



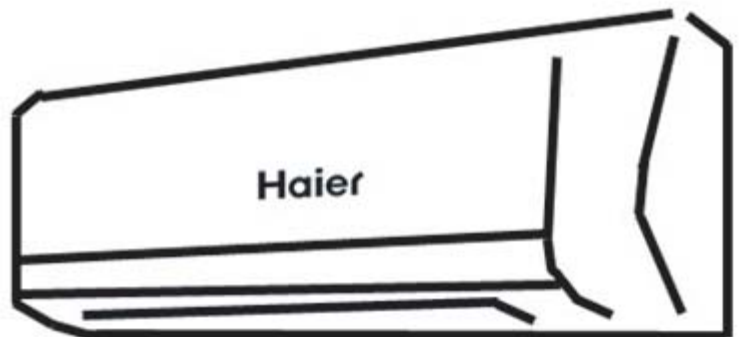
## Domestic Air conditioner

# ***TECHNICAL DATA***

## **ON/OFF**

### Wall mounted Type U-Series

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



Healthy negative ion: make your room full of an abundance natural negative ions



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



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



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



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



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



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



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



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



O2 refresh: This exclusive technology can bring fresh air in and take unpleasant air out but without temprature and humidity loss



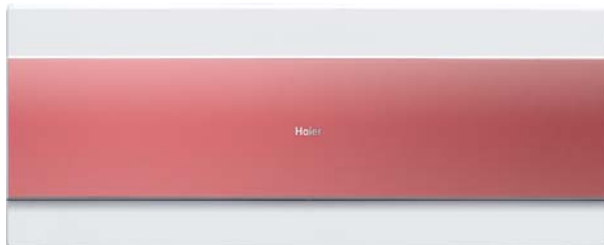
4 Fan setting: Slect the fan speed LO,MED,HI,AUTO



Entire auto mode: You can set a temprature value,with which the unit can be adjusted theoperation mode automatically



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



## 2 Specifications

This information was not available at the time of publication .

NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS			HSU-09H03/U(ZXF)		HSU-12H03/U(ZXF)
NOMINAL INPUT	Cooling	nominal	kW	0.1	0.1
	Heating	nominal	kW	0.1	0.1

NOMINAL CAPACITY and					
Model			HSU-09H03/U(ZXF)		HSU-12H03/U(ZXF)
NOMINAL CAPACITY(3-4)	Cooling(1)	norm.	kw	2.70	3.45
	Heating(2)	norm.	kw	3.00	3.80
NOMINAL INPUT	Cooling	norm	kw	0.80	1.02
	Heating	norm.	kw	0.855	1.20
EER	Cooling			2.77	2.80
COP	Heating			3.38	3.38
ENERGY LABEL(7-8)	Cooling			----	----
	Heating			----	----
ANNUAL ENERGY CONSUMPTION(9)	Cooling		kwh	420	525

TECHNICAL SPECIFICATIONS						
INDOOR UNITS				HSU-09H03/U(ZXF)	HSU-12H03/U(ZXF)	
DIMENSIONS	Unit	H	mm	285		
		W	mm	850		
		D	mm	160		
WEIGHT	Unit	kg		10.8		
COLOR	Unit	white				
SOUND LEVEL	Sound pressure (cooling/heating)(5)	high	dB(A)	39	39	
		medium	dB(A)	35	35	
		low	dB(A)	29	29	
	Sound power(cooling/heating)(6)	high	dB(A)	39	39	
FAN	Air flow rate(cooling/heating)	high	m <sup>3</sup> /min	7.7(9.0)	7.7(9.0)	
		low	m <sup>3</sup> /min	6.1(7.0)	6.1(7.0)	
		super low	m <sup>3</sup> /min	5.1(6.2)	5.1(6.2)	
	Speed(cooling/heating)	steps		5steps,silent and auto		
		high	rpm	1200	1350	
		medium	rpm	1125	1150	
		low	rpm	950	950	
Type	Cross flow fan					
Motor output	W		16	16		
AIR FILTER	Removable/washable/mildew proof					
REMOTE CONTROLLER	YL-H76EN					
TEMPERATURE CONTROL	Microcomputer control					
PIPING CONNECTIONS(external diameter)	liquid	mm	Φ6.35	Φ6.35		
	gas	mm	Φ9.52	Φ12.7		
	drain	mm	Φ16	Φ16		
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 x1.4		

TECHNICAL SPECIFICATIONS					
OUTDOOR UNITS				HSU-09H03/U(ZXF)	HSU-12H03/U(ZXF)
NET DIMENSIONS (stop valve, and bottom support is not included)	Unit	H	mm	540	
		W	mm	780	
		D	mm	245	
WEIGHT	Unit		kg	33	43
COLOR	Unit	white			
SOUND LEVEL	Sound pressure(cooling/heating)(5)	high	dB(A)	55	55
	Sound power(cooling/heating)(6)	high	dB(A)	-----	-----
FAN	Air flow rate(cooling/heating)	high	m <sup>3</sup> /min	25.3(22.8)	25.3(22.8)
		low	m <sup>3</sup> /min	---	---
	Speed(cooling/heating)	high	rpm	830	1060
		low	rpm	---	---
	Type	Propeller fan			
	Motor output		W	80	80
REFRIGERANT CIRCUIT	Refrigerant type	R22			
	Refrigerant charge		kg	1.00	1.20
	Maximum allowable distance between indoor and outdoor		m	7	
	Maximum allowable level difference		m	5	
	Refrigerant control	-----			
COMPRESSOR	Type	rotary Compressor			
	Model			2P17S225ANA	PH200X2C-8FTC1
	Motor output		w	790	970
	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 x1.4	

ELECTRICAL SPECIFICATIONS					
For indoor units only:				HSU-09H03/U(ZXF)	HSU-12H03/U(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/U(ZXF)	HSU-12H03/U(ZXF)
CURRENT	Nominal running current	cooling	A	3.52	4.5
		heating	A	3.82	5.4
	Maximum running current	cooling	A	7.8	7.8
		heating	A	7.8	7.8
	Starting current	cooling	A	32	45
		heating	A	32	45

For indoor units only:				HSU-09H03/U(ZXF)	HSU-12H03/U(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

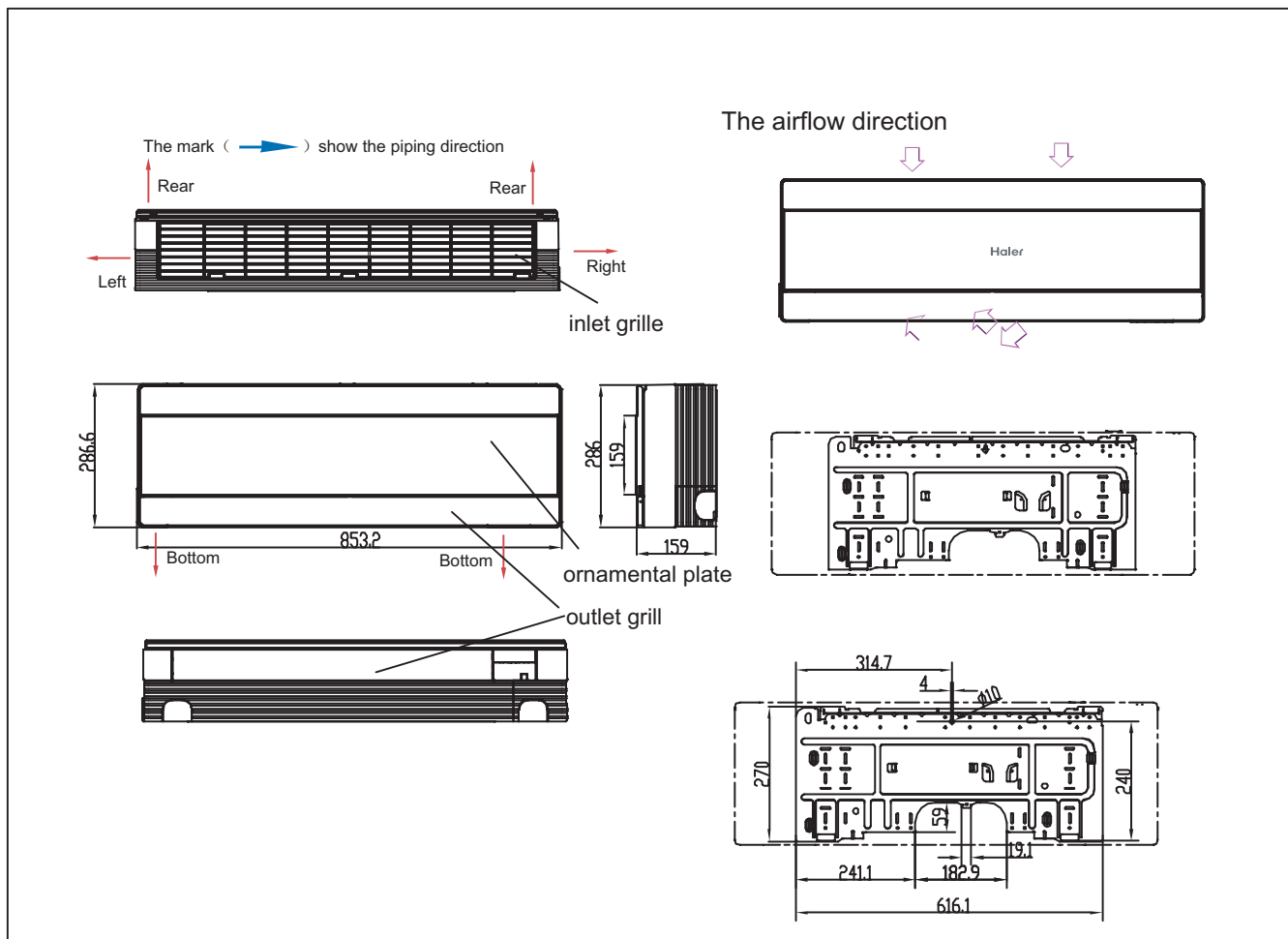
Model	HSU-09H03/U(ZXF)	HSU-12H03/U(ZXF)
YR-H76	Y	Y
YR-U01	Y	Y

