



Domestic Air conditioner

TECHNICAL DATA

ON/OFF

Wall mounted Type ARC-Series

HSU-18LE03
HSU-22LE03



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



Auto mode: According to the fixed temperature "26°C", 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 .



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 .



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 operation conditions after a sudden power blackout .



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



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



2.Specifications

This information was not available at the time of publication

NOMINAL CAPACITY and NOMINAL INPUT					
Model				HSU-18LE03	HSU-22LE03
NOMINAL CAPACITY(3-4)	Cooling(1)	norm.	kw	5.00	6.20
	Heating(2)	norm.	kw	-----	-----
NOMINAL INPUT	Cooling	norm	kw	1.90	2.35
	Heating	norm.	kw	-----	-----
EER	Cooling			2.63	2.64
COP	Heating			-----	-----
ENERGY LABEL(7-8)	Cooling			----	----
	Heating			----	----
ANNUAL ENERGY CONSUMPTION(9)	Cooling		kwh	795	970

TECHNICAL SPECIFICATIONS						
INDOOR UNITS				HSU-18LE03	HSU-22LE03	
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)	45	48	
		medium	dB(A)	43	45	
		low	dB(A)	40	39	
	Sound power(cooling/heating)(6)	high	dB(A)	45	48	
FAN	Air flow rate(cooling/heating)	high	m ³ /min	11.0	11.5	
		low	m ³ /min	10.3	10.0	
		super low	m ³ /min	9.2	9.8	
	Speed(cooling/heating)	steps		5steps,silent and auto		
		high	rpm	1350	1350	
		medium	rpm	1250	1250	
		low	rpm	1150	1100	
Type	Cross flow fan					
Motor output	W		16	16		
AIR FILTER	Removable/washable/mildew proof					
REMOTE CONTROLLER	YL-M07EN					
TEMPERATURE CONTROL	Microcomputer control					
PIPING CONNECTIONS(external diameter)	liquid	mm	Φ 6.35	Φ 6.35		
	gas	mm	Φ 12.7	Φ 15.88		
	drain	mm	Φ 16	Φ 16		
INSULATION MATERIAL	Heat insulation type					
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-18LE03	HSU-22LE03	
NET DIMENSIONS (stop valve, and bottom support is not included)	Unit	H	mm	540	632
		W	mm	780	780
		D	mm	245	257
WEIGHT	Unit		kg	34	45
COLOR	Unit			white	
SOUND LEVEL	Sound pressure(cooling/heating)(5)	high	dB(A)	58	60
	Sound power(cooling/heating)(6)	high	dB(A)	58	60
FAN	Air flow rate(cooling/heating)	high	m ³ /min	25	30
		low	m ³ /min	-----	----
	Speed(cooling/heating)	high	rpm	880	860
		low	rpm	---	---
	Type			Propeller fan	
	Motor output		W	80	80
REFRIGERANT CIRCUIT	Refrigerant type			R22	
	Refrigerant charge		kg	0.955	1.40
	Maximum allowable distance between indoor and outdoor		m	15	
	Maximum allowable level difference		m	5	
	Refrigerant control			-----	
COMPRESSOR	Type			rotary Compressor	
	Model			48R473AQ-51S	55R613A
	Motor output		w	1800	2100
	Oil type			SUNISO 4GSI	SUNISO 4GSI
	Oil charge volume		L	0.27	0.52
PIPING CONNECTIONS	liquid		mm	Φ 6.35	
	gas		mm	Φ 12.7/Φ15.88	
	drain		mm	Φ 18	
INSULATION MATERIAL	Heat insulation type			both liquid and gas pipes	
HEAT EXCHANGGER	TYPE			ML - Φ9.52HI - XAbube	
	Row x stage x fin pinth		mm	2 x 8 x1.4	

ELECTRICAL SPECIFICATIONS					
For indoor units only:				HSU-18LE03	HSU-22LE03
CURRENT	Nominal running current	cooling	A	0.15	0.15
		heating	A	-----	-----
	Maximum running current	cooling	A	0.15	0.15
		heating	A	-----	-----

For combination indoor units+ outdoor units:				HSU-18LE03	HSU-22LE03
CURRENT	Nominal running current	cooling	A	8.9	11.3
		heating	A	-----	-----
	Maximum running current	cooling	A	12.9	12.6
		heating	A	-----	-----
	Starting current	cooling	A	30	42
		heating	A	-----	-----

For indoor units only:				HSU-18LE03	HSU-22LE03
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

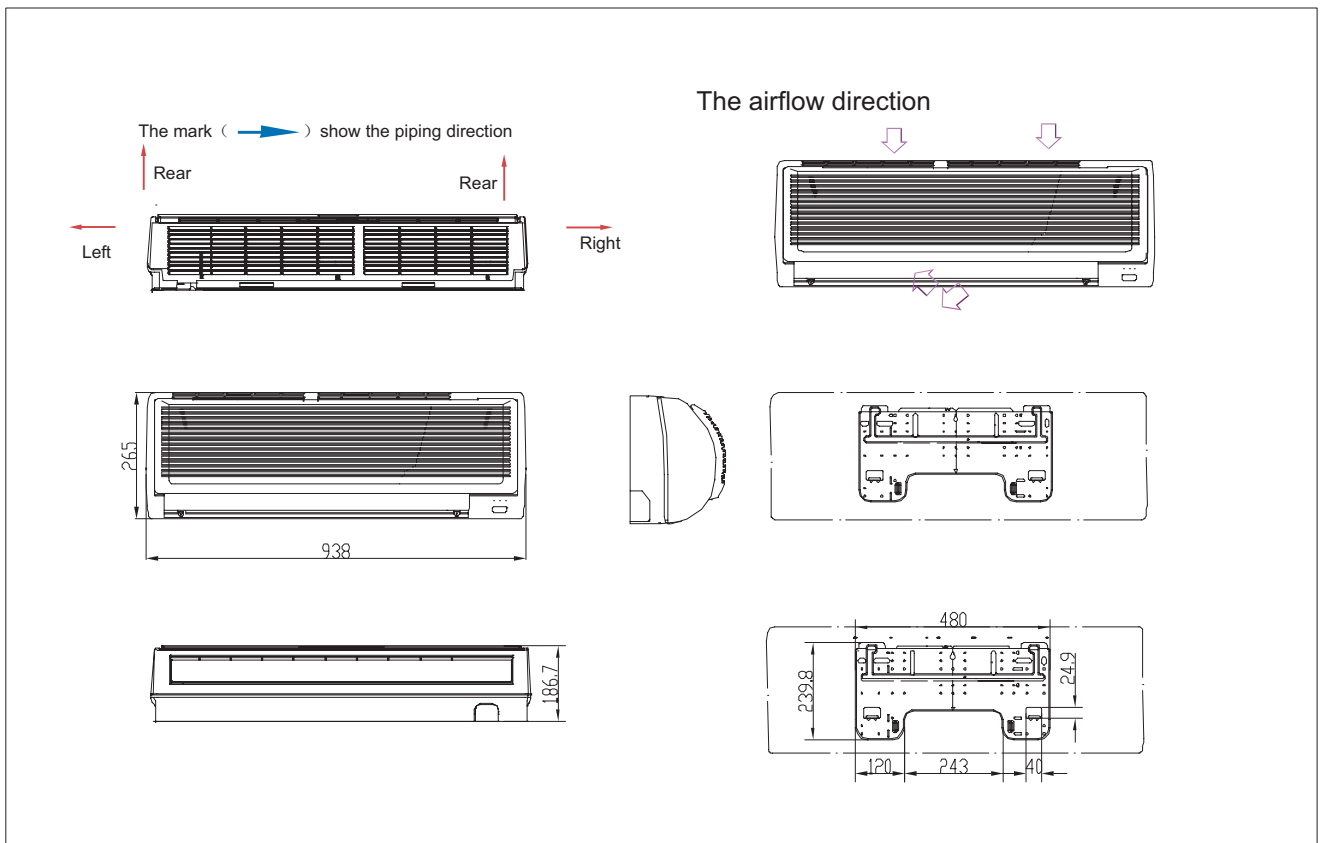
Model	HSU-18LE03	HSU-22LE03
YL-M07	Y	Y
YL-H10	Y	Y

