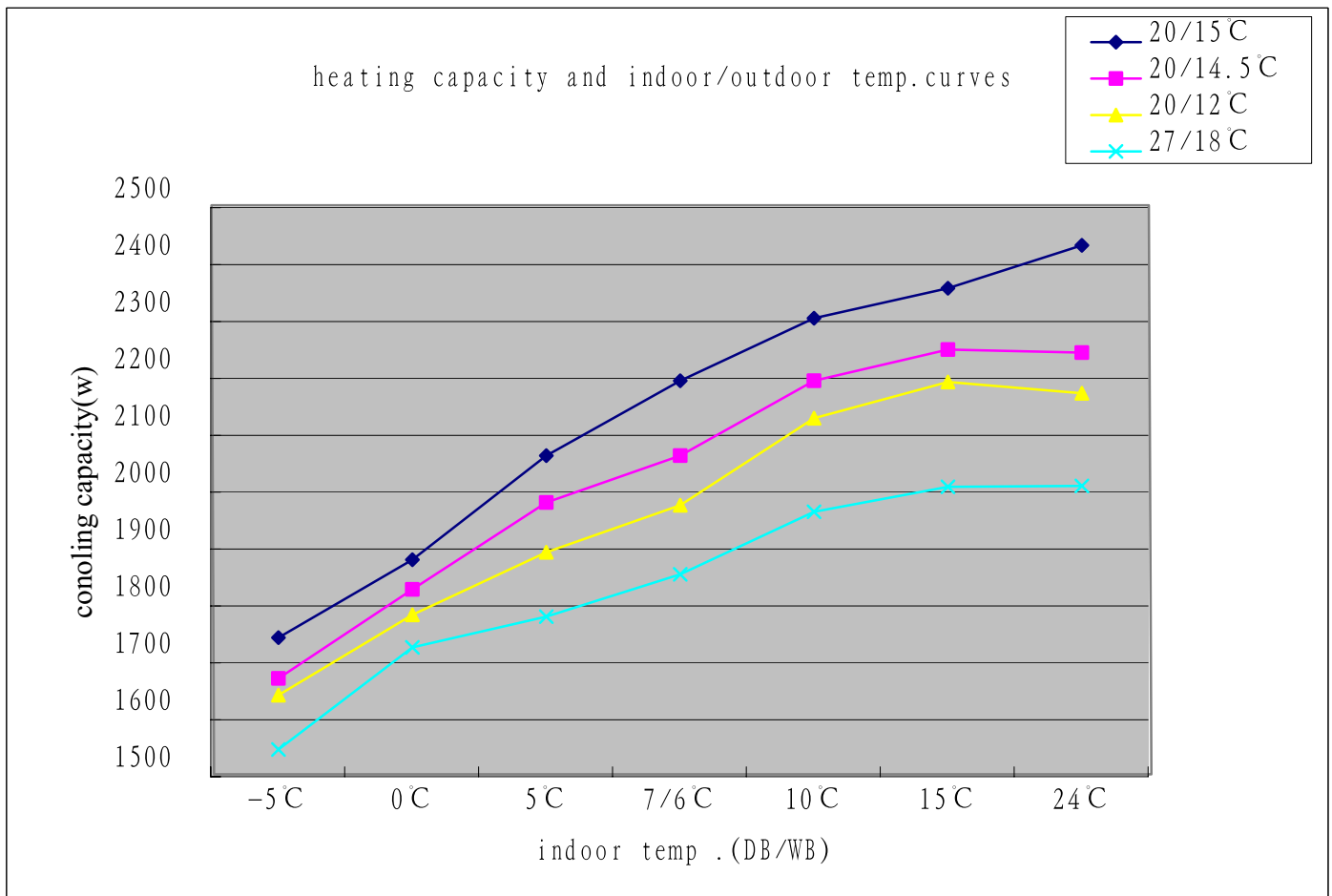


# 9 Capacity tables and curves diagrams

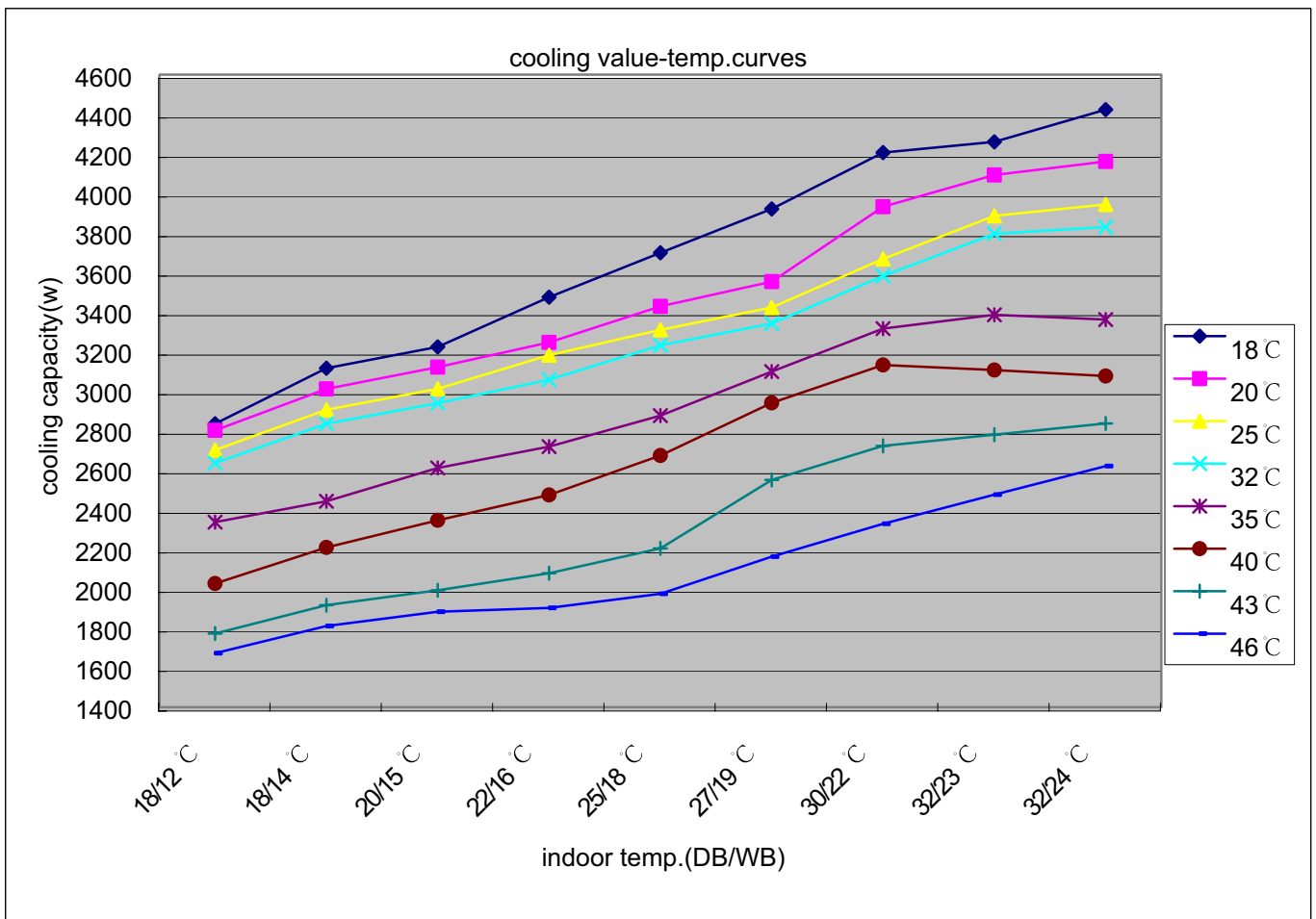
HSU-09H03/VA(ZXF) performance curves								
cooling capacity and indoor/outdoor temp.curves								
indoor temp.	outdoor temp.(humidity 46%)							
DB/WB	18 C	20 C	25 C	32 C	35 C	40 C	43 C	46 C
18/12 C	2379	2362	2263	2196	1898	1587	1334	1234
18/14 C	2684	2572	2466	2395	2003	1769	1478	1372
20/15 C	2779	2681	2572	2499	2172	1907	1553	1444
22/16 C	3021	2806	2742	2618	2279	2035	1639	1464
25/18 C	3260	2989	2871	2792	2436	2235	1764	1535
27/19 C	3482	3114	2984	2902	2659	2502	2111	1722
30/22 C	3767	3493	3229	3143	2877	2692	2283	1889
32/23 C	3821	3653	3447	3256	2947	2766	2340	2036
32/24 C	3984	3722	3504	3391	3022	2737	2397	2181



HSU-09H03/VA(ZXF) performance curves				
Heating capacity and indoor/outdoor temp.curves				
outdoor temp. °C	indoor temp. (humidity 46%)			
DB/WB	20/15	20/14.5	20/12	27/18
-5	1727	1655	1626	1530
0	1864	1811	1767	1710
5	2047	1964	1877	1764
7/6	2178	2047	1959	1838
10	2288	2178	2112	1948
15	2341	2233	2176	1992
24	2416	2228	2156	1993