### 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

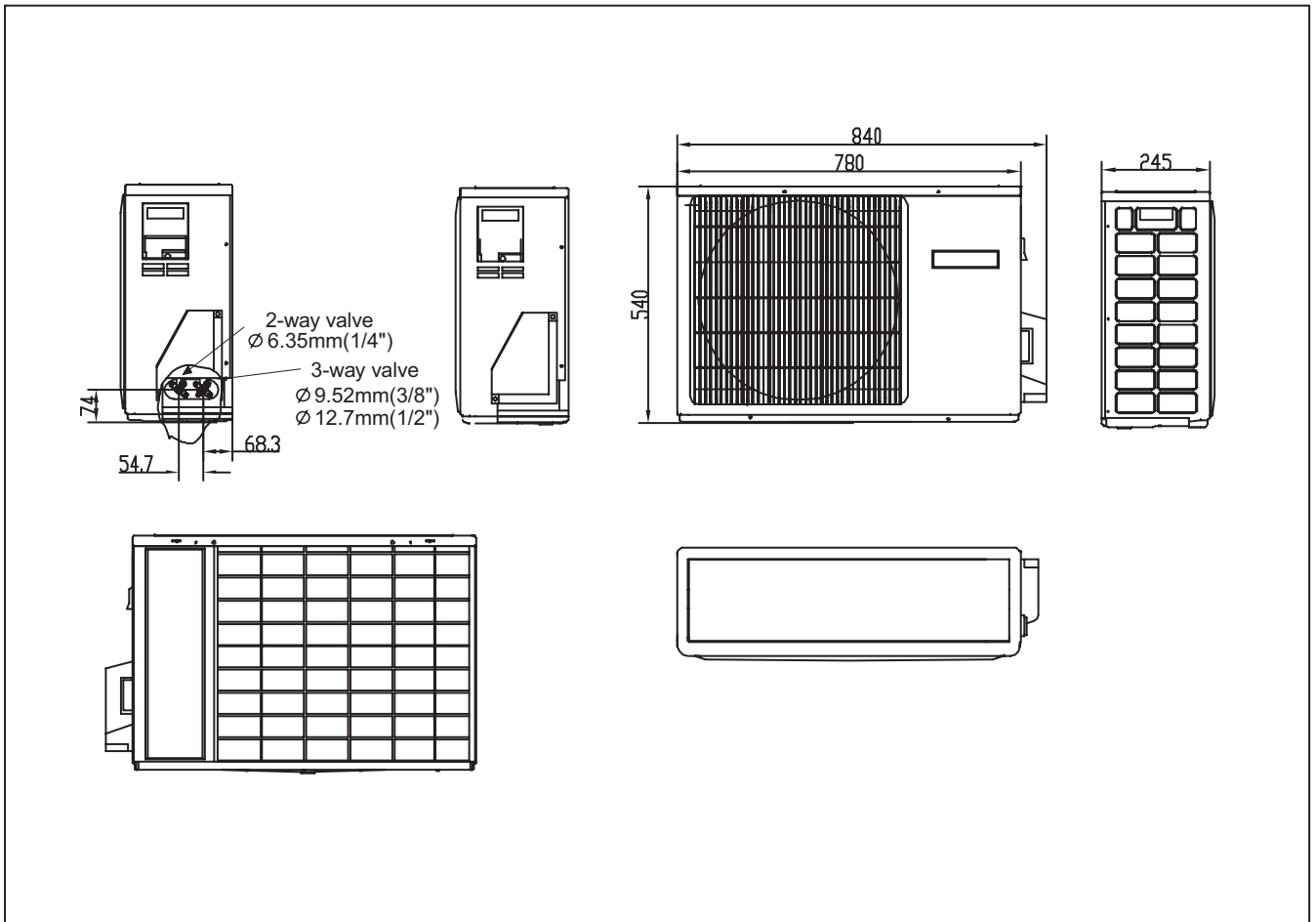
# 5 Dimensional drawings

## Indoor unit





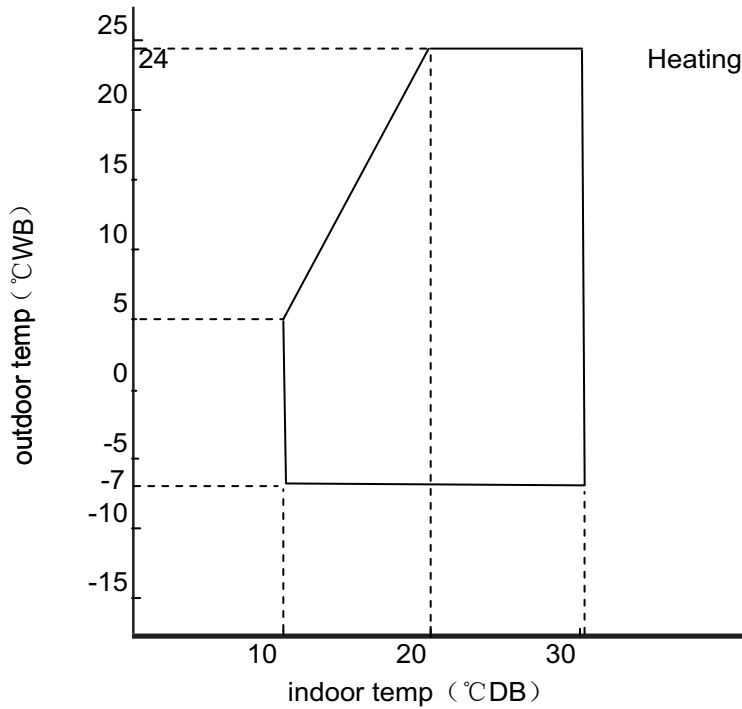
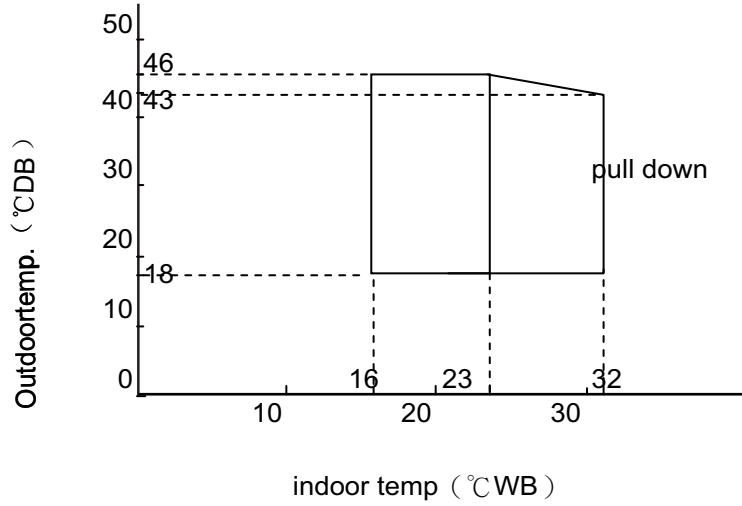
# Outdoor unit