4 Sensors lists

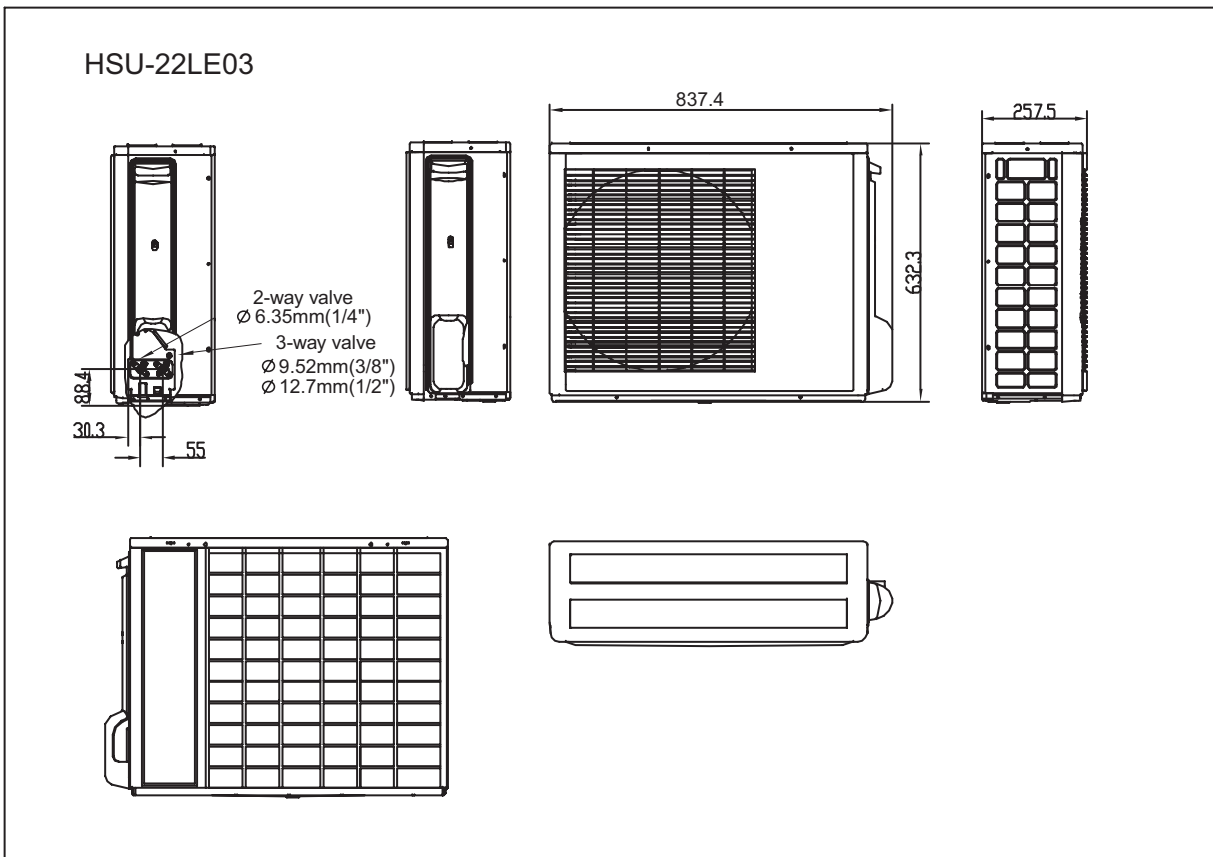
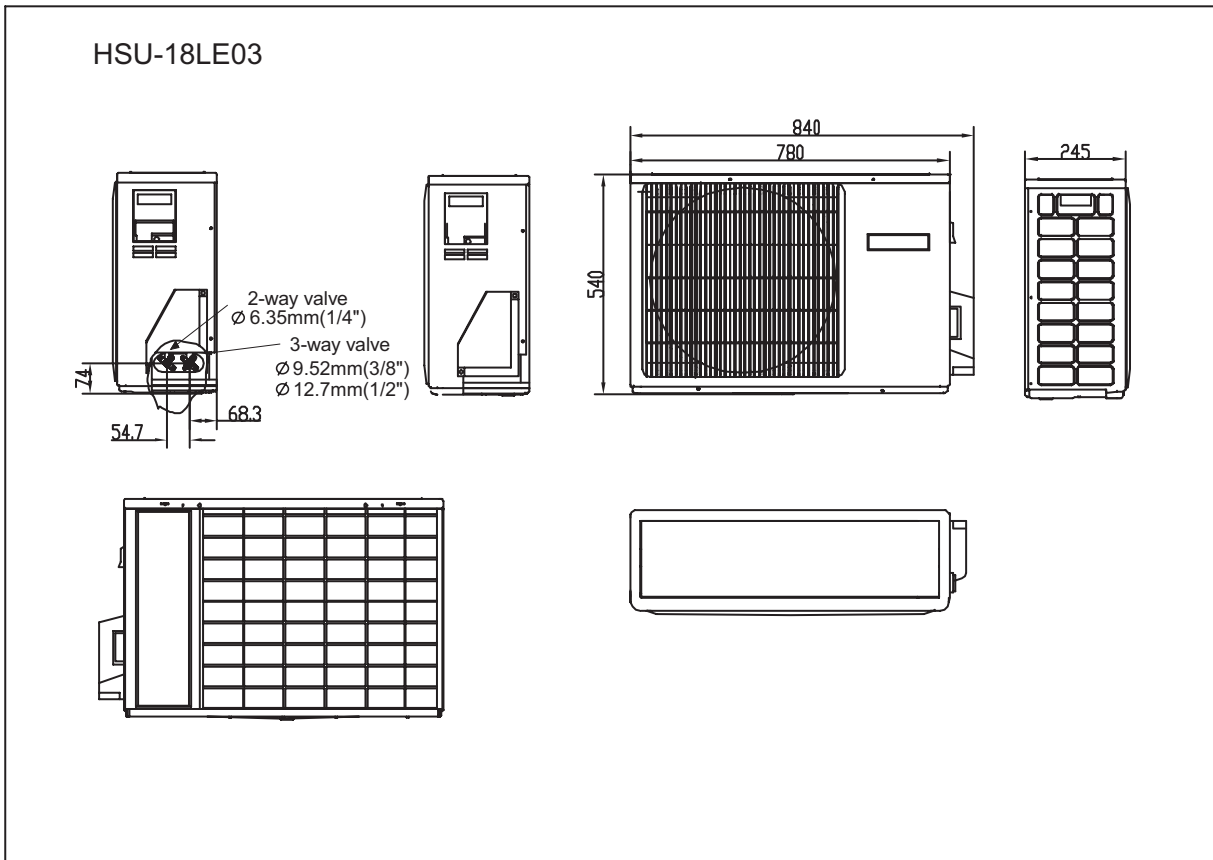
INDOOR UNIT		
type	Description	Qty
Room sensor	It's used for detecting room temperature	1
Pipe sensor	It's used for detecting temperature of evaporator	1

