Haier
Inspired living

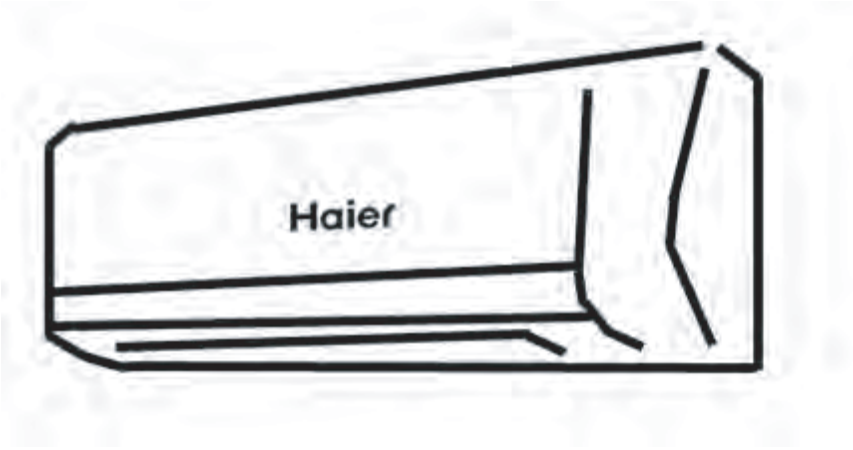
Domestic
Air conditioner

TECHNICAL DATA

ON/OFF

Wall mounted Type ARC-Series

HSU-07LE03
HSU-09LE03
HSU-12LE03



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

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

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 .

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 .

24Hour 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 after asundden 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 .

NOMINALCAPACITY and NOMINAL INPUT						
Model				HSU-07LE03	HSU-09LE03	HSU-12LE03
NORMINAL CAPACITY(3-4)	Cooling(1)	norm.	kw	2.10	2.60	3.50
	Heating(2)	norm.	kw	-----	-----	------
NORMINAL INPUT	Cooling	norm	kw	0.73	0.94	1.25
	Heating	norm.	kw	-----	-----	------
EER	Cooling			2.88	2.77	2.80
COP	Heating			-----	-----	-----
ENERGY LABEL(7-8)	Cooling			----	-----	----
	Heating			----	-----	----
ANNUAL ENERGY CONSUMPTION(9)	Cooling		kwh	307.5	396.5	530

TECHNICAL SPECIFICATIONS						
INDOOR UNITS				HSU-07LE03	HSU-09LE03	HSU-12LE03
DIMENSIONS	Unit	H	mm	265		
		W	mm	795		
		D	mm	182		
WEIGHT	Unit		kg	7.2		
COLOR	Unit			white		
SOUND LEVEL	Sound pressure (cooling/heating)(5)	high	dB(A)	48	48	48
		medium	dB(A)	42	42	42
		low	dB(A)	39	39	39
	Sound power(cooling/heating)(6)	high	dB(A)	48	48	39
FAN	Air flow rate(cooling/heating)	high	m^3/min	6.7	7.5	8.3
		low	m^3/min	6.0	6.7	7.5
		super low	m^3/min	5.2	6.0	6.9
	Speed(cooling/heating)	steps		5steps,silent and auto		
		high	rpm	1100	1150	1290
		medium	rpm	1050	1050	1150
		low	rpm	900	920	1000
	Type			Cross flow fan		
	Motor output		W	16	16	16
AIR FILTER				Removable/washable/mildew proof		
REMOTE CONTROLLER				YL-M07EN		
TEMPERATURE CONTROL				Microcomputer control		
PIPING CONNECTIONS(external diameter)		liquid	mm	Φ6.35	Φ 6.35	Φ 6.35
		gas	mm	Φ 9.52	Φ 9.52	Φ12.7
		drain	mm	Φ16	Φ 16	Φ16
INSULATION MATERIAL	Heat insulation type			both liquid and gas pipes		
HEAT EXCHANGGER	TYPE			ML fin - Φ9.52HI - XA tube		
	Row x stage x fin pinth		mm	2 x 8 x1.4		

TECHNICAL SPECIFICATIONS						
OUTDOOR UNITS				HSU-07LE03	HSU-09LE03	HSU-12LE03
NET DIMENSIONS (stop valve, and bottom support is not included)	Unit	H	mm	430		
		W	mm	695		
		D	mm	245		
WEIGHT	Unit		kg	21.5	24.2	28.8
COLOR	Unit			white		
SOUND LEVEL	Sound pressure(cooling/heating)(5)	high	dB(A)	58	58	58
	Sound power(cooling/heating)(6)	high	dB(A)	58	58	58
FAN	Air flow rate(cooling/heating)	high	m^3/min	18	20	22
		low	m^3/min	---	---	---
	Speed(cooling/heating)	high	rpm	830	830	1060
		low	rpm	---	---	---
	Type			Propeller fan		
	Motor output		W	60	60	60
REFRIGERANT CIRCUIT	Refrigerant type			R22		
	Refrigerant charge		kg	0.40	0.44	0.69
	Maximum allowable distance between indoor and outdoor		m	7		
	Maximum allowable level difference		m	5		
	Refrigerant control			----------		
COMPRESSOR	Type			rotary Compressor		
	Model			44R233CF-5JSC/44R233CF-5JSC 48R313NL-5FSF		
	Motor output		w	680	790	970
	Oil type			SUNISO	SUNISO	SUNISO
	Oil charge volume		L	0.27	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-07LE03	HSU-09LE03	HSU-12LE03
CURRENT	Nominal running current	cooling	A	0.15	0.15	0.15
		heating	A	------	-------	-------
	Maximum running current	cooling	A	0.15	0.15	0.15
		heating	A	------	-------	------

For combination indoor units+ outdoor units:				HSU-07LE03	HSU-09LE03	HSU-12LE03
CURRENT	Nominal running current	cooling	A	3.5	4.5	5.9
		heating	A	------	------	------
	Maximum running current	cooling	A	4.6	6.2	7.5
		heating	A	-------	------	-------
	Starting current	cooling	A	18	22	32
		heating	A	-------	------	-------

For indoor units only:			HSU-07LE03	HSU-09LE03	HSU-12LE03
POWER SUPPLY			VM	VM	VM
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase		1PH	1PH	1PH
	Frequency	Hz	50	50	50
	Voltage	V	220V~	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