# 6 Operation range

The name of parts

Cooling

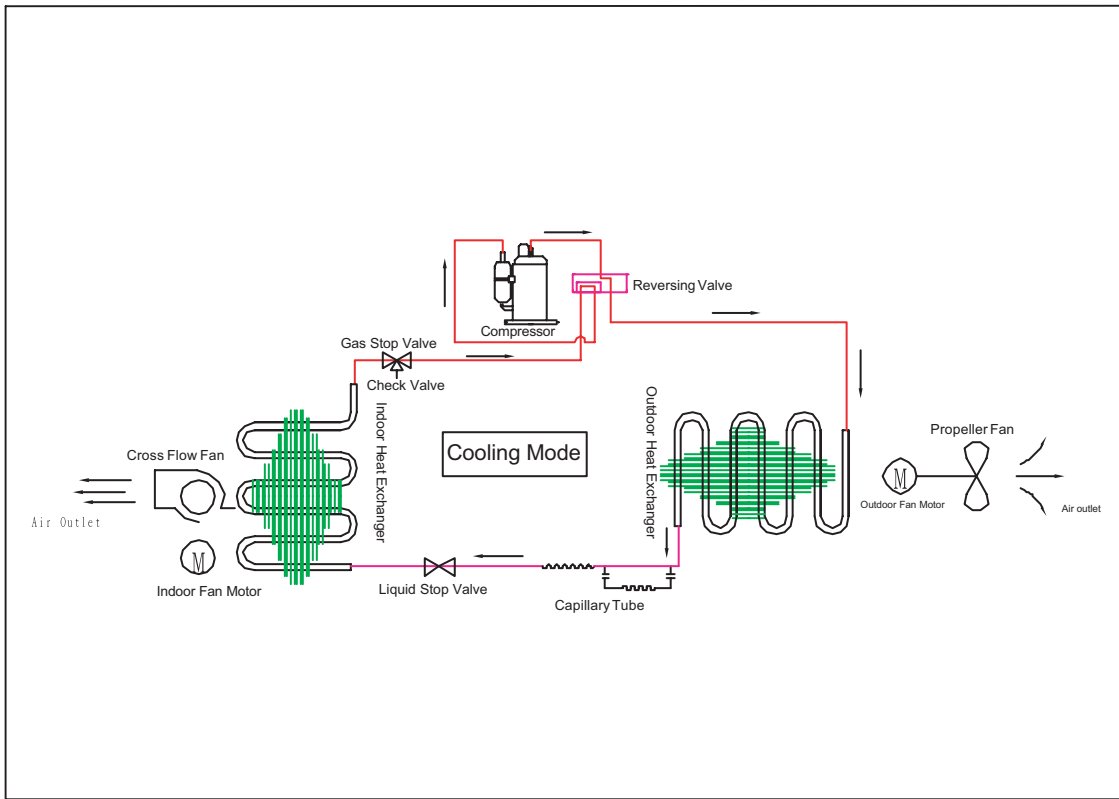


Notes:

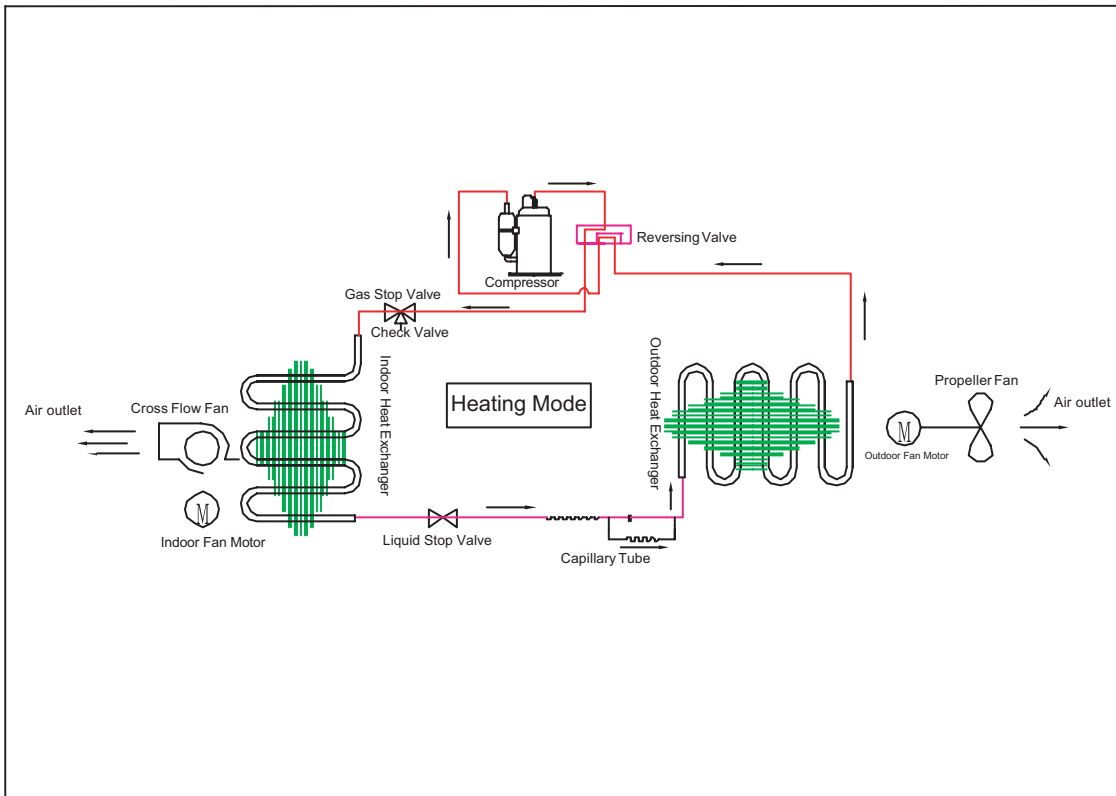
- The graphs are based on the following condition:
- Equivalent piping length      7.5m
- Level difference                  0m
- Air flow rate                      high