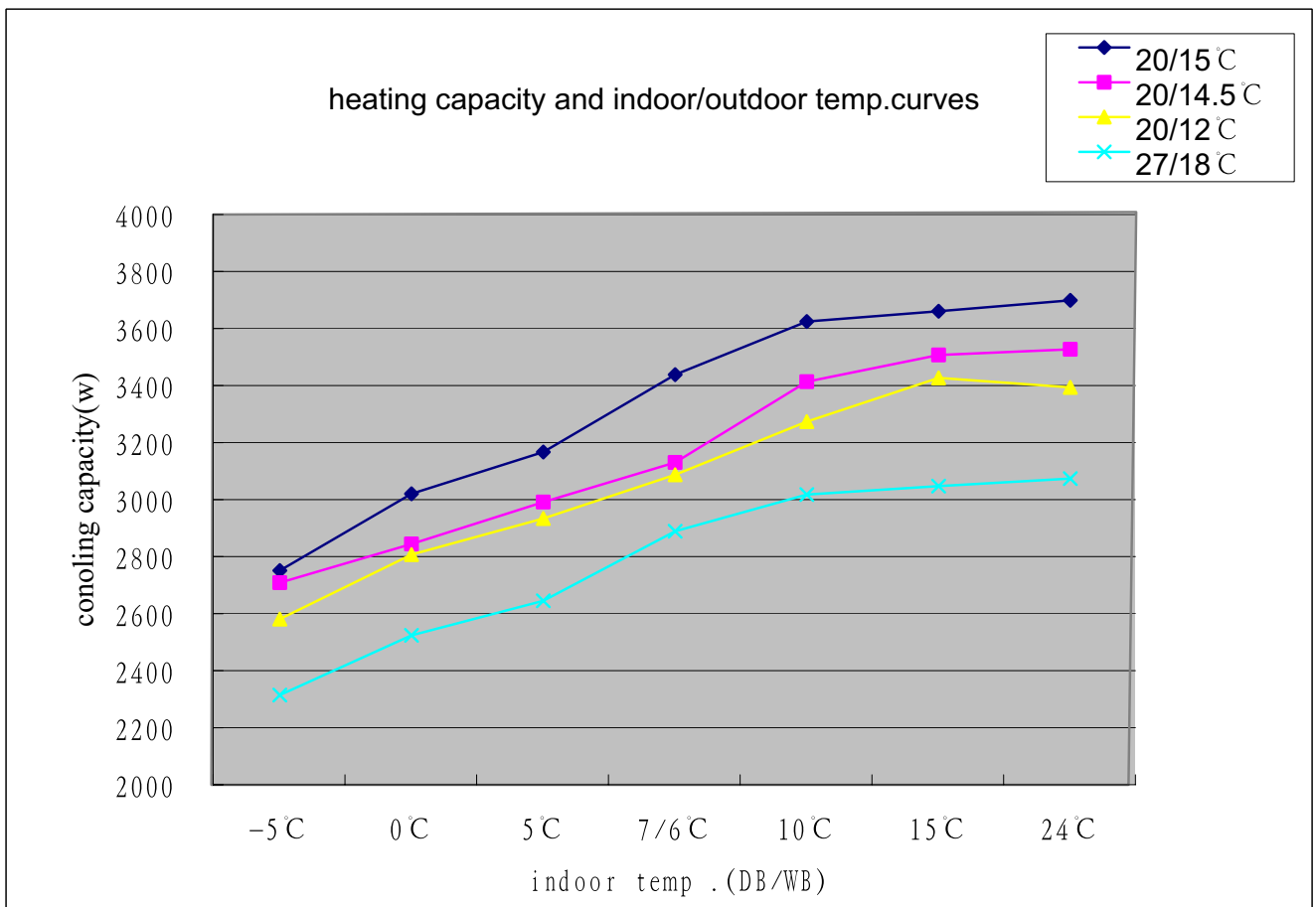


HSU-12H03/VA(ZXF) performance curves								
cooling capacity and indoor/outdoor temp.curves								
indoor temp.	outdoor temp.(humidity 46%)							
DB/WB	18 C	20 C	25 C	32 C	35 C	40 C	43 C	46 C
18/12 C	2895	2862	2763	2696	2398	2087	1834	1734
18/14 C	3176	3072	2966	2895	2503	2269	1978	1872
20/15 C	3284	3181	3072	2999	2672	2407	2053	1944
22/16 C	3536	3306	3242	3118	2779	2535	2139	1964
25/18 C	3760	3489	3371	3292	2936	2735	2264	2035
27/19 C	3982	3614	3484	3402	3159	3000	2611	2222
30/22 C	4267	3993	3729	3643	3377	3192	2783	2389
32/23 C	4321	4153	3947	3756	3447	3166	2840	2536
32/24 C	4484	4222	4004	3891	3422	3137	2897	2681

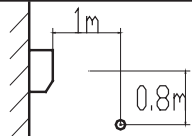




HSU-12H03/VA(ZXF) performance curves				
heating capacity and indoor/outdoor temp.curves				
outdoor temp . °C	indoor temp .(humidity 46%)			
DB/W B	20/15 °C	20/14.5 °C	20/12 °C	27/18 °C
-5 °C	271.6	267.3	254.5	227.9
0 °C	298.5	280.9	277.2	248.8
5 °C	313.2	295.6	289.8	261.0
7/6 °C	340.3	309.5	305.2	285.4
10 °C	358.9	337.8	323.8	298.2
15 °C	362.5	347.1	339.2	301.2
24 °C	366.3	349.1	335.8	303.8