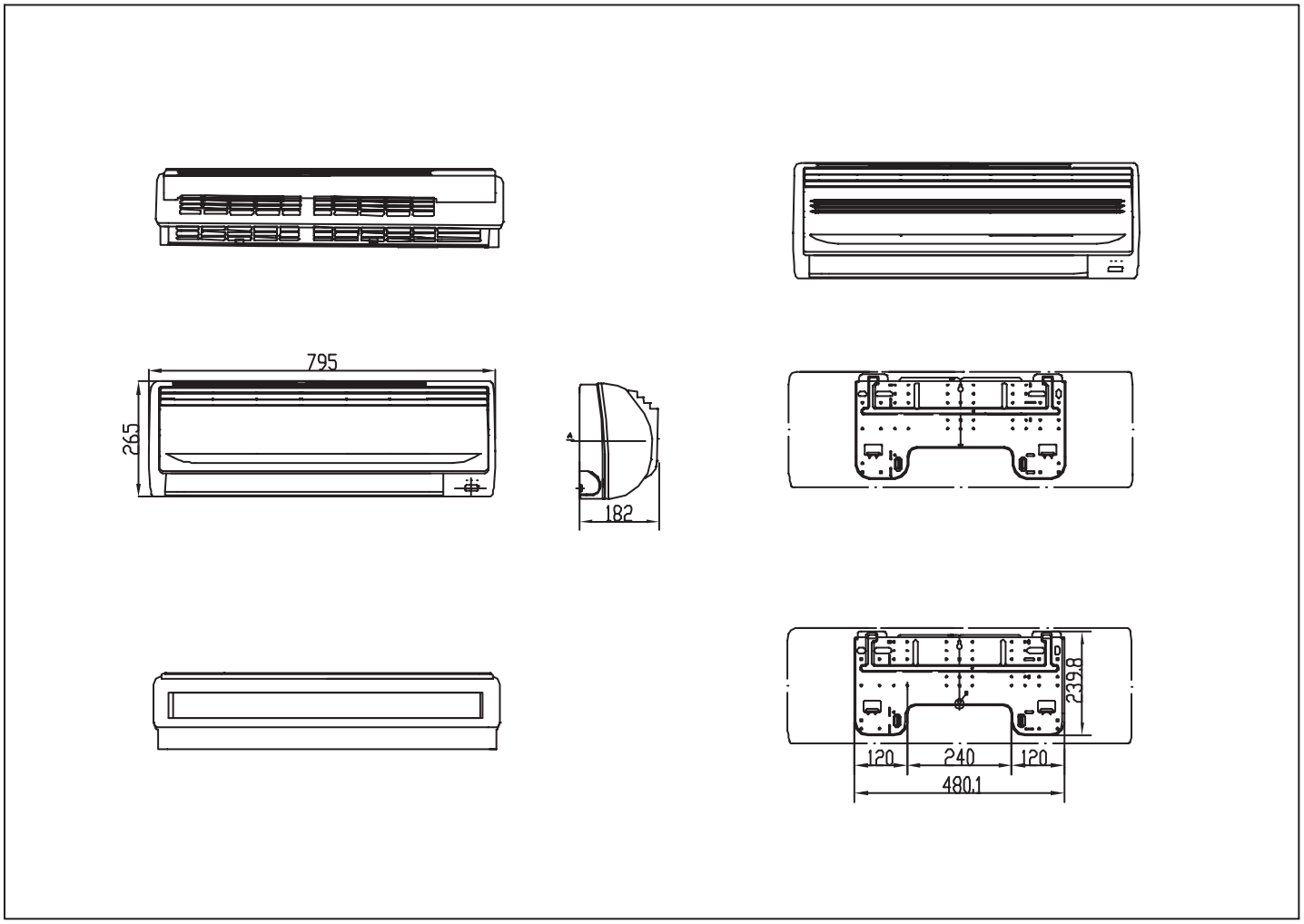
Model	HSU-07LE03	HSU-09LE03	HSU-12LE03
YL-M07	Y	Y	Y
YL-H10	Y	Y	Y

4 Sensors lists

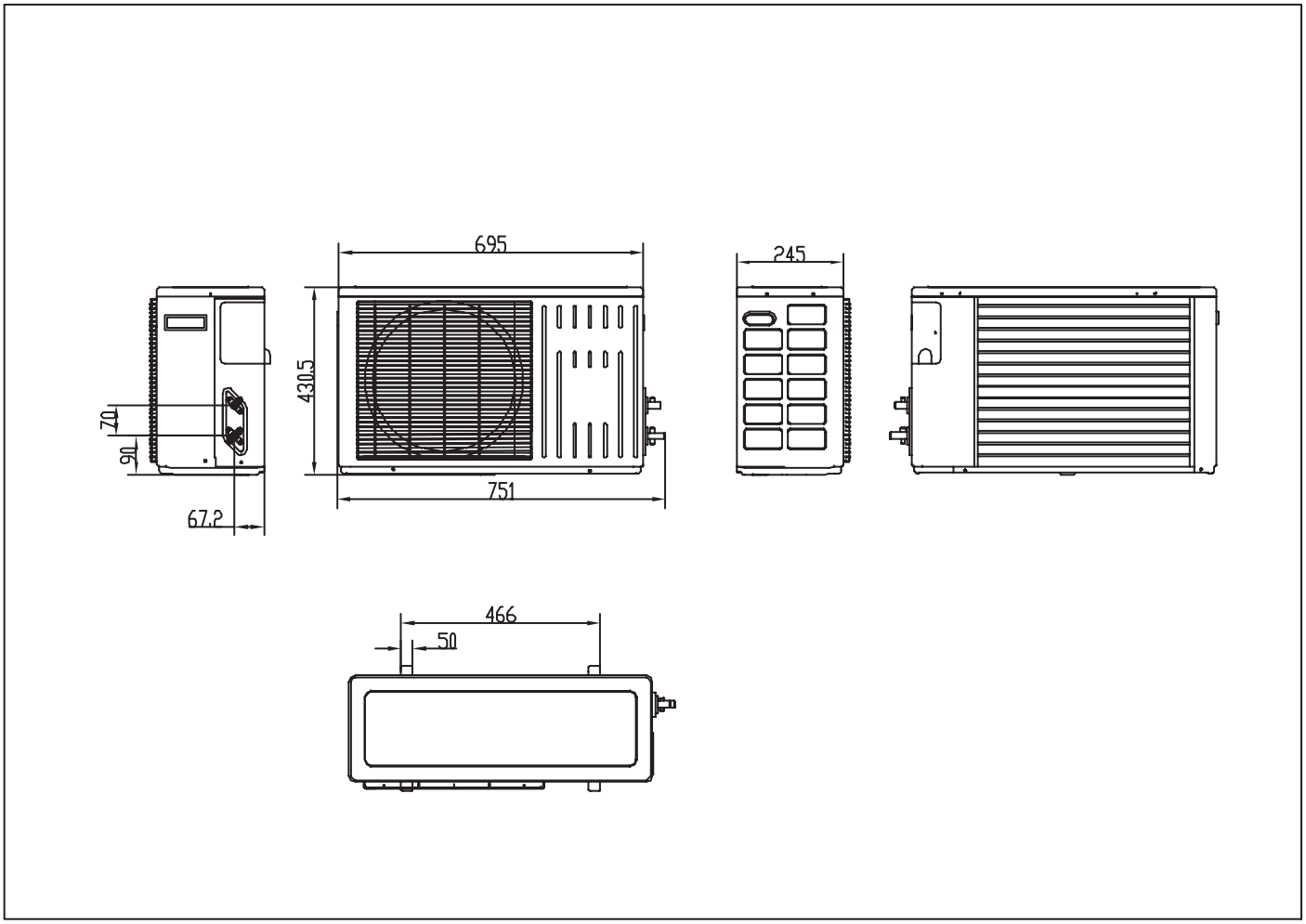
INDOOR UNIT		
type	Description	Qty
Room sensor	It's used for detecting room temperature	1
Pipe sensor	It's used for detecting temperature of evaporator	1