# 7 Piping diagrams

## Cooling mode

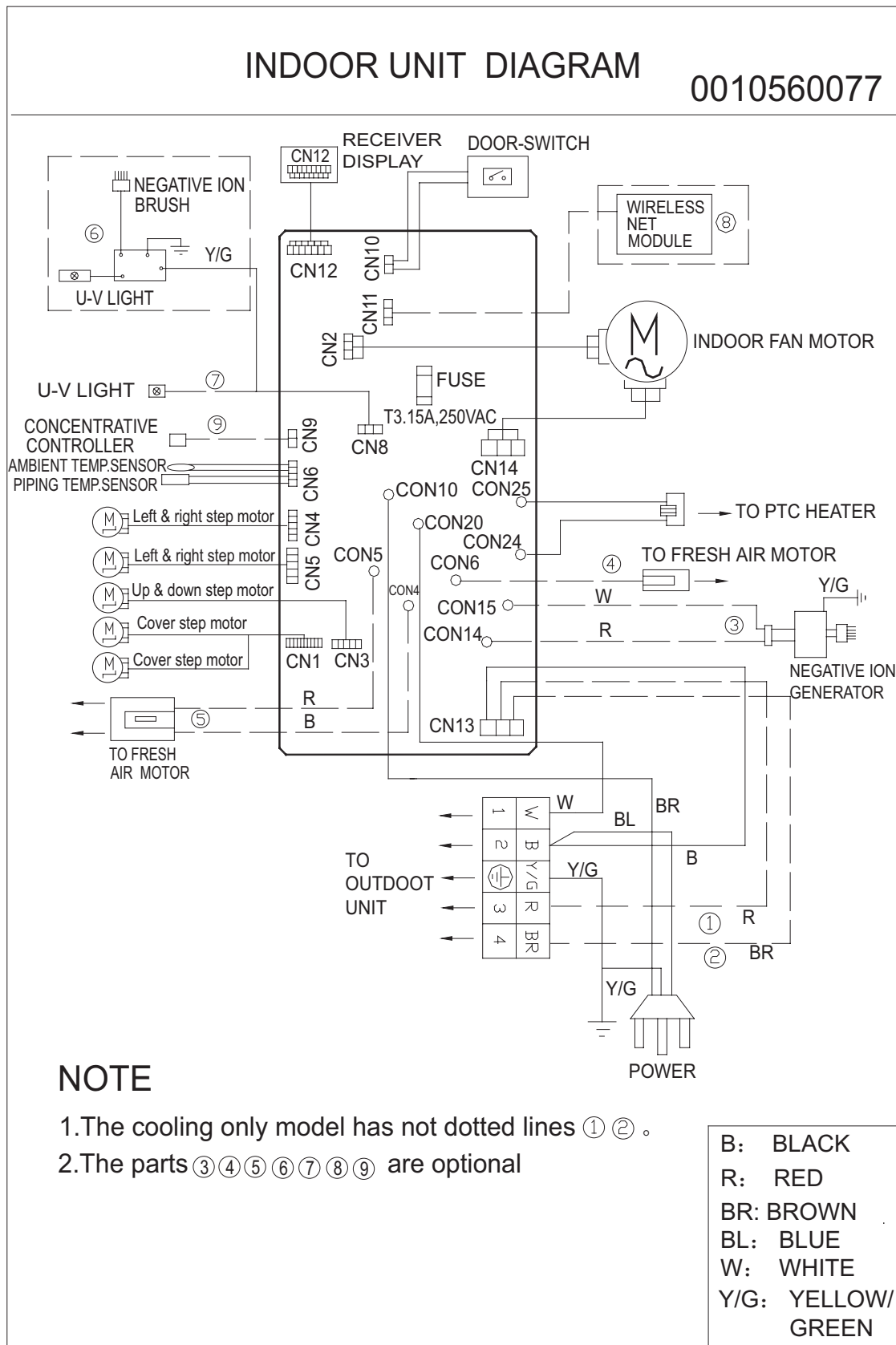


## Heating mode

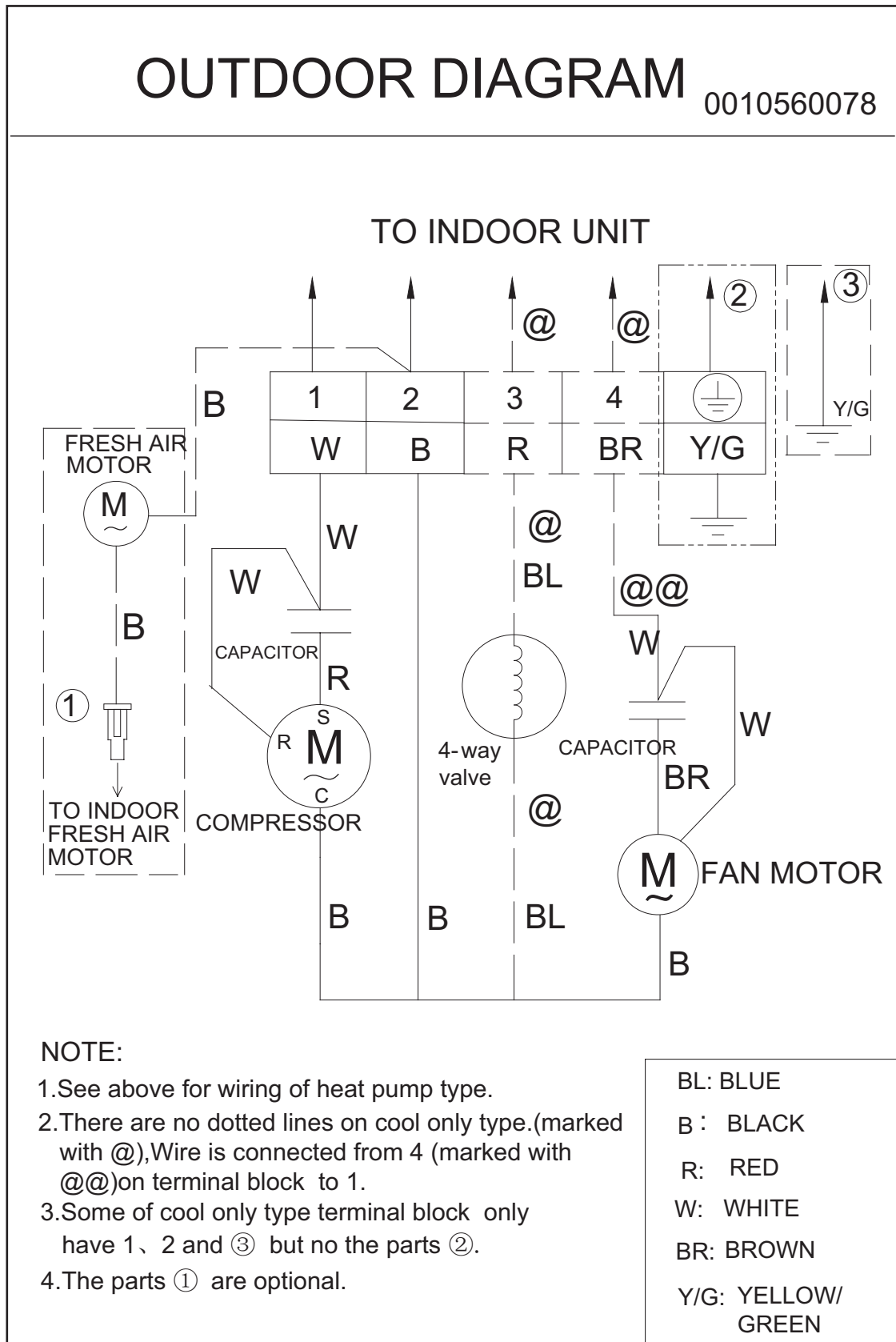


# 8 Wiring diagrams

## Indoor unit

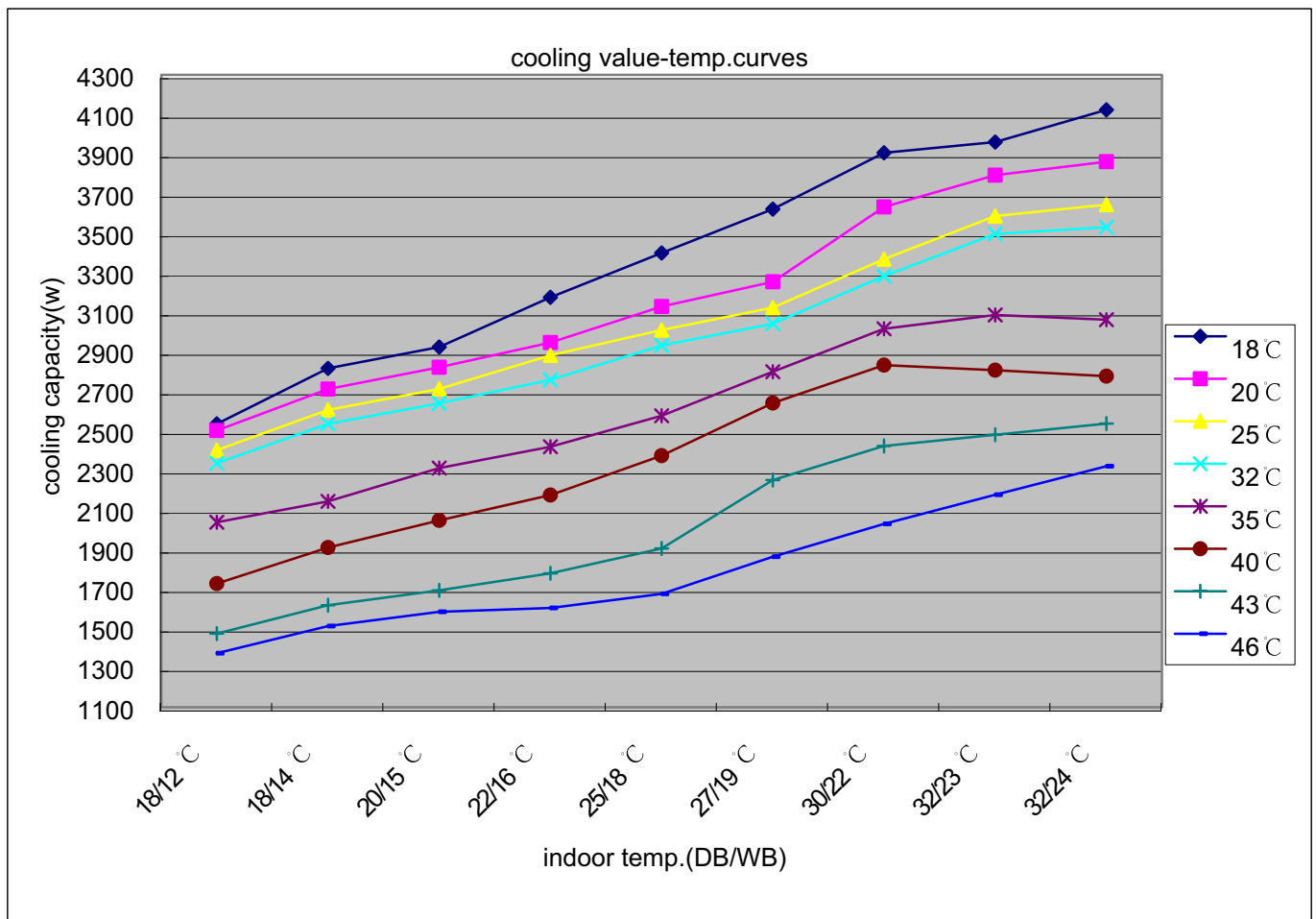


Outdoor unit

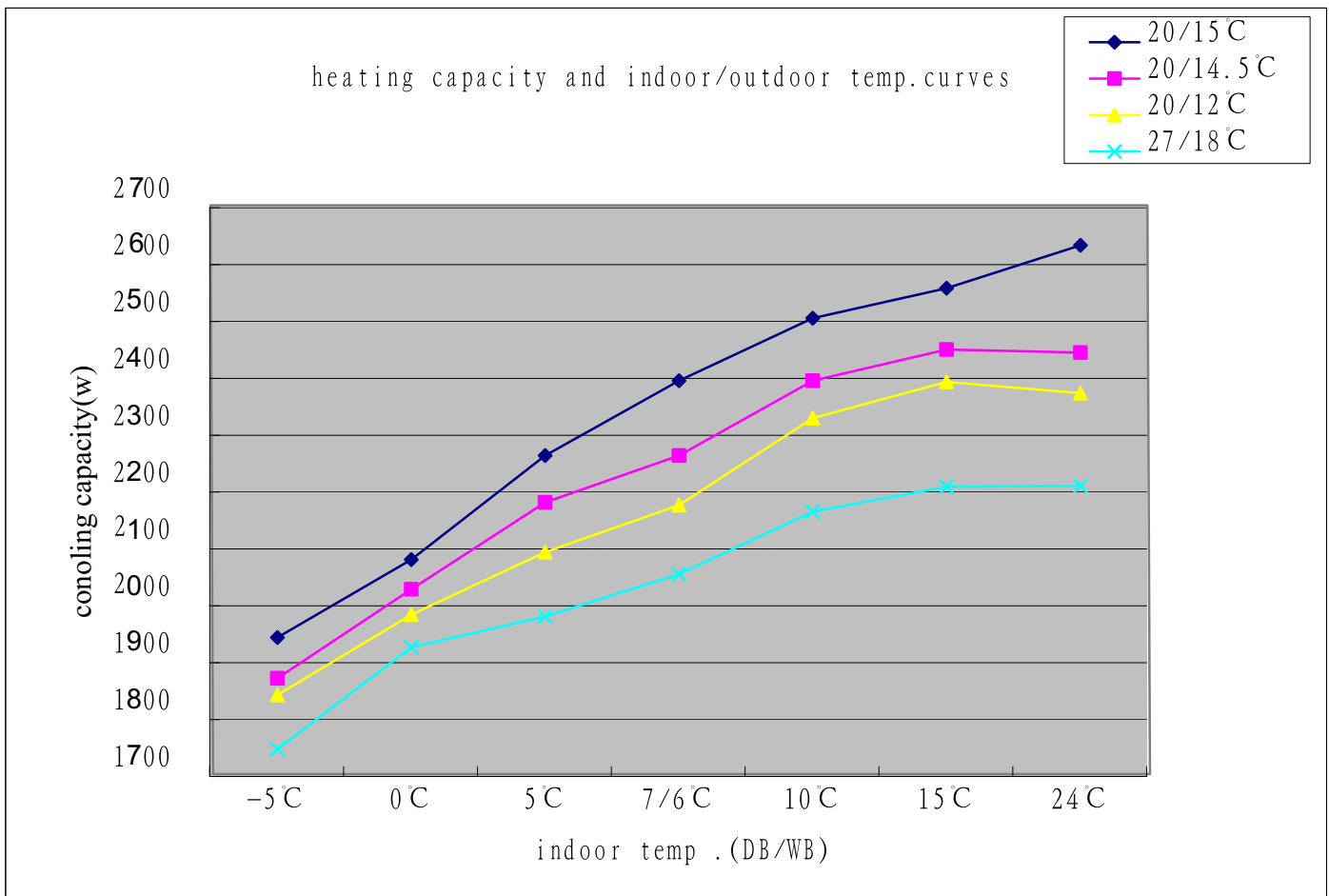


# 9 Capacity tables and curves diagrams

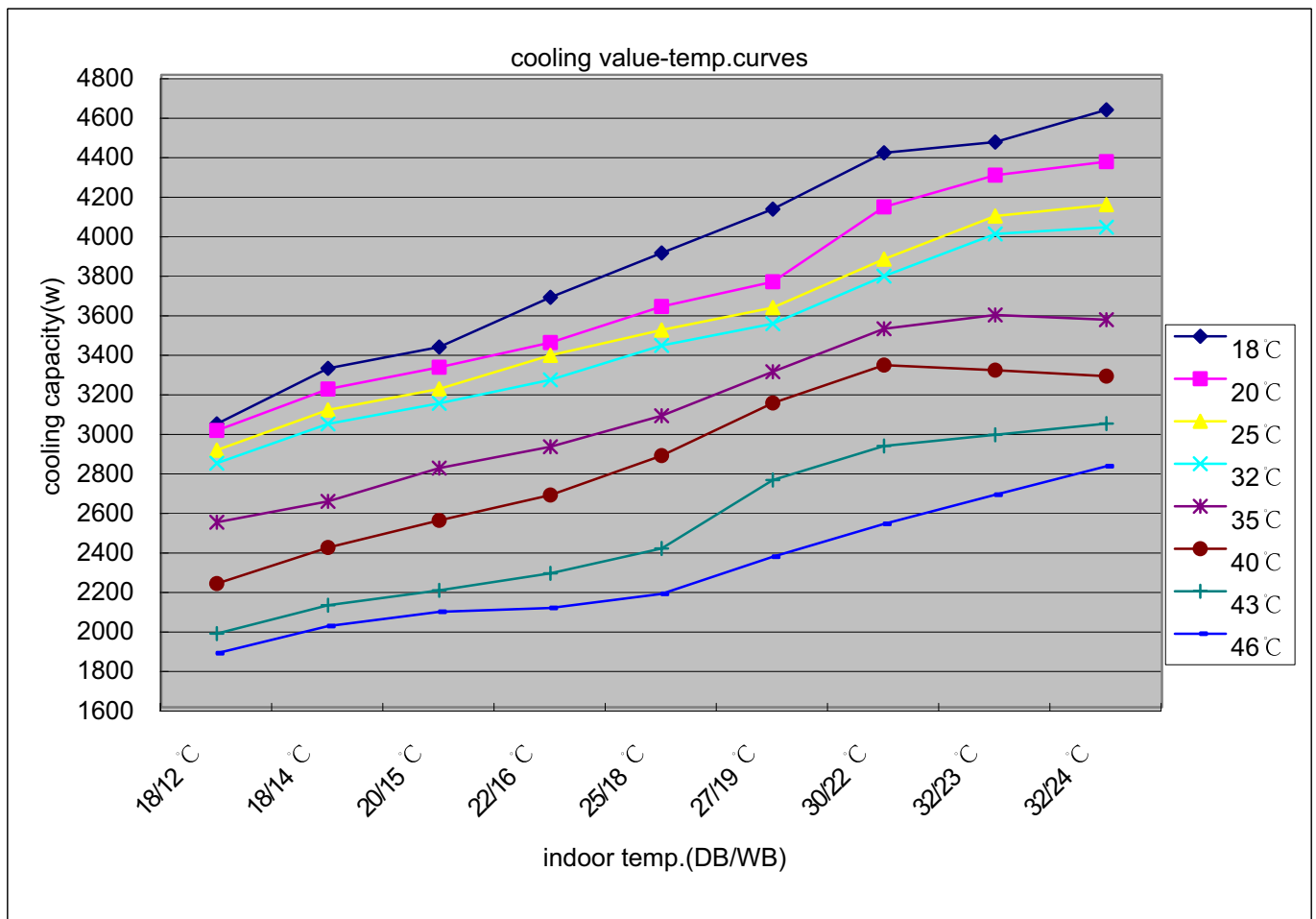
HSU-09H03/U(ZXF) performance curves								
cooling capacity and indoor/outdoor temp.curves								
indoor temp.	outdoor temp.(humidity 46%)							
DB/WB	18 C	20 C	25 C	32 C	35 C	40 C	43 C	46 C
18/12 C	2579	2562	2463	2396	2098	1787	1534	1434
18/14 C	2884	2772	2666	2595	2203	1969	1678	1572
20/15 C	2979	2881	2772	2699	2372	2117	1753	1644
22/16 C	3221	3006	2942	2818	2479	2235	1839	1664
25/18 C	3460	3189	3071	2992	2636	2435	1964	1735
27/19 C	3682	3214	3184	3102	2859	2702	2311	1922
30/22 C	3967	3693	3429	3343	3077	2892	2483	2089
32/23 C	4021	3853	3647	3456	3147	2966	2540	2236
32/24 C	4184	3922	3704	3591	3222	3037	2597	2381



HSU-09H03/U(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	1927	1855	1826	1730
0	2064	2011	1967	1910
5	2247	2164	2077	1964
7/6	2378	2247	2159	2038
10	2488	2378	2312	2148
15	2541	2433	2376	2192
24	2616	2428	2456	2293