# 10 Sound level

Model	Sound pressure level			Measuring location Location of microphone 	sound power level (cooling/heating)
	220 ~ V,50Hz				
	Cooling/heating				
	H	L	SL		
HSU-09H03/VA(ZXF)	38	34	30		38
HSU-12H03/VA(ZXF)	39	35	30		39

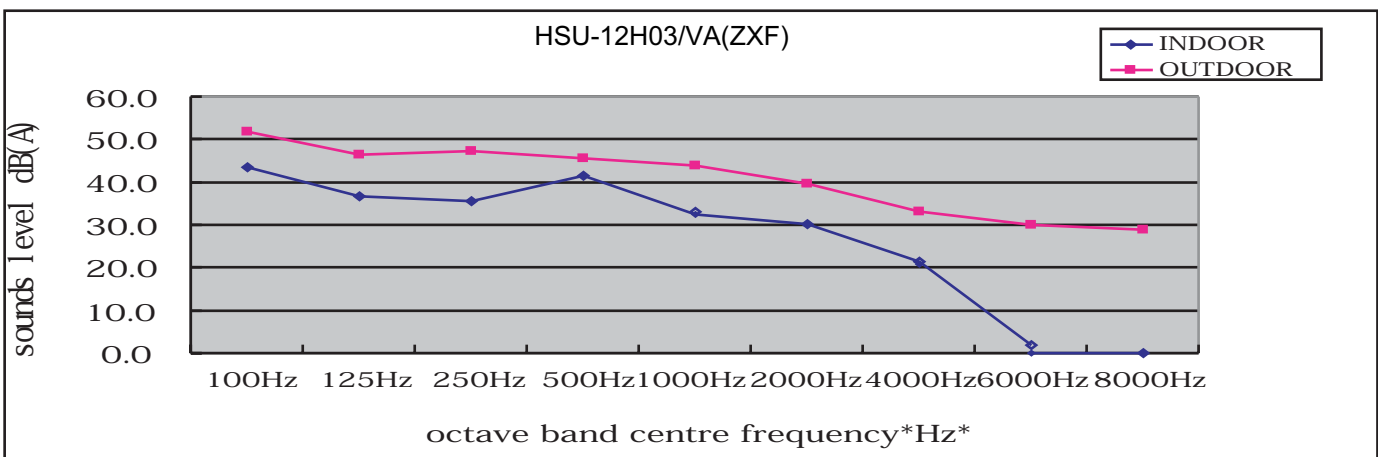
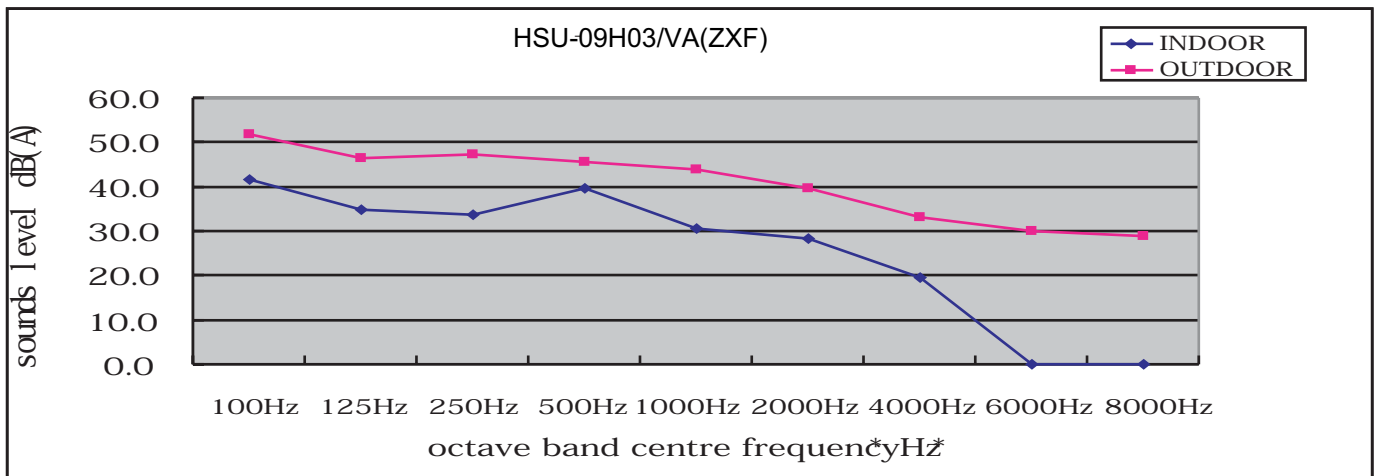
## Sound level data(cooling)

HSU-09H03/VA(ZXF)	100Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	6000Hz	8000Hz
INDOOR	41.7	34.7	33.6	32.6	30.5	28.2	19.7	0.0	0.0
OUTDOOR	51.7	46.5	47.2	45.6	43.9	39.7	33.0	29.9	28.9

HSU-12H03/VA(ZXF)	100Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	6000Hz	8000Hz
INDOOR	42.4	35.2	34.6	33.6	31.4	29.1	20.1	0.0	0.0
OUTDOOR	52.7	49.7	48.2	46.3	44.2	40.1	35.0	30.2	29.9