5 Dimensional drawings

Indoor unit

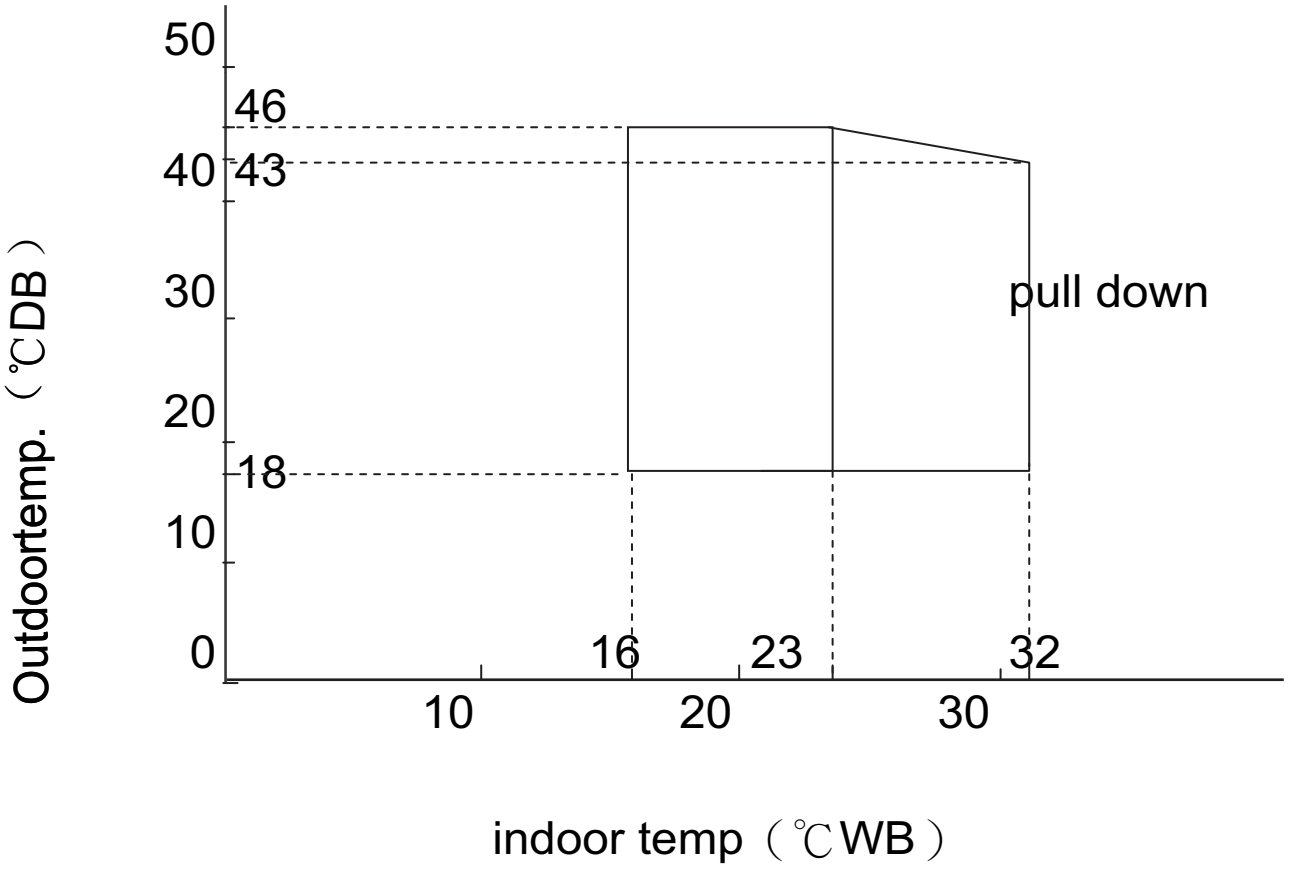


Outdoor unit



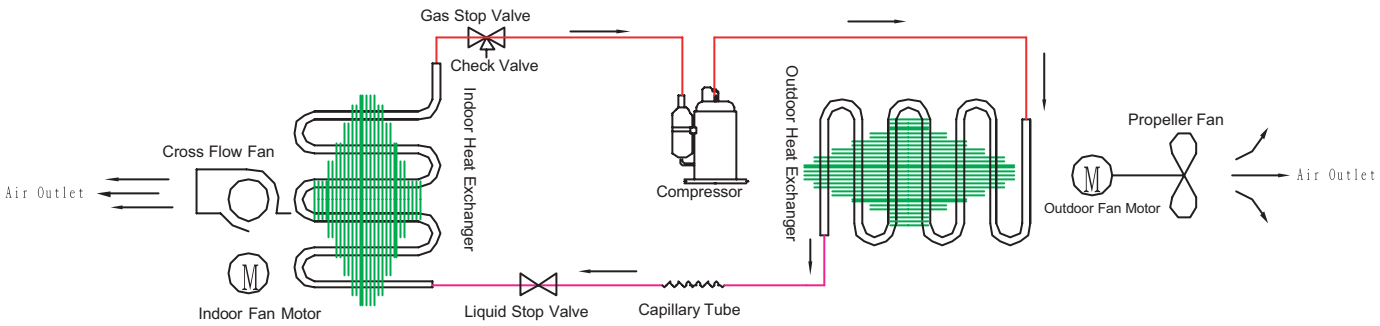
6 Operation range

The name of parts Cooling



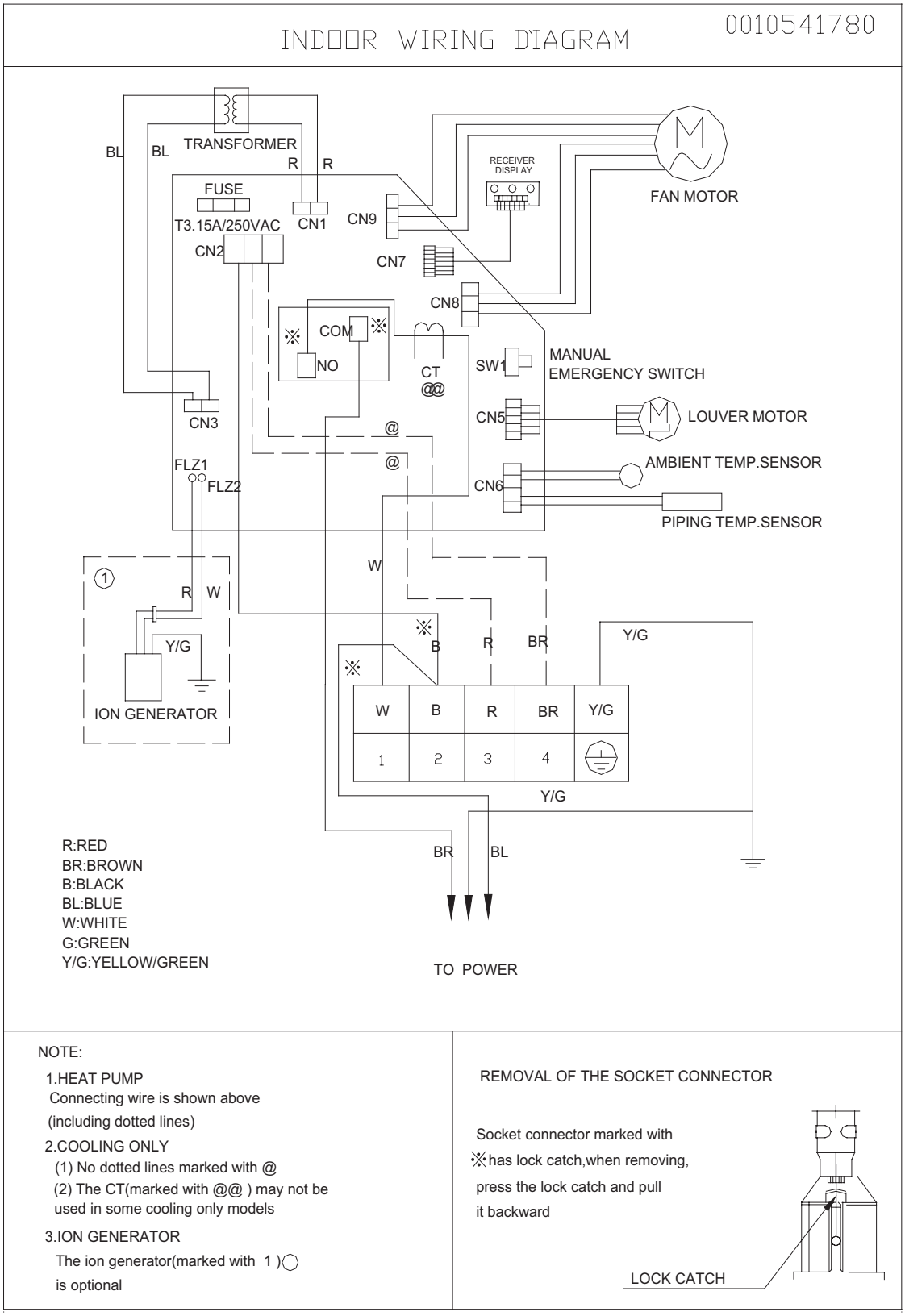
7 Piping diagrams

Cooling mode