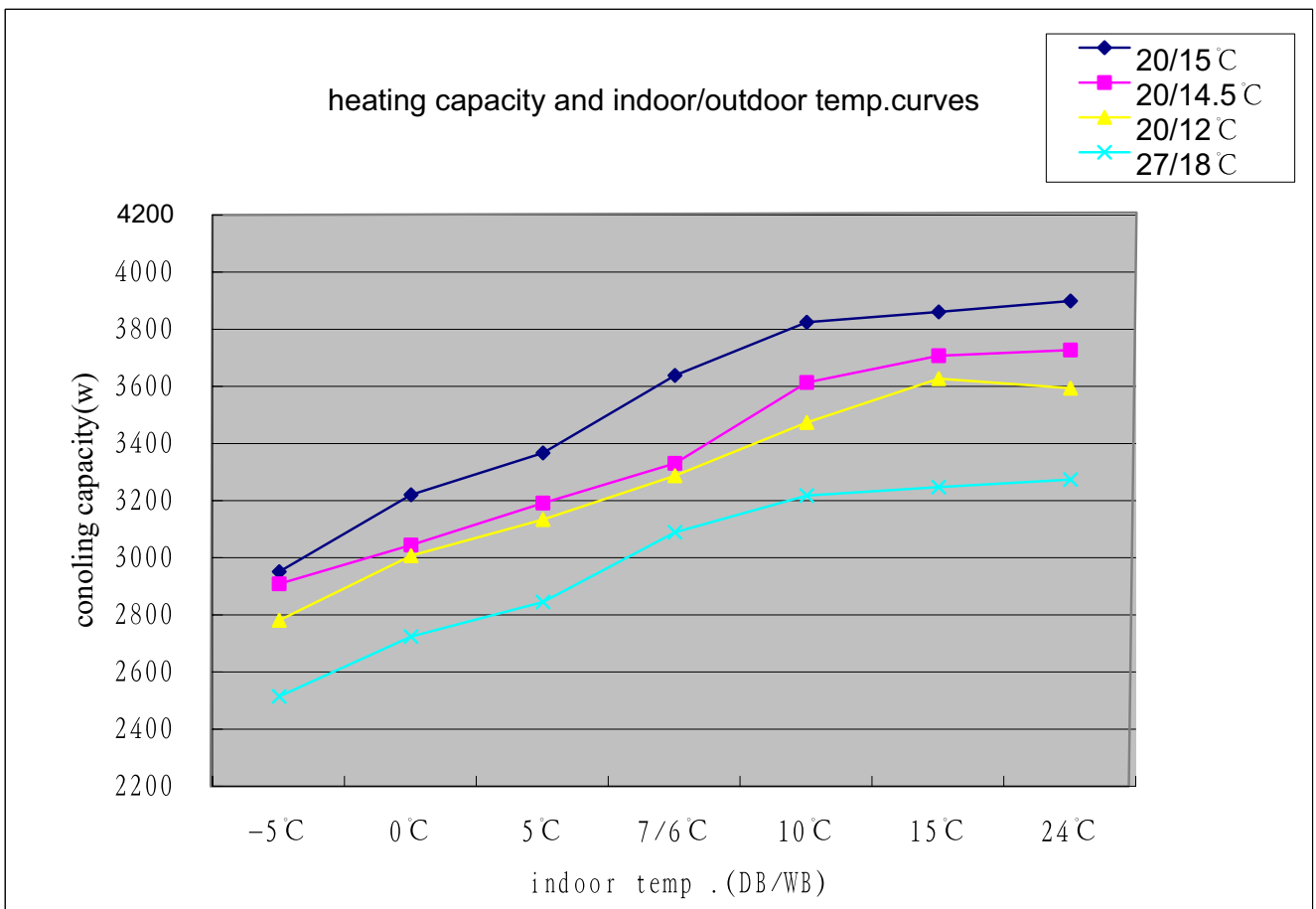


HSU-12H03/U(ZXF) performance curves								
cooling capacity and indoor/outdoor temp.curves								
indoor temp.	outdoor temp.(humidity 46%)							
DB/WB	18 C	20 C	25 C	32 C	35 C	40 C	43 C	46 C
18/12 C	3095	3062	2963	2896	2598	2287	2034	1934
18/14 C	3376	3272	3166	3095	2703	2469	2178	2072
20/15 C	3484	3381	3272	3199	2872	2607	2253	2144
22/16 C	3736	3506	3442	3218	2979	2735	2339	2164
25/18 C	3960	3689	3571	3492	3136	2935	2464	2235
27/19 C	4182	3814	3684	3602	3359	3211	2811	2422
30/22 C	4467	4193	3929	3843	3577	3392	2983	2589
32/23 C	4521	4353	4147	3956	3647	3366	3040	2736
32/24 C	4684	4422	4204	4091	3622	3337	3197	2881

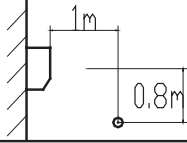




HSU-12H03/U(ZXF) performance curves				
heating capacity and indoor/outdoor temp.curves				
outdoor temp . °C	indoor temp .(humidity 46%)			
DB/W B	20 /15 °C	20/14.5 °C	20 /12 °C	27 /18 °C
-5 °C	2911	2871	2745	2478
0 °C	3184	3002	2973	2682
5 °C	3334	3156	3096	2814
7/6 °C	3607	3294	3251	3051
10 °C	3789	3571	3436	3184
15 °C	3825	3673	3593	3213
24 °C	3869	3695	3557	343



# 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/U(ZXF)	45	38	32		45
HSU-12H03/U(ZXF)	39	35	29		39

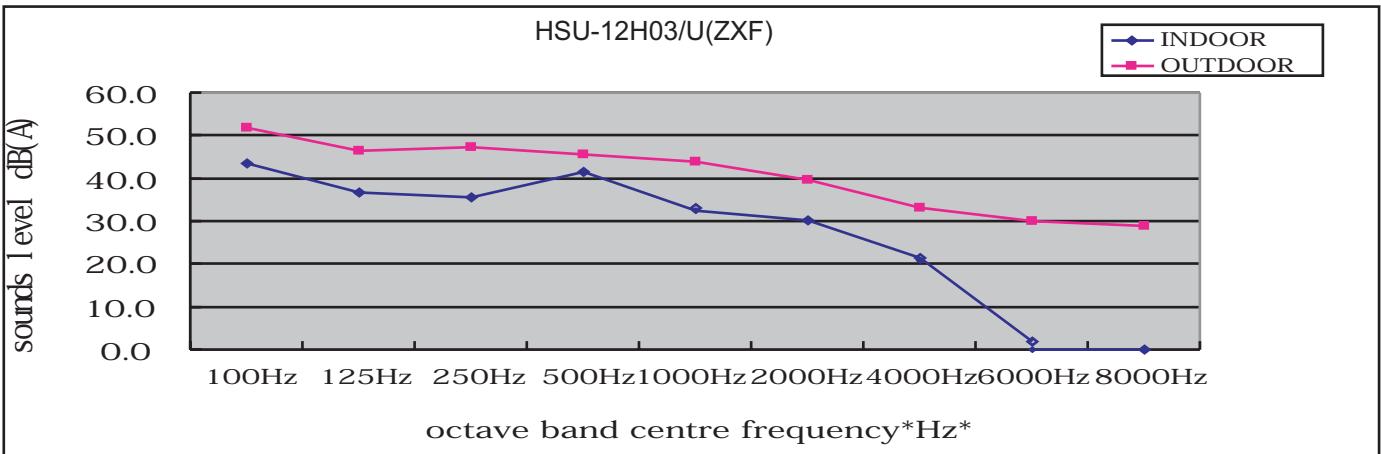
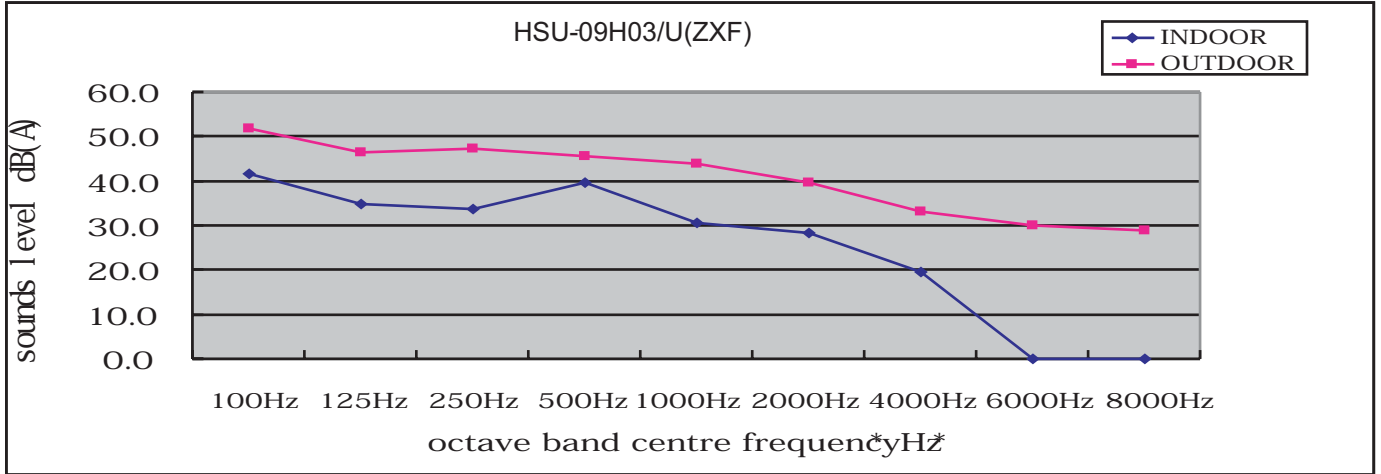
## Sound level data(cooling)

HSU-09H03/U(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/U(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)



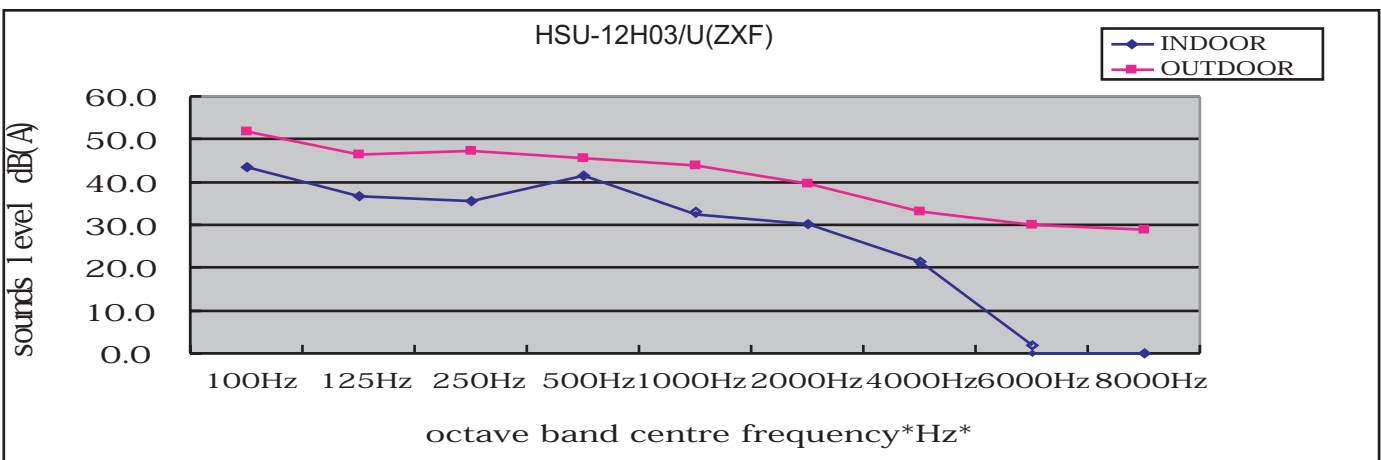
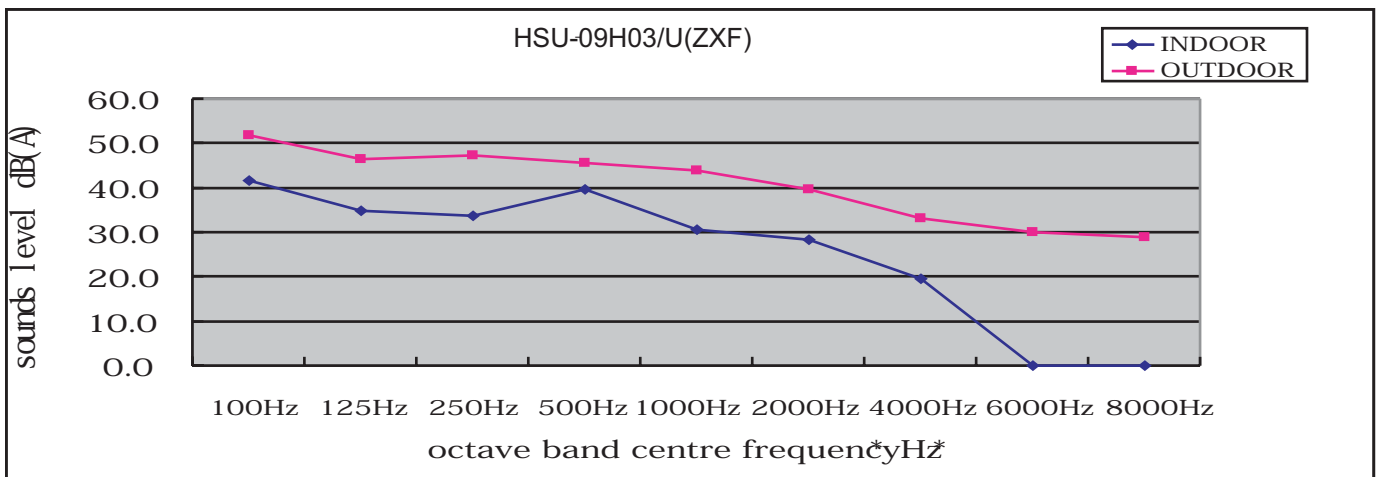
### Sound level data(heating)