## Sound pressure spectrum(cooling)



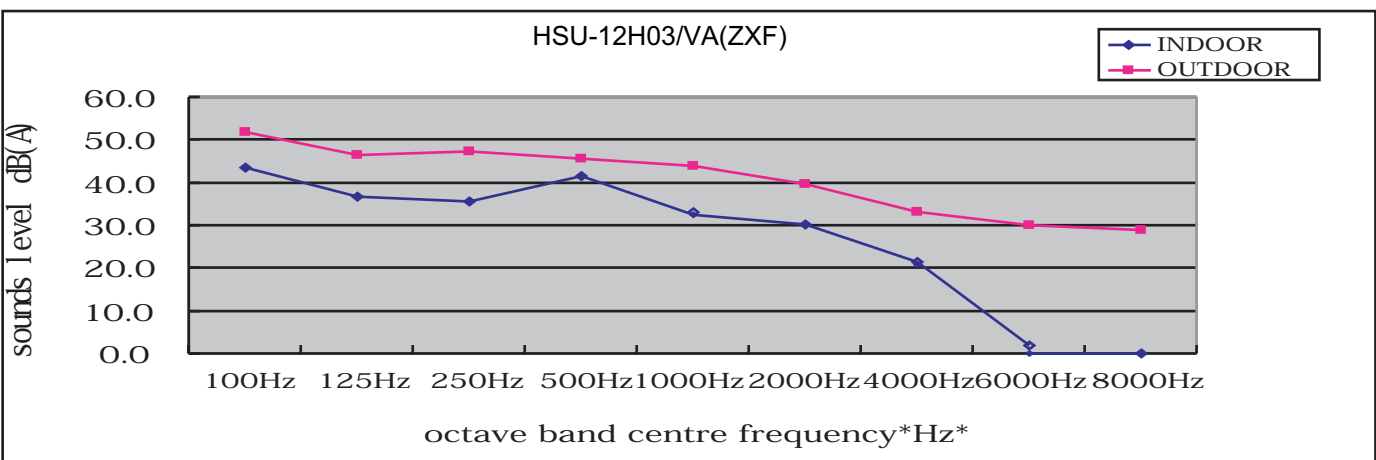
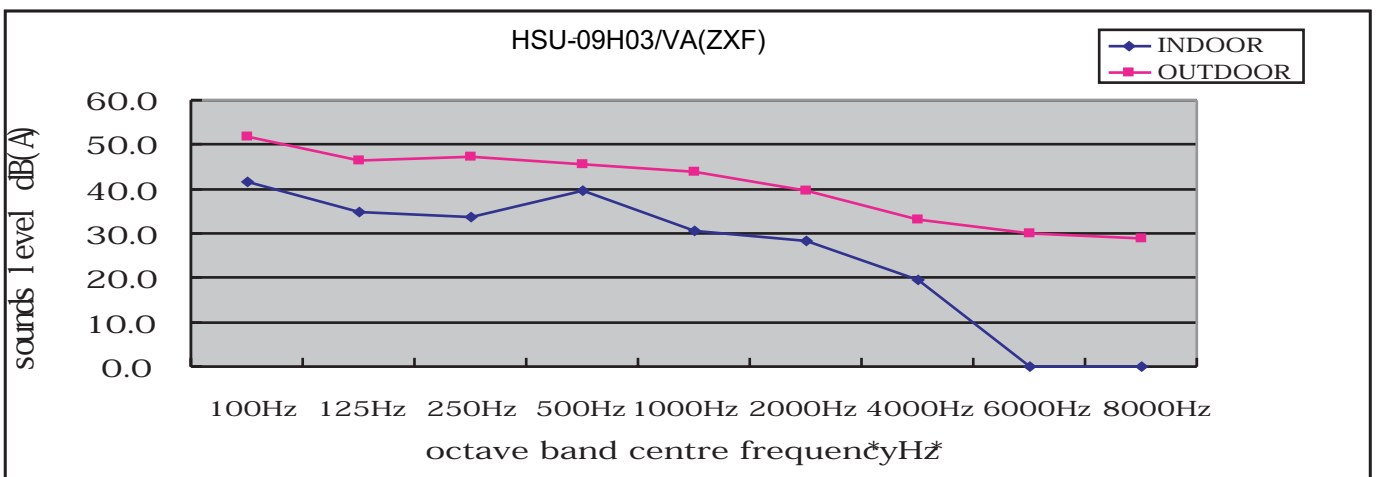
### Sound level data(heating)

HSU-09H03/VA(ZXF)	100Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	6000Hz	8000Hz
INDOOR	41.7	34.7	33.6	32.6	30.5	28.2	19.7	0.0	0.0
OUTDOOR	51.7	46.5	47.2	45.6	43.9	39.7	33.0	29.9	28.9