8 Wiring diagrams

Indoor unit



NOTE:

1.HEAT PUMP
Connecting wire is shown above
(including dotted lines)

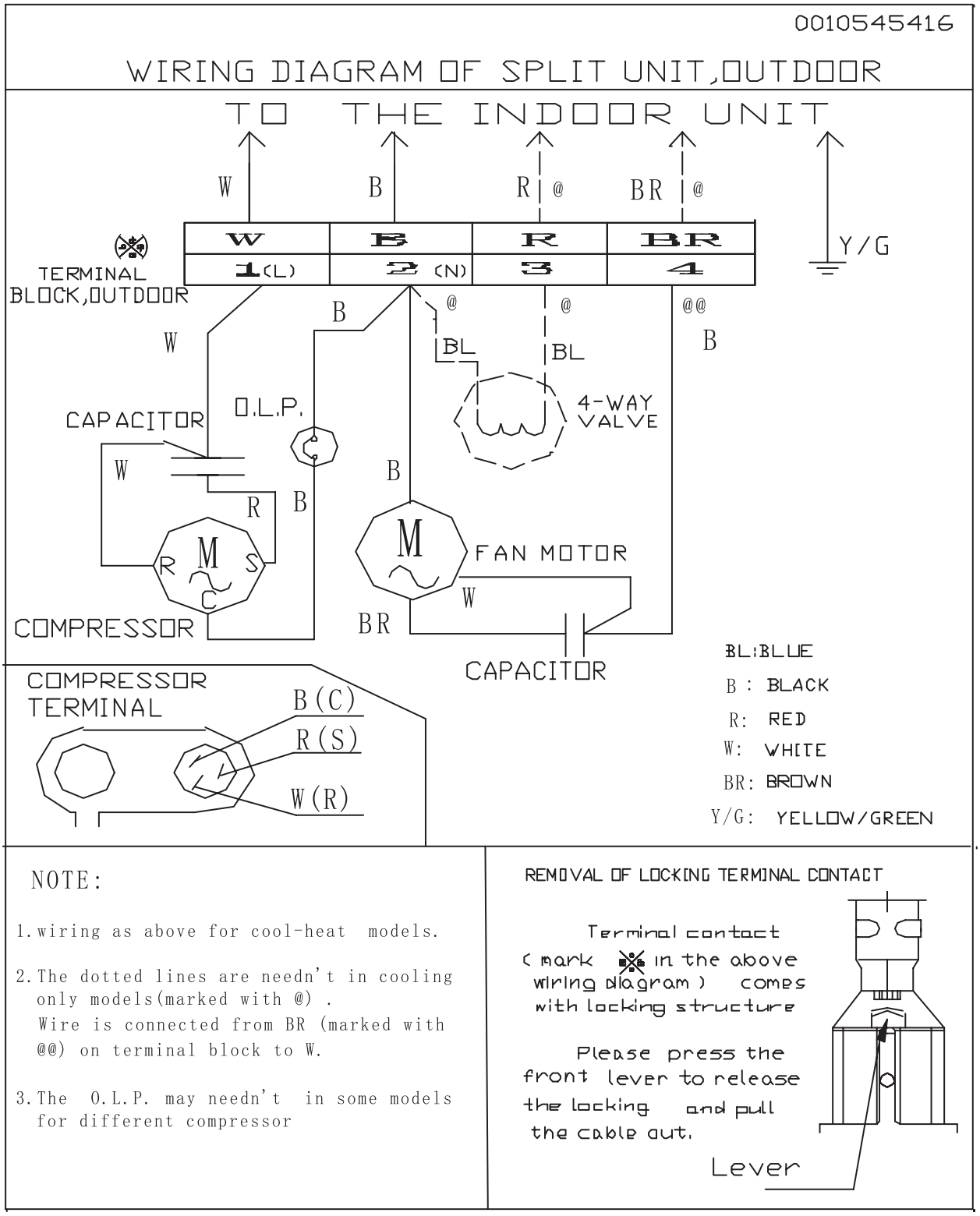
2.COOLING ONLY
(1) No dotted lines marked with @
(2) The CT(marked with @@) may not be used in some cooling only models