5 Dimensional drawings

Indoor unit



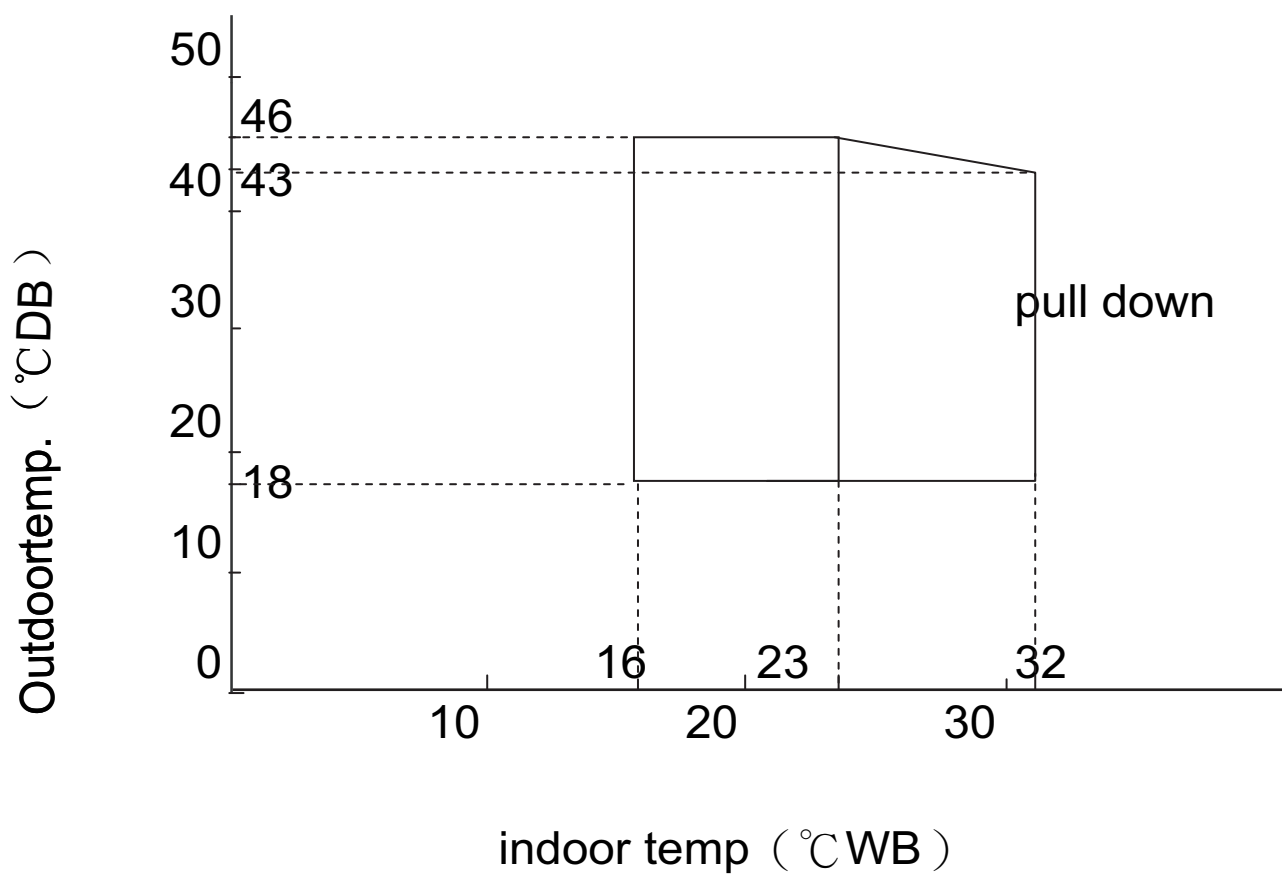
Outdoor unit



6 Operation range

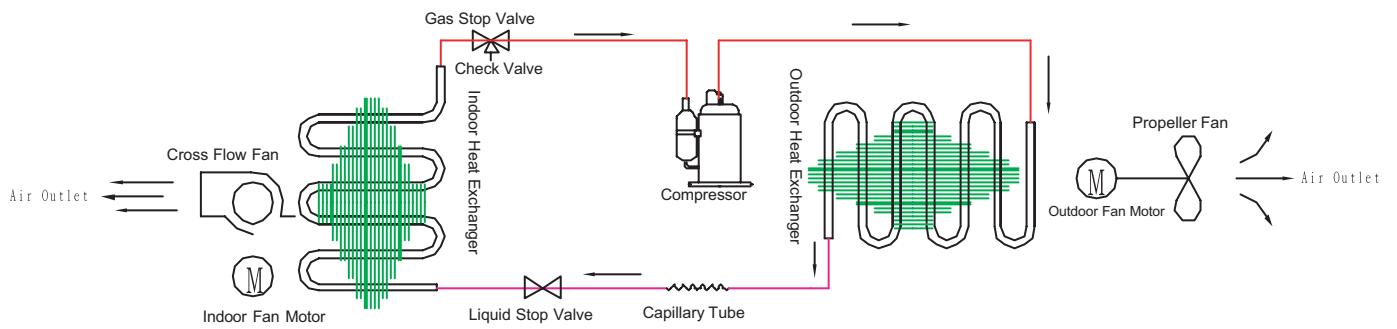
The name of parts

Cooling



7 Piping diagrams

Cooling mode

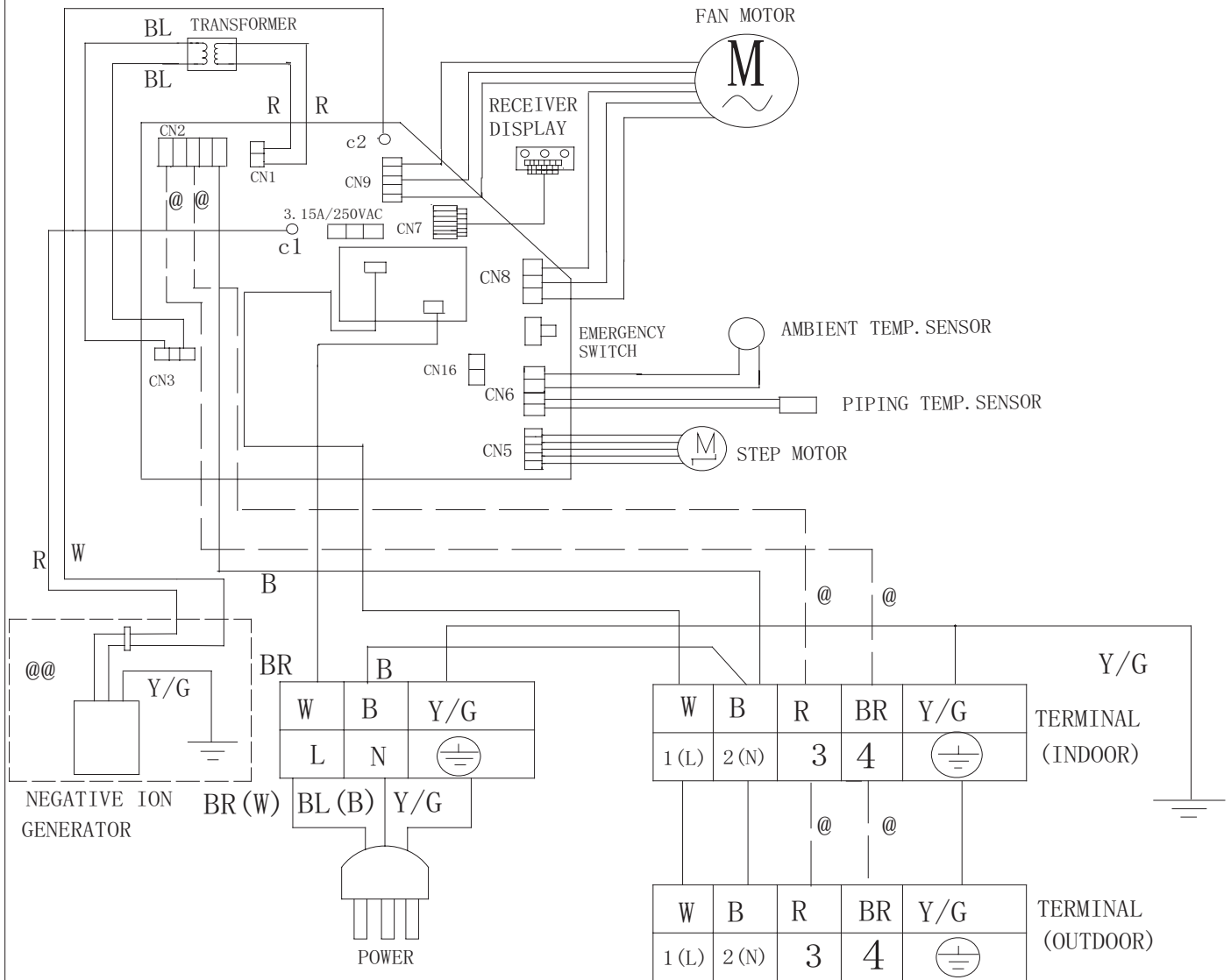


8 Wiring diagrams

Indoor unit

INDOOR WIRING DIAGRAM

0010543658



W:White BL:Blue
 B:Black BR:Brown
 R:Red
 Y/G :Yellow/Green

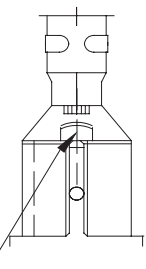