HSU-12H03/VA(ZXF)	100Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	6000Hz	8000Hz
INDOOR	42.4	35.2	34.6	33.6	31.4	29.1	20.1	0.0	0.0
OUTDOOR	52.7	49.7	48.2	46.3	44.2	40.1	35.0	30.2	29.9

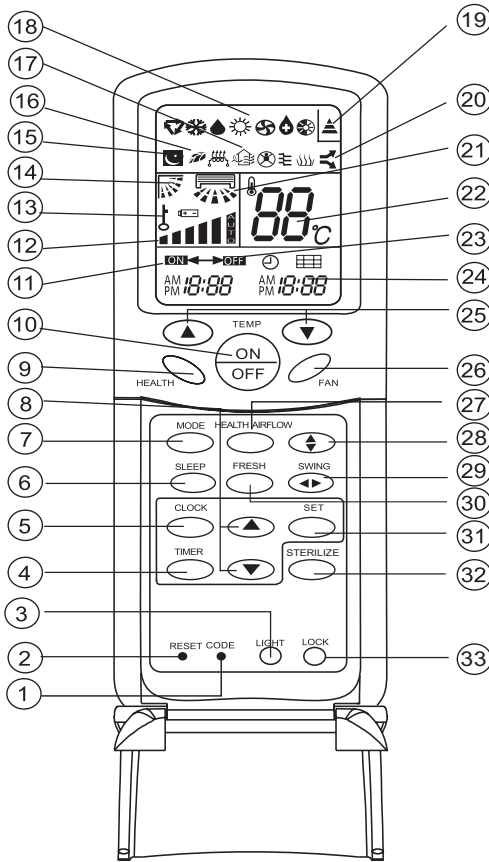
### Sound pressure spectrum(heating)



# 11 Accessories

Standard name	HSU-09H03/VA(ZXF)	HSU-12H03/VA(ZXF)
Drain hose	1	1
Plastic bag	1	1
screw assembly	1	1
Air purifier	2	2
Change for fresh airtube(suit)	1	1
Mounting plate	1	1
Remote controller	1	1
Installation manual	1	1
Operation manual	1	1
Change for fresh air box	1	1

# 12 Control systems



### 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 LCD 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. HOUR button

Used to set clock and timer setting.

NOTE:(1) The following functions and related displays are not available:①

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

(3) The fresh function is only for the models ZXF.



9. HEALTH button  
Used to set healthy operation.

10. ON/OFF button  
Used for unit start and stop.

11. TIMER ON display

12. FAN SPEED display



13. LOCK display

14. SWING UP/DOWN display

15. SLEEP display

16. HEALTH display

17.FRESH AIR display

18. Operation mode display

Operation mode	AUTO	COOL	DRY	HEAT	FAN
Remote controller					
Display board					

19.Singal sending display

20. UV light degerming function display

21. Left/right air flow display

22. TEMP display

Remote controller: to display the TEMP. setting.

23. TIMER OFF display

24. CLOCK display

25. TEMP button

Used to select your desired temperature.

26. FAN button

Used to select fan speed: LOW,MED, HI, AUTO.

27. HEALTH AIRFLOW button

Used to set the health airflow mode.

28. SWING UP/DOWN button

Used to select up or down air sending direction.

29. SWING LEFT/RIGHT button

Used to select left/right air flow.

30. FRESH button

Use to set fresh air function.

31. SET button

Used to confirm timer and clock settings.

32. STERILIZE button

Use to set UV light degerming function.