3.ION GENERATOR
The ion generator(marked with 1)◯ is optional

REMOVAL OF THE SOCKET CONNECTOR

Socket connector marked with ※has lock catch,when removing, press the lock catch and pull it backward

Outdoor unit



NOTE:

1. wiring as above for cool-heat models.
2. The dotted lines are needn't in cooling only models(marked with @) . Wire is connected from BR (marked with @@) on terminal block to W.
3. The O.L.P. may needn't in some models for different compressor

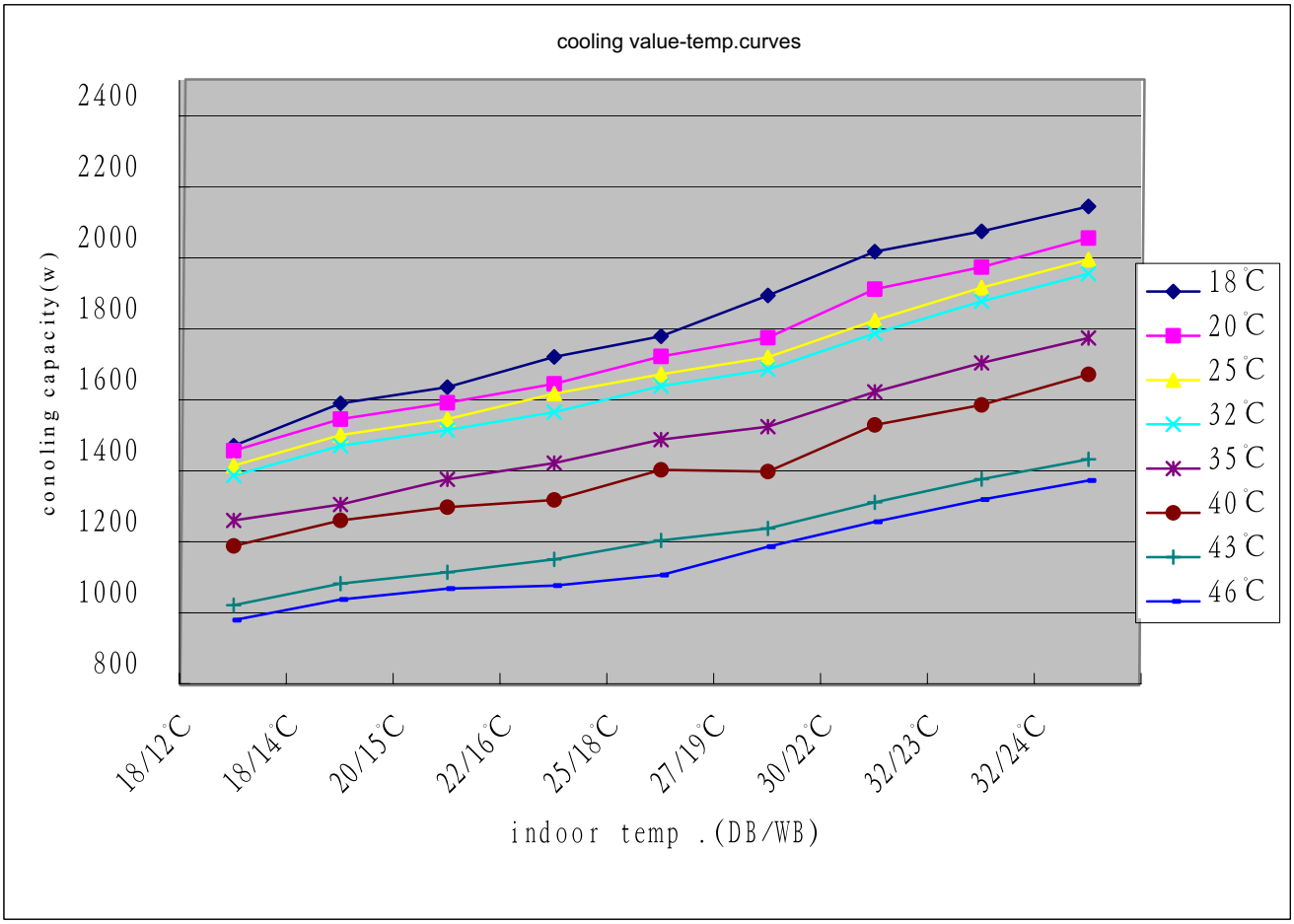
REMOVAL OF LOCKING TERMINAL CONTACT

Terminal contact (mark ※ in the above wiring diagram) comes with locking structure