Note:

- 1:There are dotted lines(marked with@) on cool-warm type.
- 2:The dotted lines (marked with @) are needn't in cooling only type.
- 3:CN16 is connected with centralize controller.
- 4:The part marked with@@ is optional.

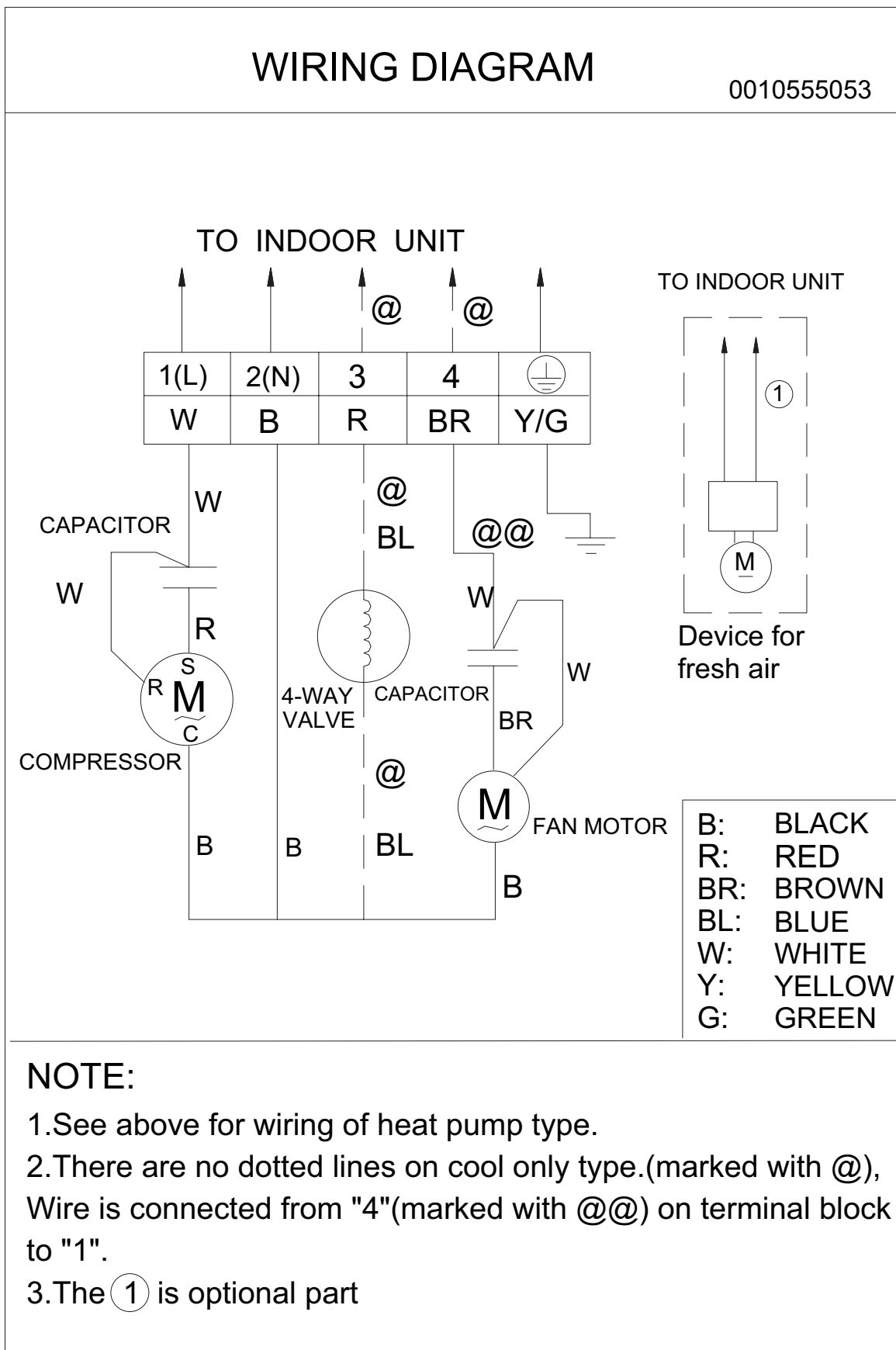
REMOVAL OF LOCKING TERMINAL CONTACT

Terminal contact comes with locking structure, Please press the front lever to release the locking and pull the cable out.