HSU-09H03/U(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/U(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

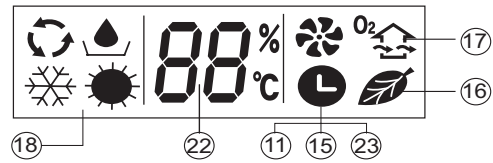
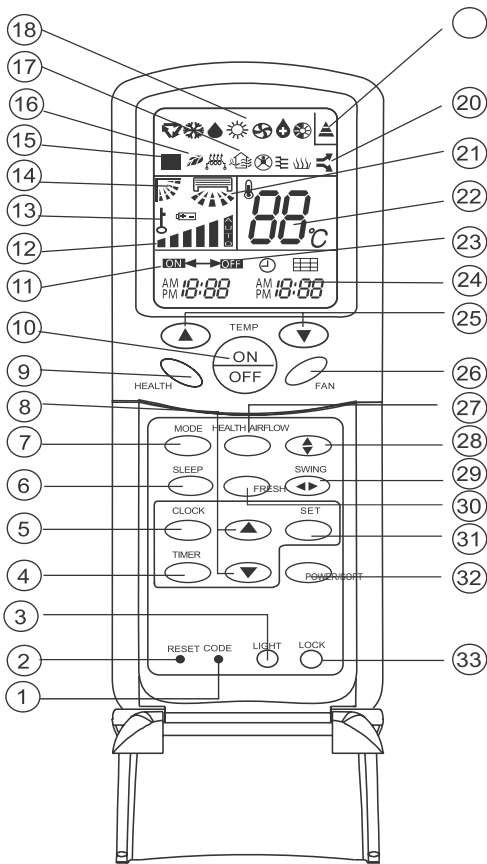
### Sound pressure spectrum(heating)



## 11 Accessories

Standard name	HSU-09H03/U(ZXF)	HSU-12H03/U(ZXF)
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



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. POWER/SOFT 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. POWER/SOFT button

Use to set power/soft 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.

## 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. HOUR button

Used to set clock and timer setting.

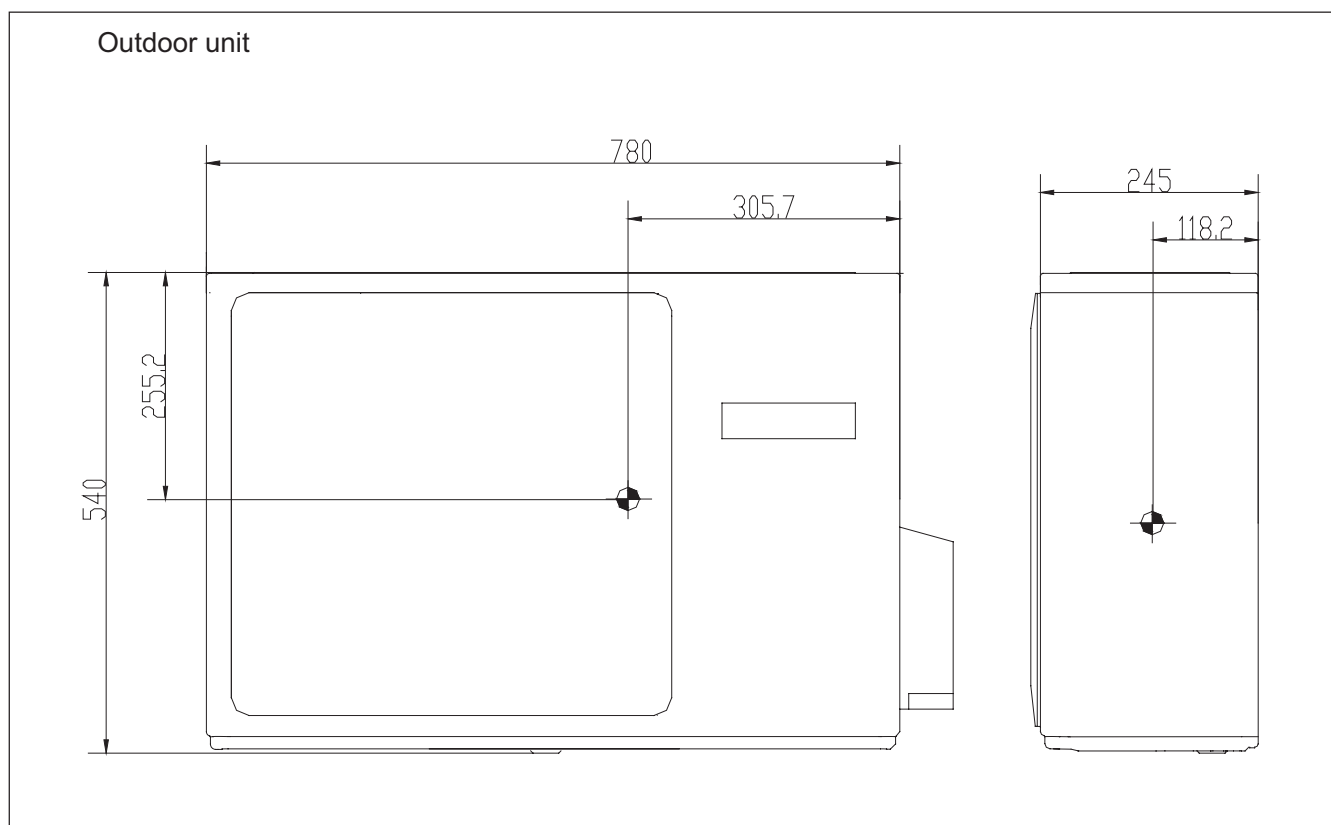
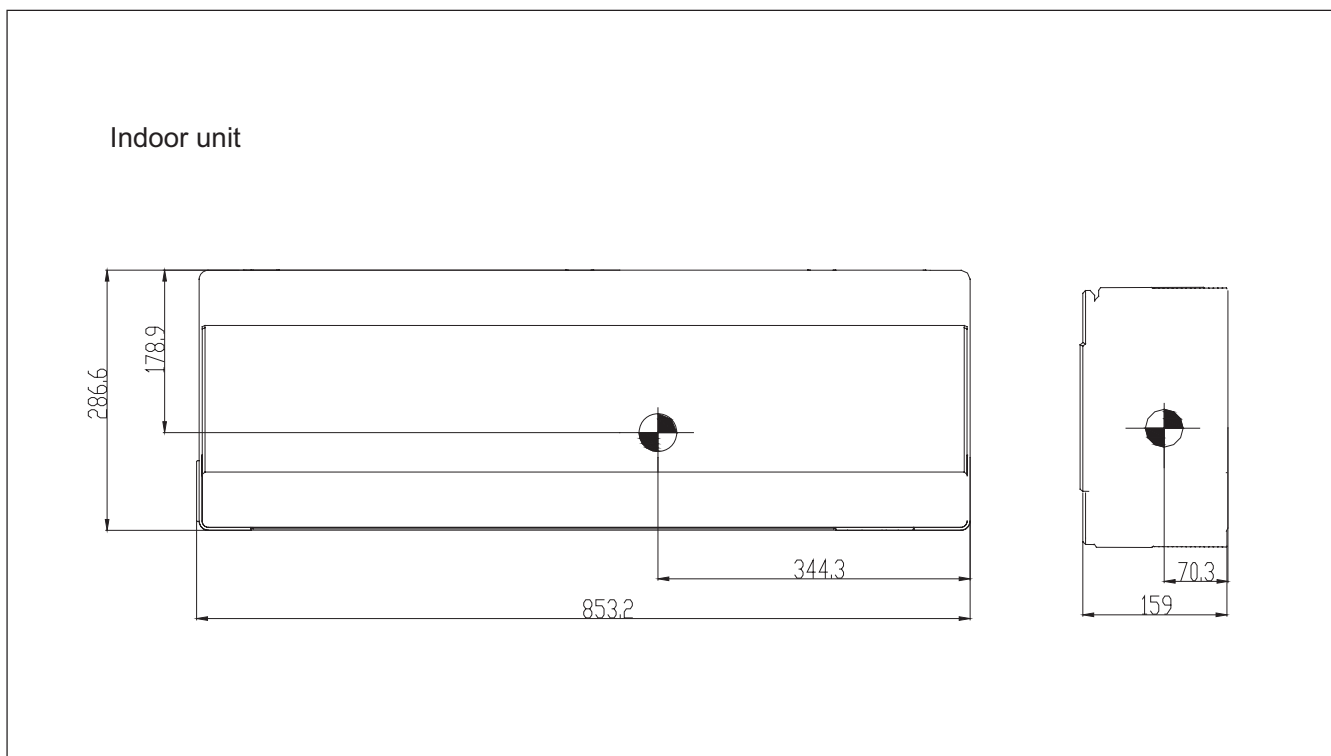
## 9. HEALTH button