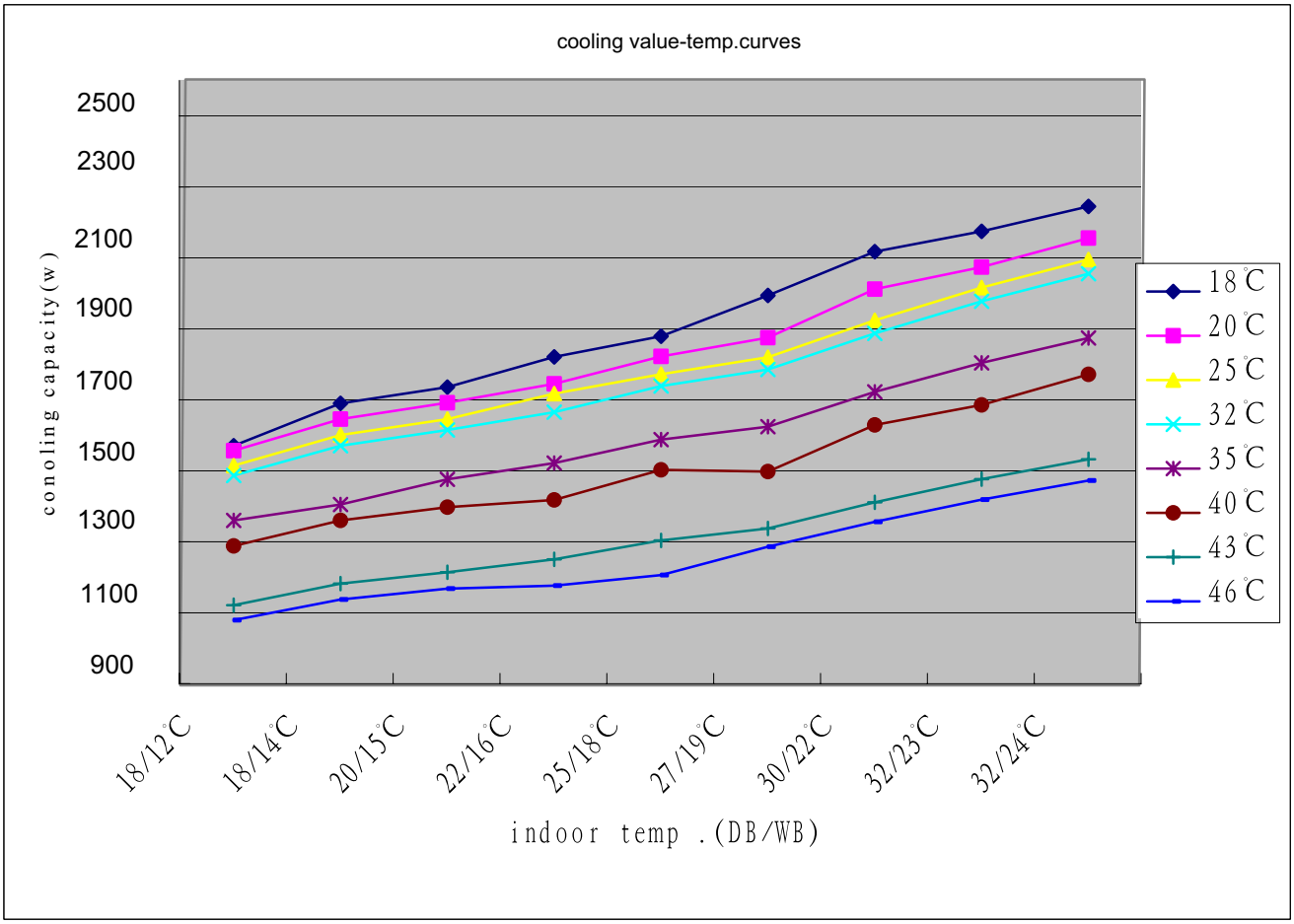
Please press the front lever to release the locking and pull the cable out.

9 Capacity tables and curves diagrams

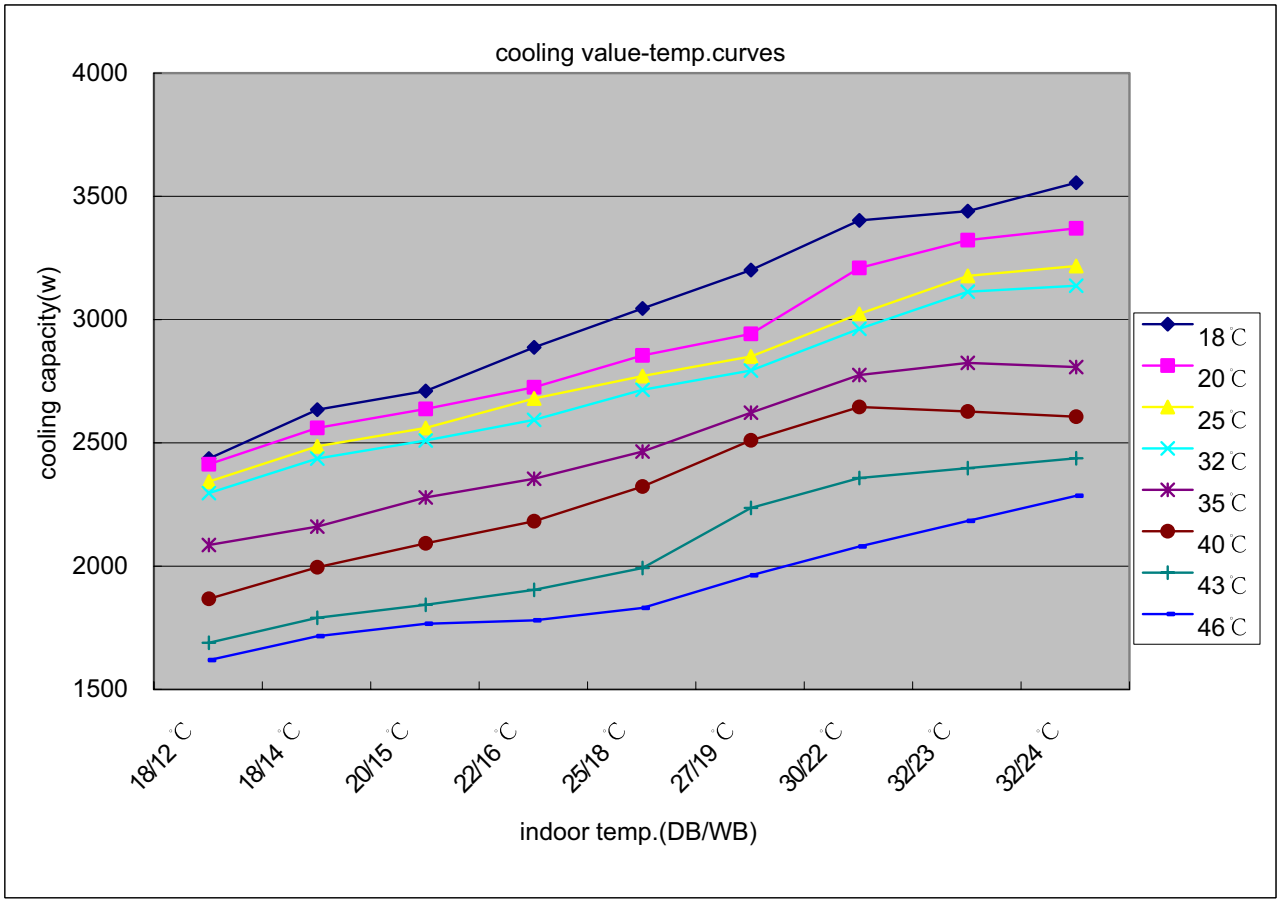
HSU-07LE03 performance curves								
cooling capacity and indoor/outdoor temp.curves								
indoor temp.℃	outdoor temp. (humidity 46%)							
DB/WB	18	20	25	32	35	40	43	46
18/12	1441	1419	1386	1356	1218	1156	989	946
18/14	1556	1514	1471	1437	1269	1225	1050	1005
20/15	1604	1561	1520	1483	1342	1265	1081	1035
22/16	1687	1616	1579	1538	1375	1287	1118	1044
25/18	1750	1697	1636	1608	1448	1370	1171	1074
27/19	1859	1741	1680	1643	1436	1365	1205	1153
30/22	1960	1874	1798	1749	1590	1499	1279	1224
32/23	2047	1943	1887	1857	1678	1553	1344	1286
32/24	2117	2023	1967	1926	1742	1642	1400	1340