Lock catch

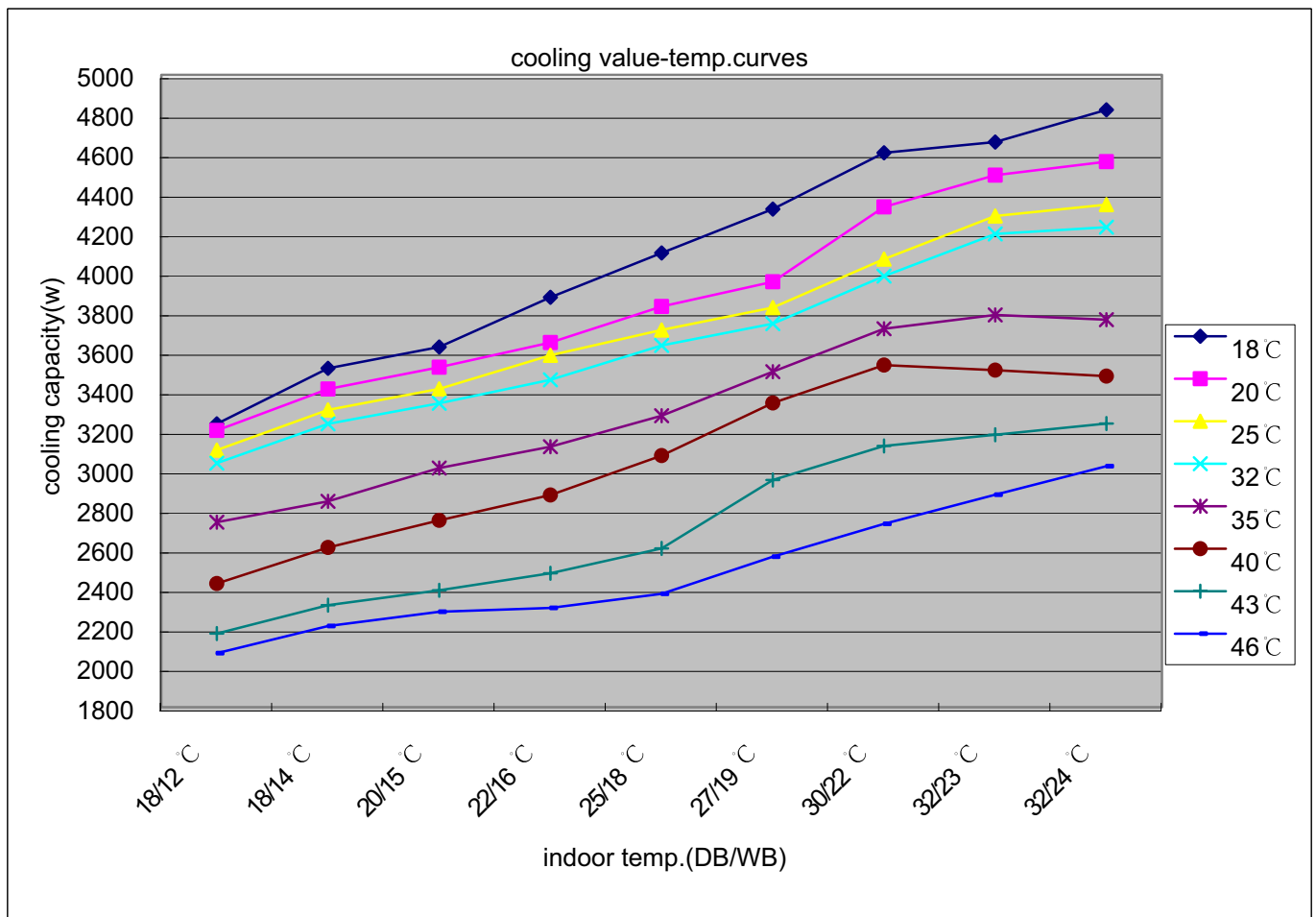


Outdoor unit

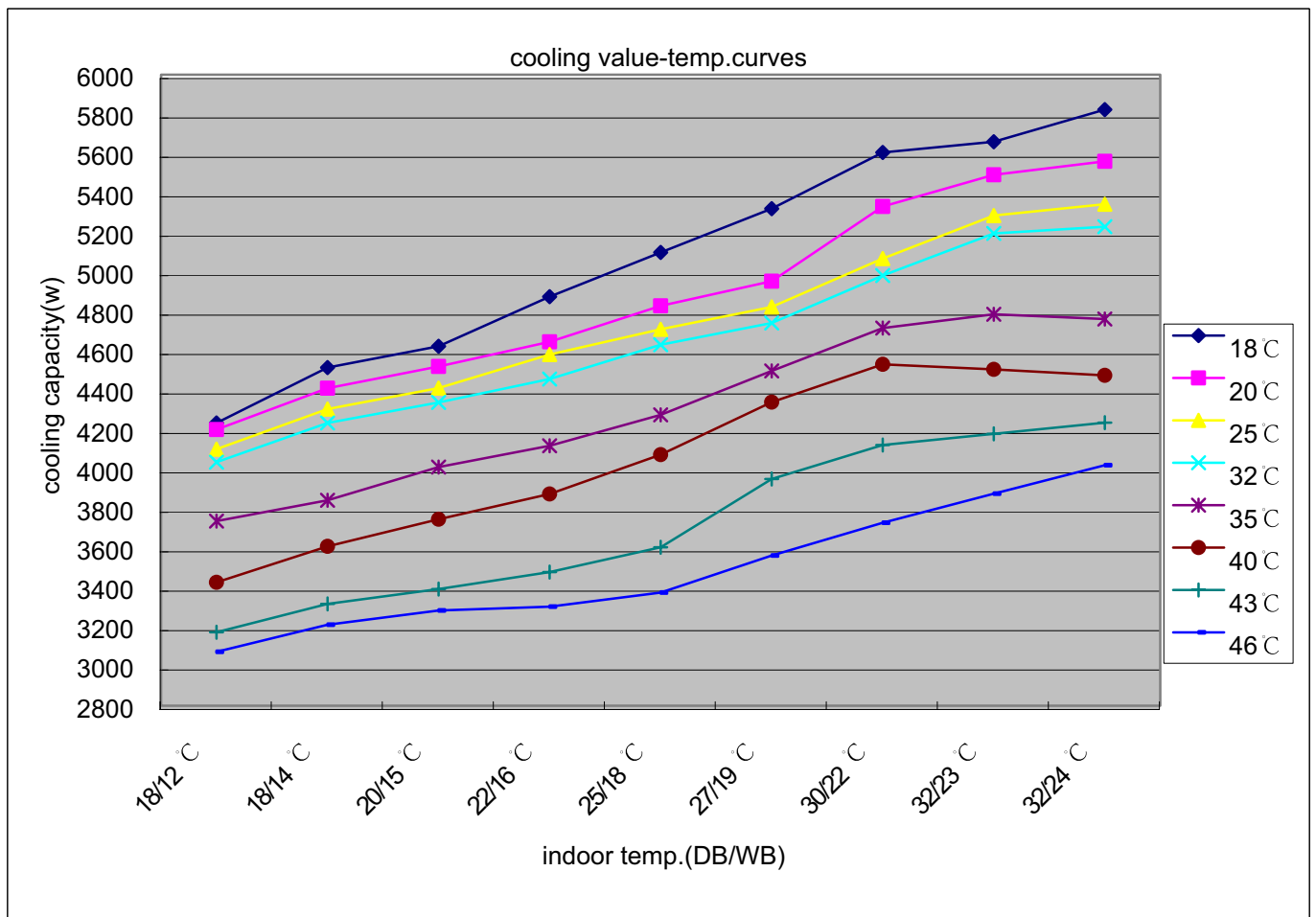


9 Capacity tables and curves diagrams

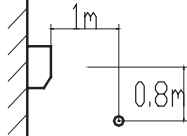
HSU-18LE03 performance curves								
cooling capacity and indoor/outdoor temp.curves								
indoor temp.	outdoor temp.(humidity 46%)							
DB/WB	18 C	20 C	25 C	32 C	35 C	40 C	43 C	46 C
18/12 C	3297	3262	3163	3096	2798	2487	2234	2134
18/14 C	3573	3472	3366	3295	2903	2669	2378	2272
20/15 C	3687	3581	3472	3399	3072	2807	2453	2344
22/16 C	3929	3706	3642	3518	3179	2935	2539	2364
25/18 C	4151	3889	3771	3692	3336	3135	2664	2435
27/19 C	4390	4014	3884	3802	3559	3404	3011	2622
30/22 C	4680	4393	4129	4043	3777	3552	3183	2789
32/23 C	4726	4553	4347	4256	3847	3566	3240	2936
32/24 C	4885	4622	4404	4291	3822	3537	3297	3081



HSU-22LE03 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	4295	4258	4163	4096	3798	3487	3234	3134