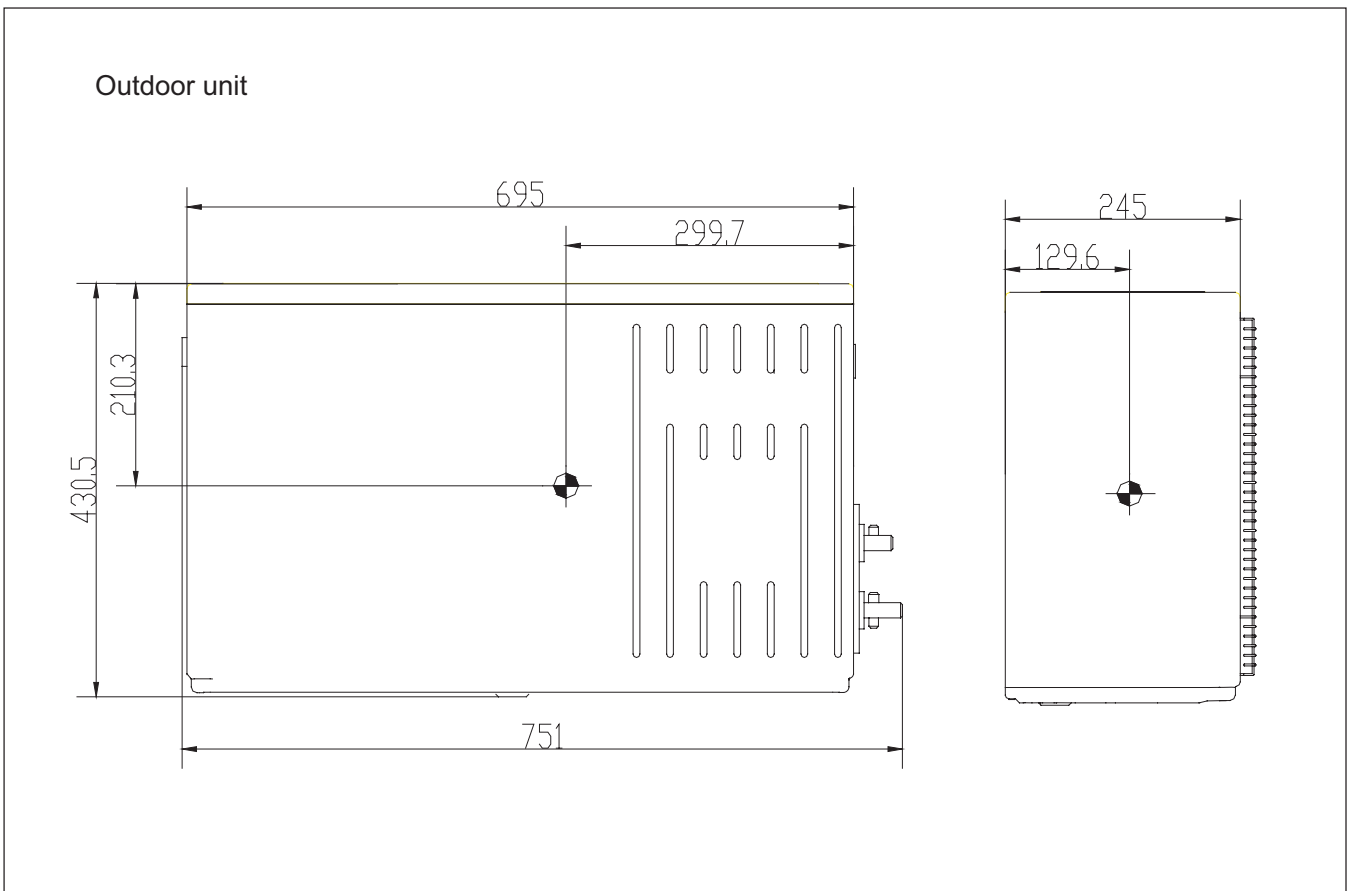
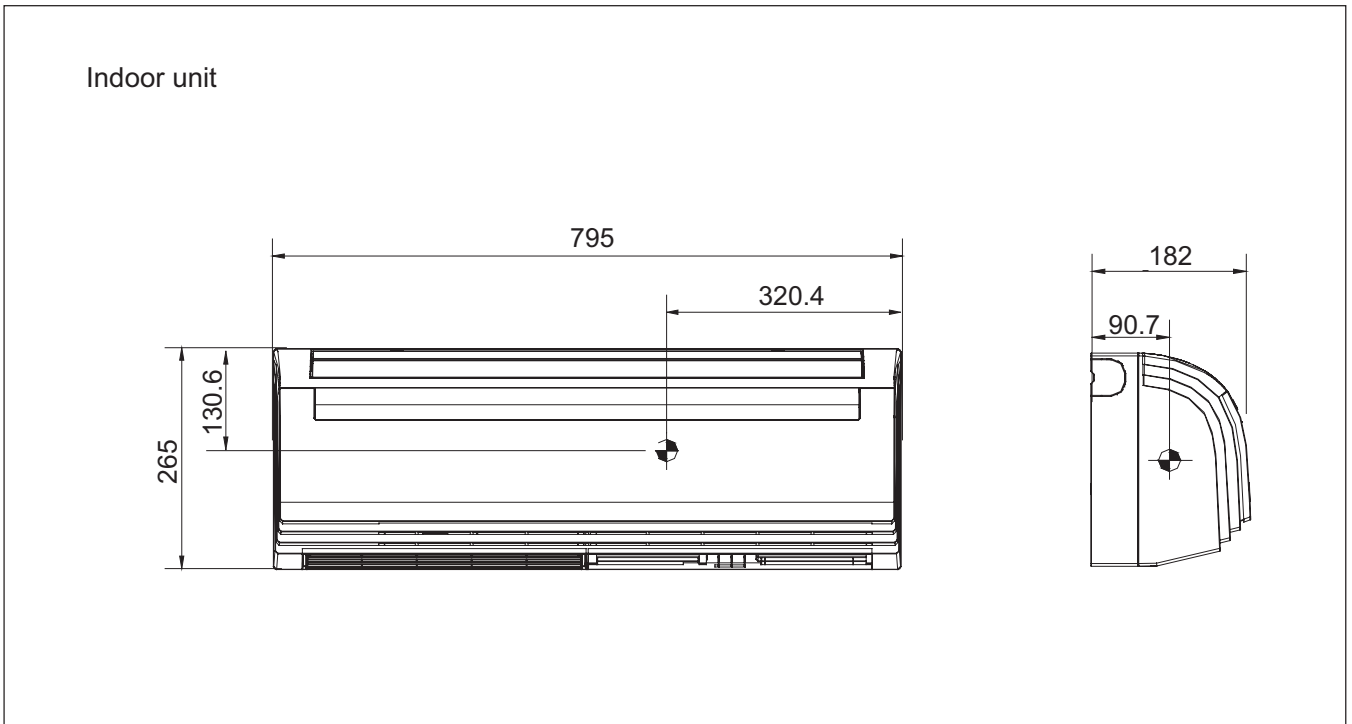
33. LOCK

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. Ambient temp.display

To display the Ambient temp.