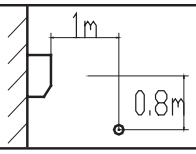
HSU-09LE03 performance curves								
cooling capacity and indoor/outdoor temp.curves								
indoor temp.℃	outdoor temp. (humidity 46%)							
DB/WB	18	20	25	32	35	40	43	46
18/12	1541	1519	1486	1456	1318	1256	1089	1046
18/14	1656	1614	1571	1537	1369	1325	1150	1105
20/15	1704	1661	1620	1583	1442	1365	1181	1135
22/16	1787	1716	1679	1638	1475	1387	1218	1144
25/18	1850	1797	1736	1708	1548	1470	1271	1174
27/19	1959	1841	1780	1743	1536	1465	1305	1253
30/22	2060	1974	1898	1849	1690	1599	1379	1324
32/23	2147	2043	1987	1957	1778	1653	1444	1386
32/24	2217	2123	2067	2026	1842	1742	1500	1440



HSU-12LE03 performance curves								
cooling capacity and indoor /ou tdoor temp .curves								
indoor temp . ℃	outdoor temp.(humidity 46%)							
DB/W B	18 ℃	20 ℃	25 ℃	32 ℃	35 ℃	40 ℃	43 ℃	46 ℃
18/12 ℃	2394	2362	2297	2254	2042	1825	1644	1572
18/14 ℃	2583	2517	2449	2392	2112	1955	1743	1671
20/15 ℃	2662	2596	2513	2469	2237	2044	1797	1723
22/16 ℃	2841	2682	2634	2544	2304	2137	1858	1737
25/18 ℃	3004	2802	2722	2678	2424	2274	1942	1788
27/19 ℃	3158	2891	2807	2747	2577	2461	2196	1911
30/22 ℃	3355	3167	2971	2913	2738	2605	2319	2038
32/23 ℃	3397	3278	3132	3062	2771	2585	2357	2134
32/24 ℃	3514	3321	3177	3092	2762	2566	2391	2249



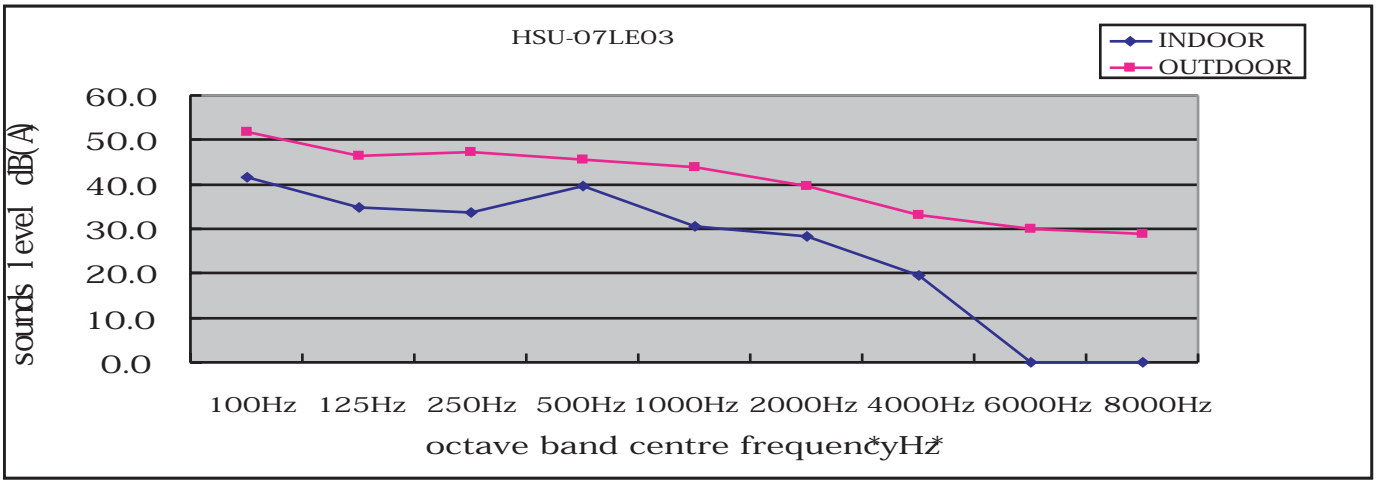
10 Sound level

Model	Sound presure level				sound power level
	220 ~ V,50Hz			Measuring location Location of microphone	
	Cooling				
	H	L	SL		
HSU-07LE03	48	42	39		48
HSU-09LE03	48	42	39		48
HSU-12LE03	48	42	39		48