18/14 C	4576	4472	4345	4295	3903	3669	3378	3272
20/15 C	4684	4582	4472	4396	4072	3807	3453	3344
22/16 C	4934	4706	4642	4518	4179	3935	3539	3364
25/18 C	5160	4885	4769	4645	4336	4135	3664	3435
27/19 C	5382	5014	4884	4802	4559	4423	4011	3622
30/22 C	5659	5389	5129	5043	4777	4589	4183	3789
32/23 C	5719	5553	5344	5256	4847	4566	4240	3936
32/24 C	5887	5622	5404	5291	4822	4537	4297	4081



10 Sound level

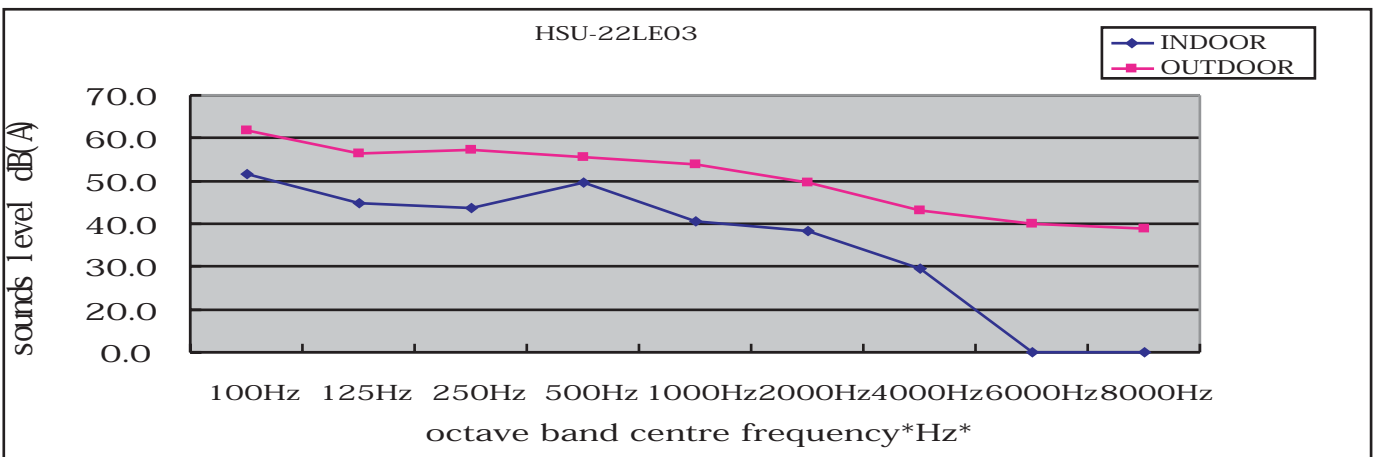
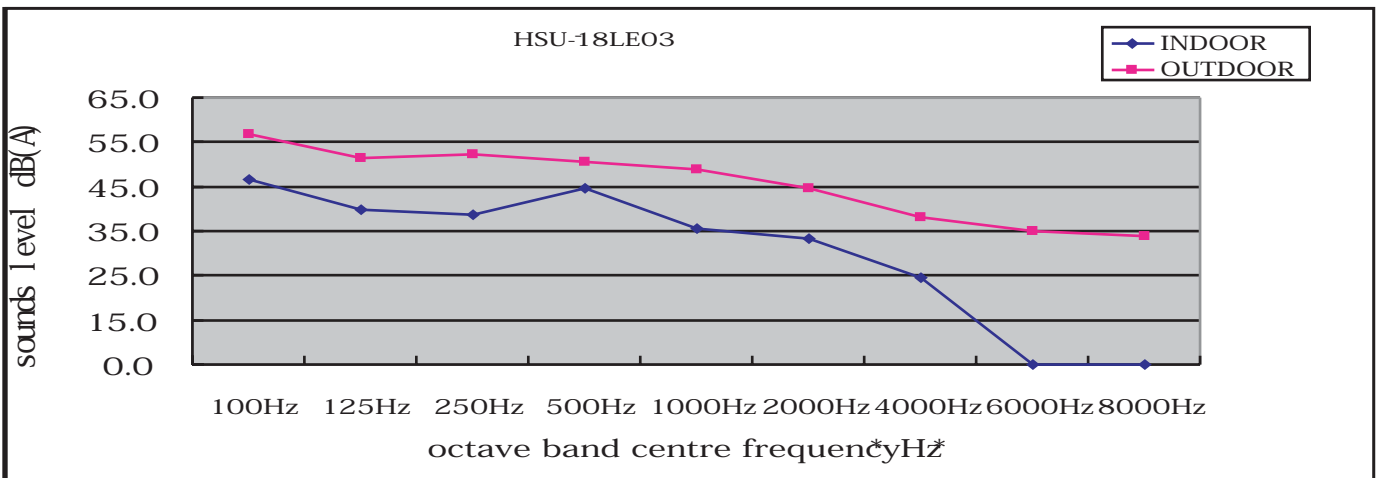
Model	Sound pressure level			Measuring location Location of microphone 	sound power level
	220 ~ V,50Hz				
	Cooling				
	H	L	SL		
HSU-18LE03	45	43	40		45
HSU-22LE03	48	45	39		48

Sound level data

HSU-18LE03	100Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	6000Hz	8000Hz
INDOOR	47.7	39.7	38.6	41.6	34.5	31.2	23.7	0.0	0.0
OUTDOOR	58.7	52.5	49.2	47.6	47.9	43.7	38.0	34.9	33.9