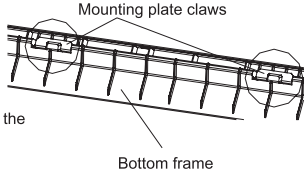
### 13 Center of gravity



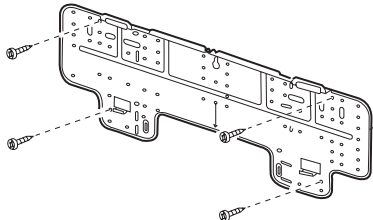
# 14 Installations

## Indoor unit installation drawings

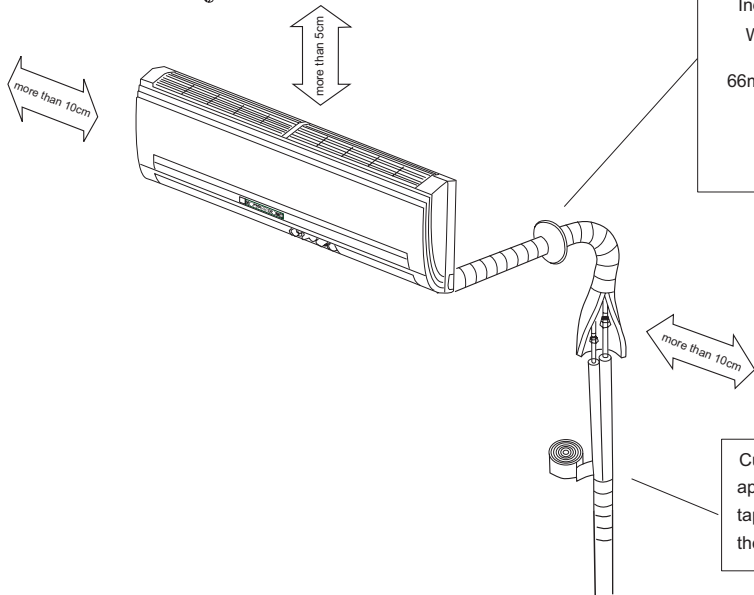
- How to attach the indoor unit.  
Hook the claws of the bottom frame to the mounting plate.
- How to remove the indoor unit.  
Push up the marked area (at the lower part of the front panel ) to release the claws . If it is difficult to release ,remove the front panel .



Labels: Mounting plate claws, Bottom frame



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



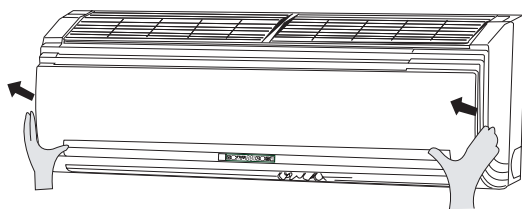
(Section of wall hole)

Indoor side, Outdoor side, Wall hole, Thickness of wall, Piping hole pipe, 66mm

more than 10cm

more than 10cm

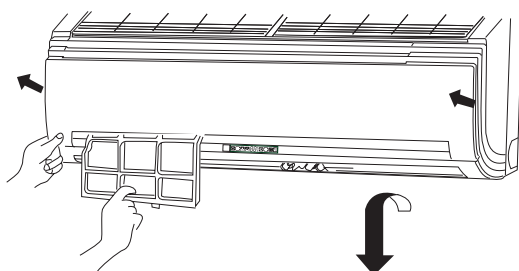
Cut thermal insulation pipe to an appropriate length and wrap it with tape, making sure that no gap is left in the insulation pipe's cut line .



### 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.

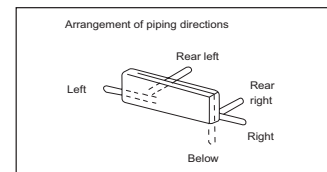
# Outdoor unit installation drawings

## HSU-09,12H03\VA(ZXF)

### Outdoor

Model	26/28 class
Max.allowable length	Cooling only: 7 m Heat pump: 7 m
Max.allowable height	5m
Additional refrigerant required for refrigerant pipe exceeding 5m in length	16g/m
Gas pipe	O.D. 9.52/12.7
Liquid pipe	O.D. 6.35/9.52

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



The distance between the indoor unit and the floor should be more than 2m.

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.
- If vibration may affect the house, fix the unit by attaching a vibration-proof mat.



# Sincere Forever



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