Used to set healthy operation.

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

The fresh function is optional.

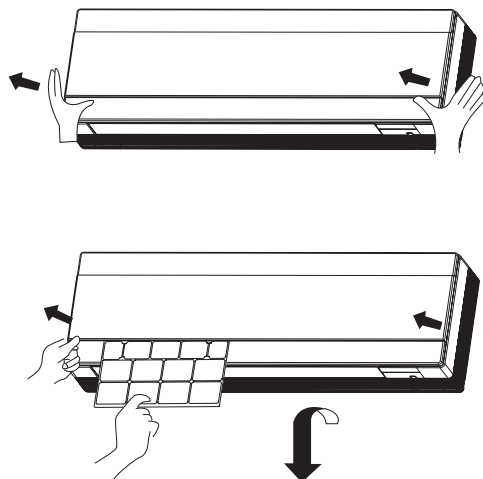
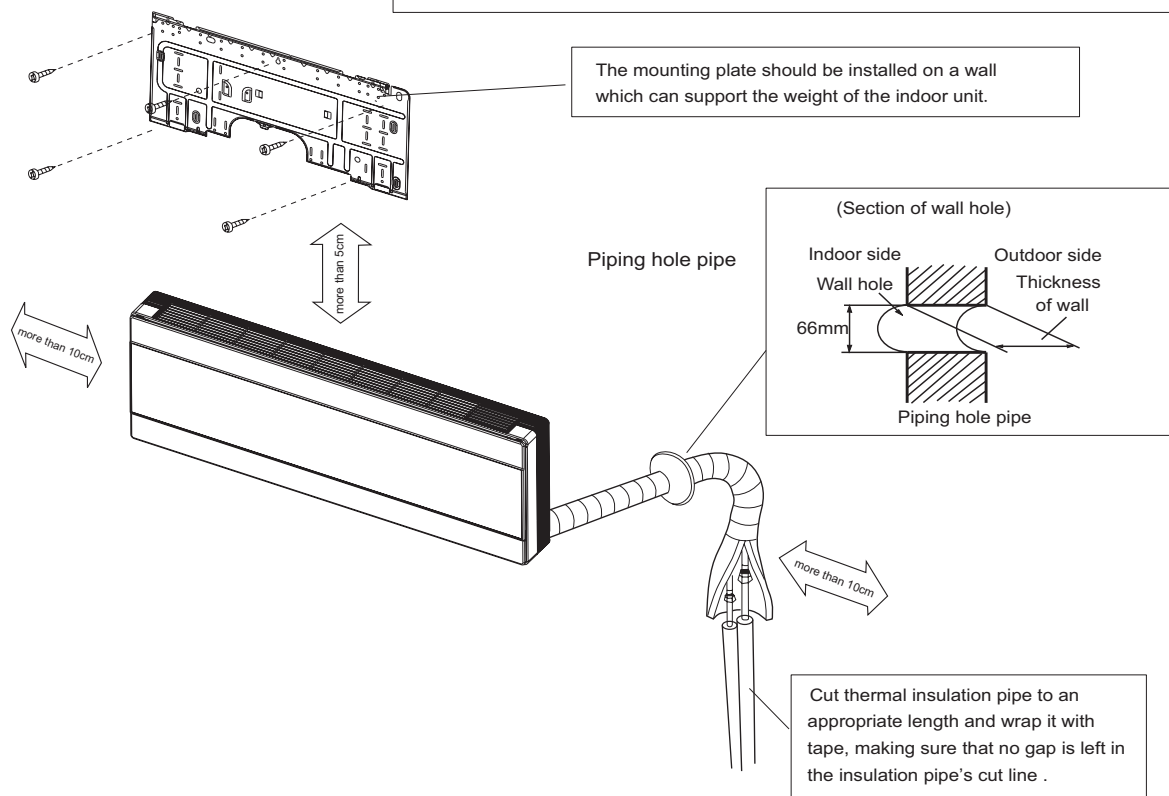
### 13 Center of gravity



# 14 Installations

## Indoor unit installation drawings

- How to attach the indoor unit.  
Hook the claws of the bottom frame to the mounting plate.  
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 .



### 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.

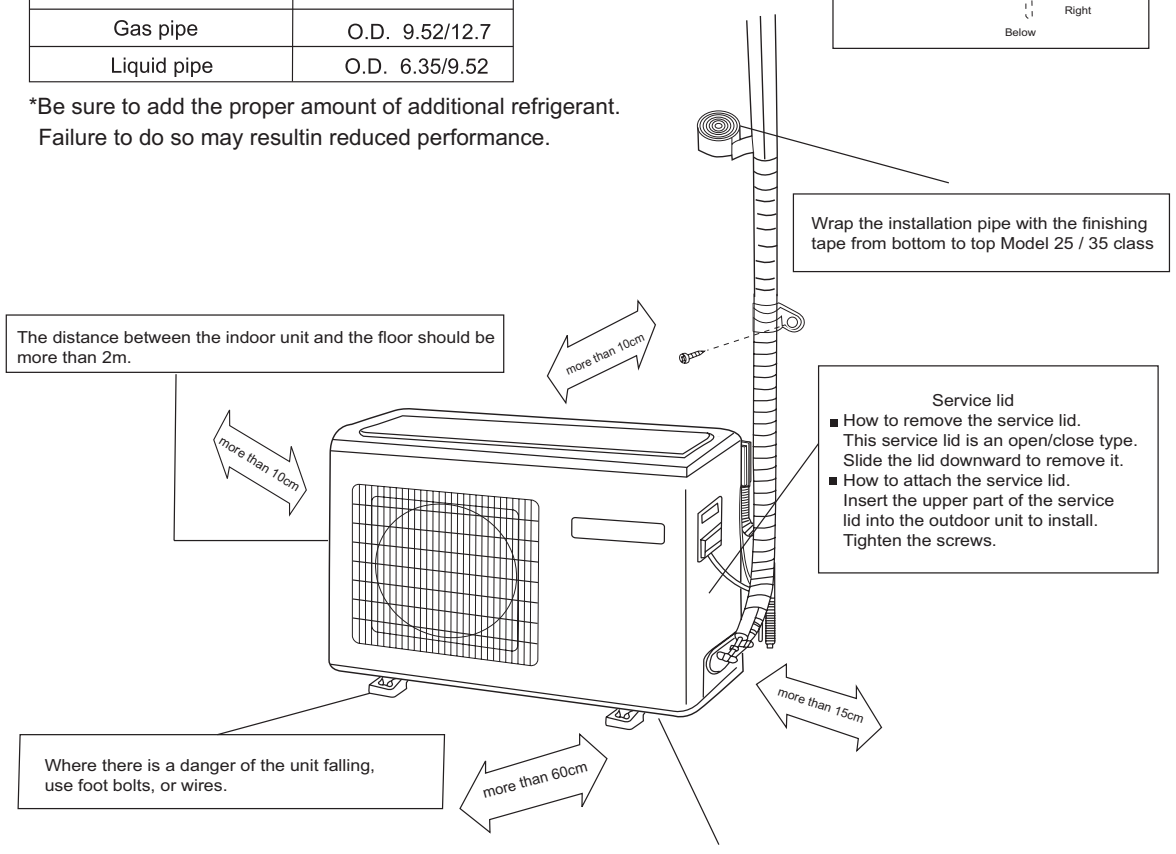
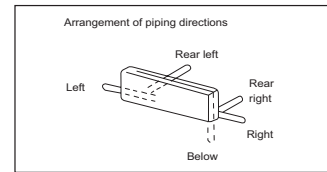
# Outdoor unit installation drawings

## HSU-09,12H03/U(ZXF)

### Outdoor

Model	26/28 class
Max.allowable length	Cooling only: 7m Heat pump: 7m
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.



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.

- 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



Haier Group

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