HSU-22LE03	100Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	6000Hz	8000Hz
INDOOR	41.7	34.7	33.6	39.6	30.5	28.2	19.7	0.0	0.0
OUTDOOR	61.4	56.7	56.7	53.9	51.8	47.8	41.7	39.7	35.6

Sound pressure spectrum



11 Accessories

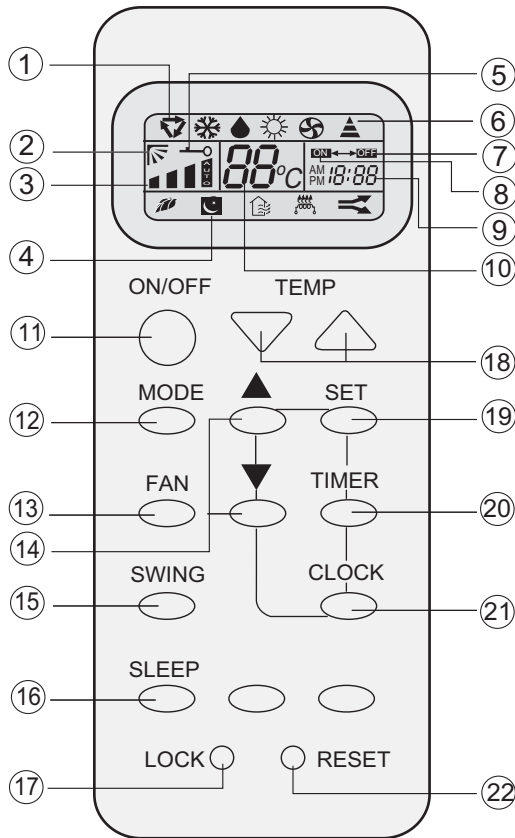
Standard accessories

Standard name	HSU-18LE03	HSU-22LE03
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

Operation

Buttons and display of the remote controller.



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 Δ 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

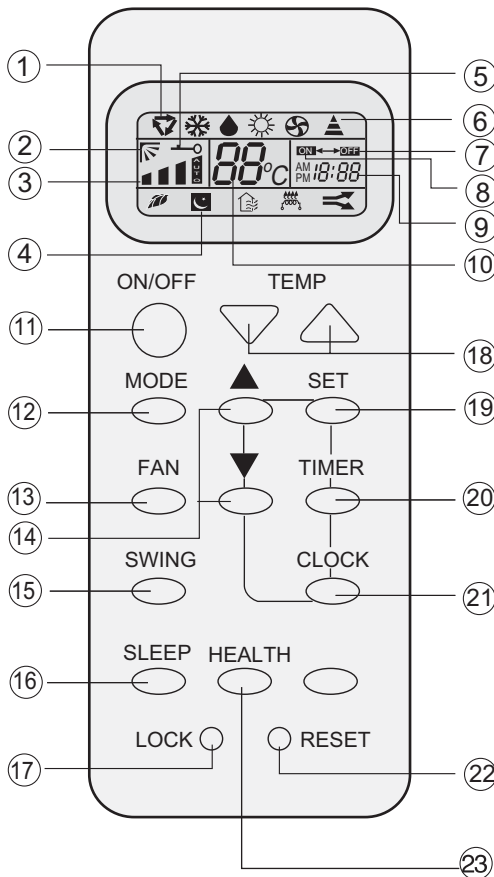
Hints















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

Operation

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 
 DRY 
 HEAT 
 FAN 
2. SWING display 
3. FAN SPEED display  AUTO LO MED HI
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

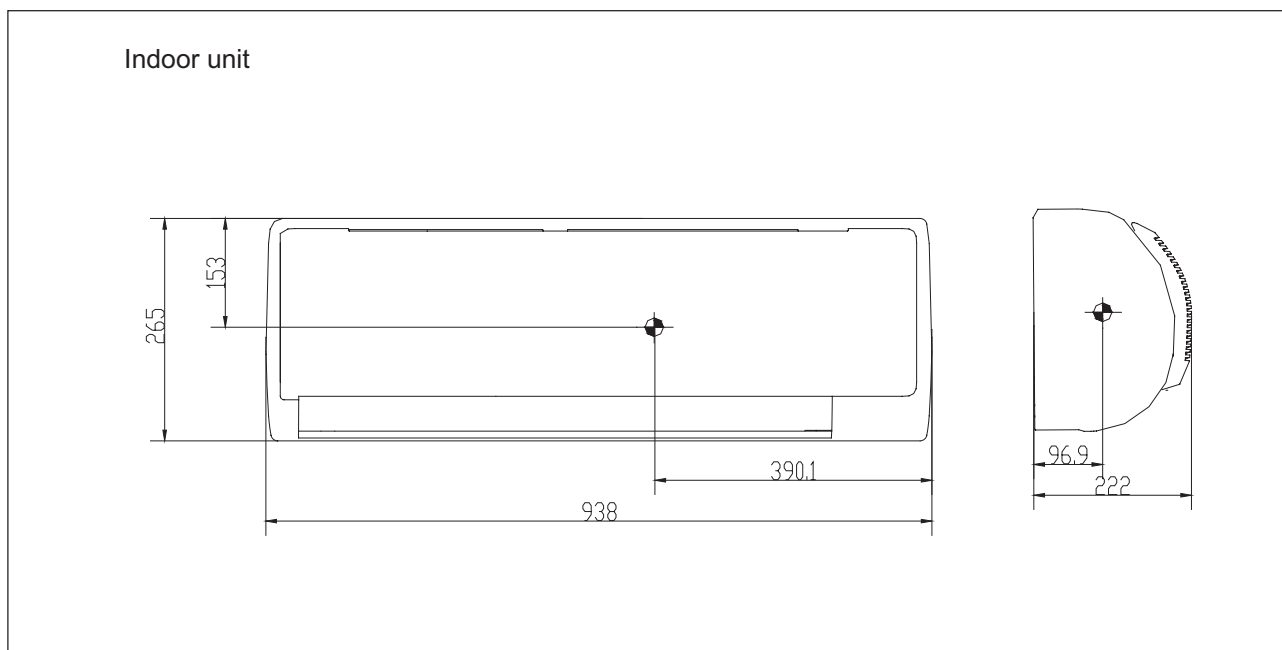
The anion generator in the air conditioner can generate a lot of anion to effectively balance the quantity of position and anion in the air and also to kill bacteria and speed up the dust sediment in the room and finally clean the air in the room.

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

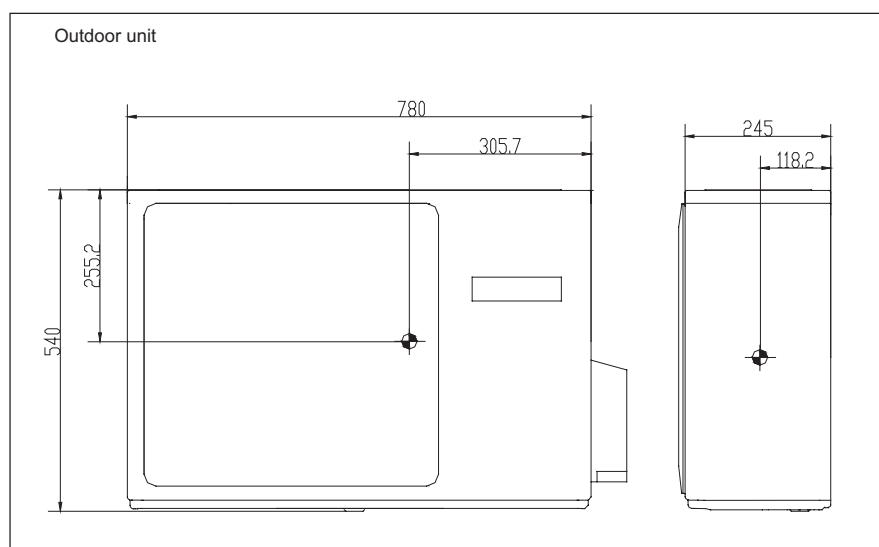
Hints

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

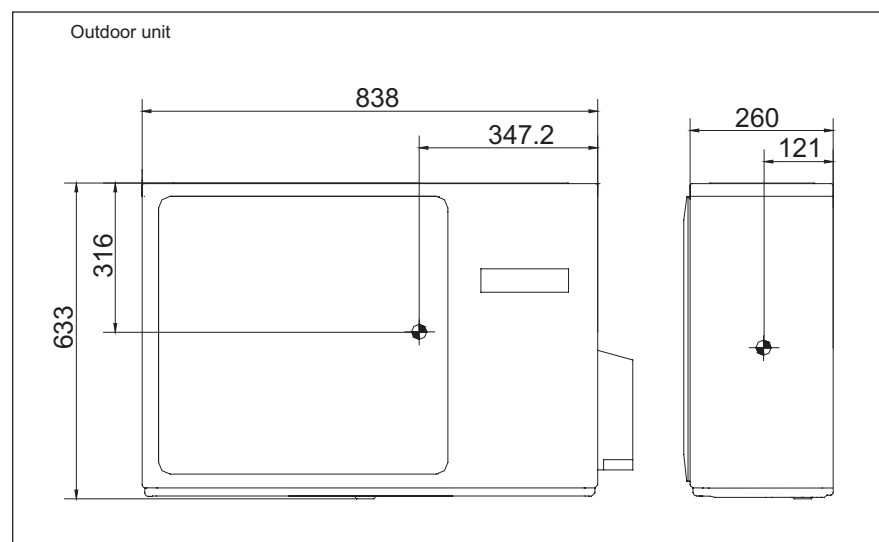
13 Center of gravity



HSU-18LE03



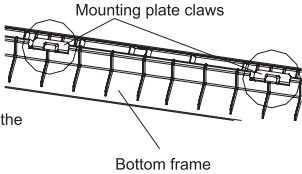
HSU-22LE03



14 Installations

Indoor unit installation drawings

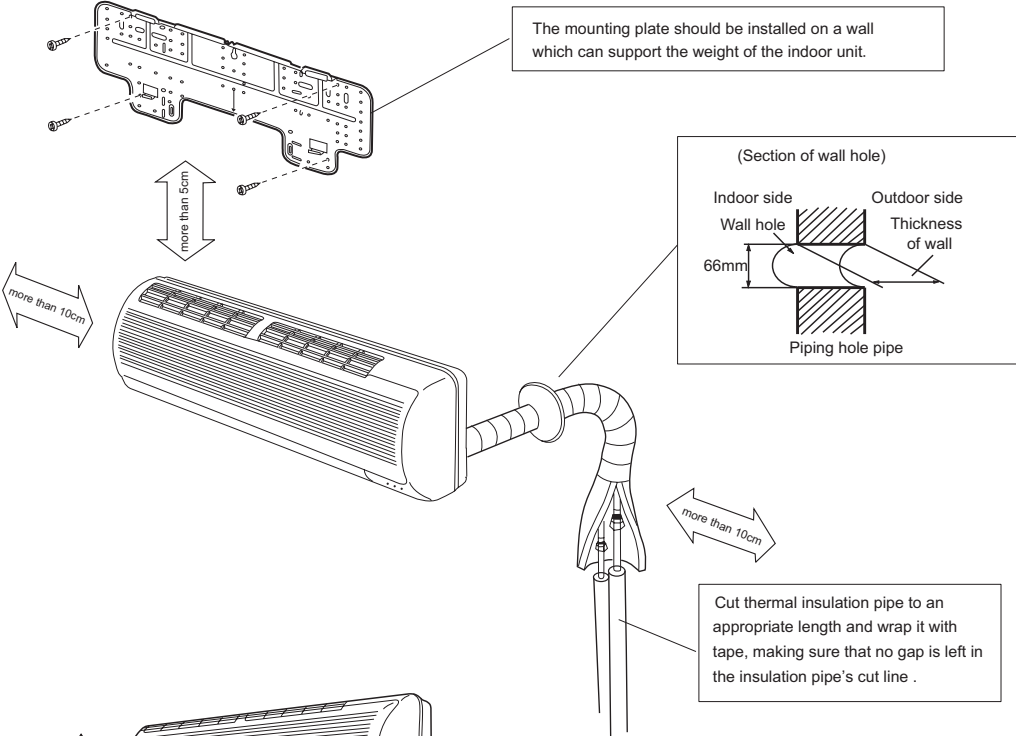
- How to attach the indoor unit.
Hook the claws of the bottom frame to the mounting plate.
If the claws are difficult to hook ,remove the front panel.
- How to remove the indoor unit.
Push up the marked area (at the lower part of the front panel) to release the the claws . If it is difficult to release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



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

66mm

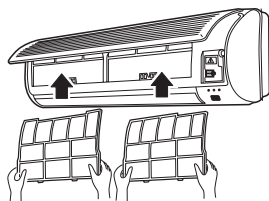
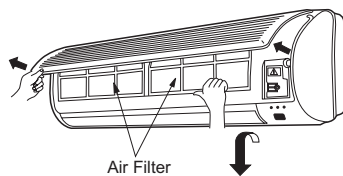
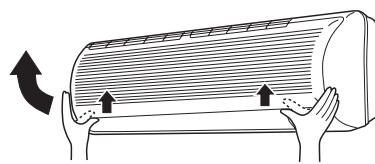
Piping hole pipe

more than 5cm

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.

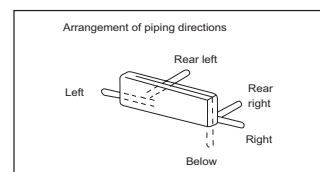
Close the inlet grille.

Outdoor unit installation drawings

HSU-18,22LE03

Outdoor

Model	26/28 class
Max.allowable length	Cooling only: 15m Heat pump: 15m
Max.allowable height	5m
Additional refrigerant required for refrigerant pipe exceeding 5m in length	16g/m
Gas pipe	O. D. 6.35/12.7
Liquid pipe	O. D. 6.35/15.88



*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

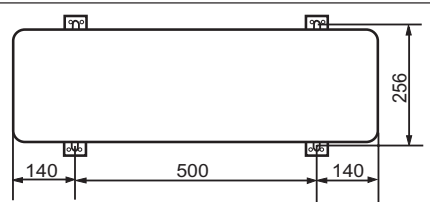
The distance between the indoor unit and the floor should be more than 2m.

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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