Sound level data

HSU-07LE03	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

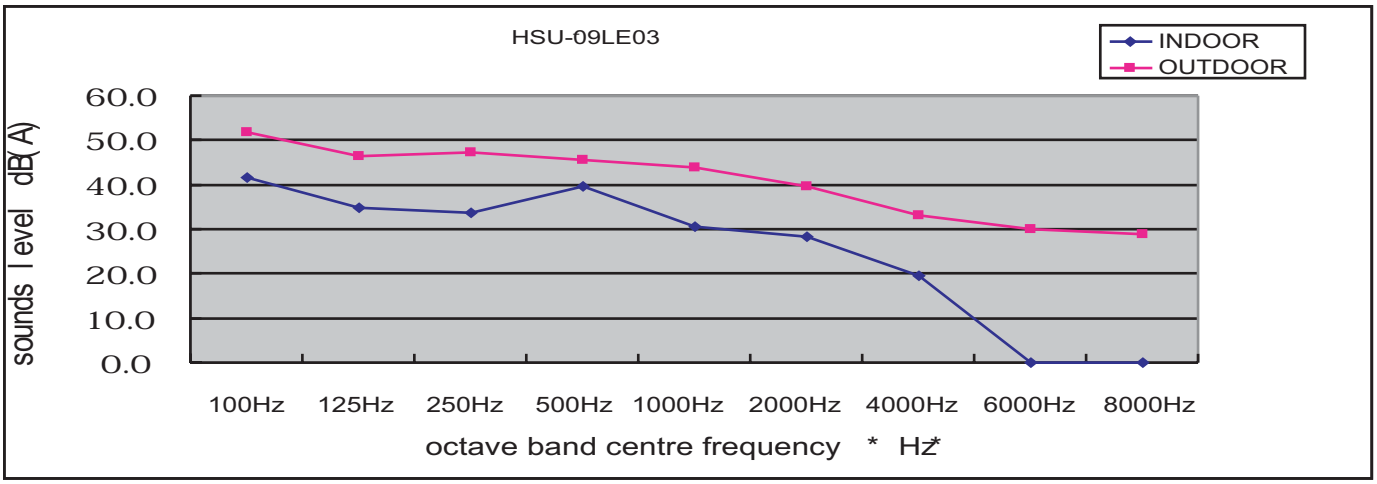
Sound pressure spectrum



Sound level data

HSU-09LE03	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

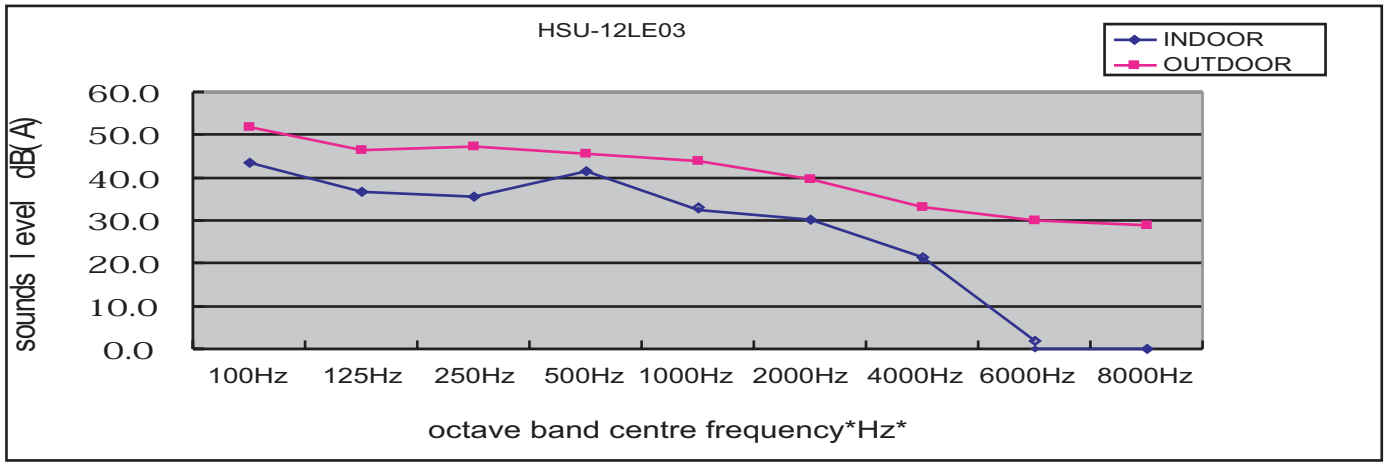
Sound pressure spectrum



Sound level data

HSU-12LE03	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



11 Accessories

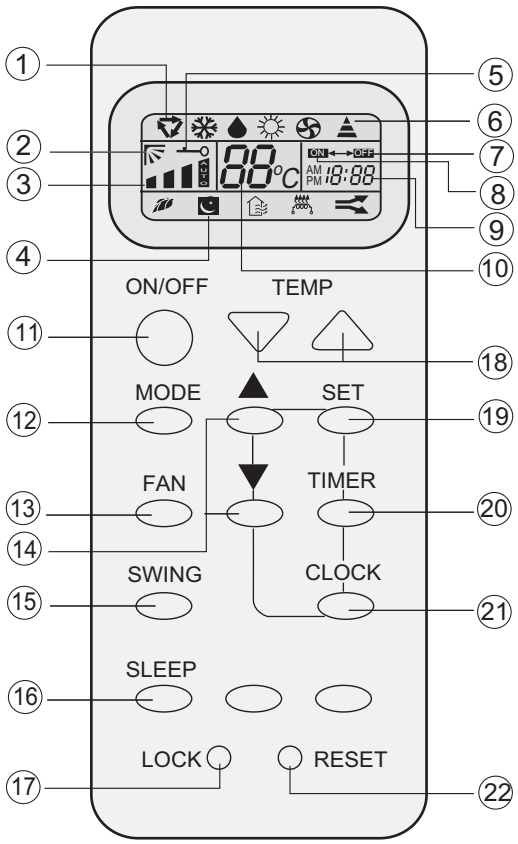
Standard accessories

Standard name	HSU-07LE03	HSU-09LE03	HSU-12LE03
Drain hose	1	1	1
Plastic bag	1	1	1
screw assembly	1	1	1
Air purifier	2	2	2
Battery	2	2	2
Mounting plate	1	1	1
Remote controller	1	1	1
Installation manual	1	1	1
Operation manual	1	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 △ 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

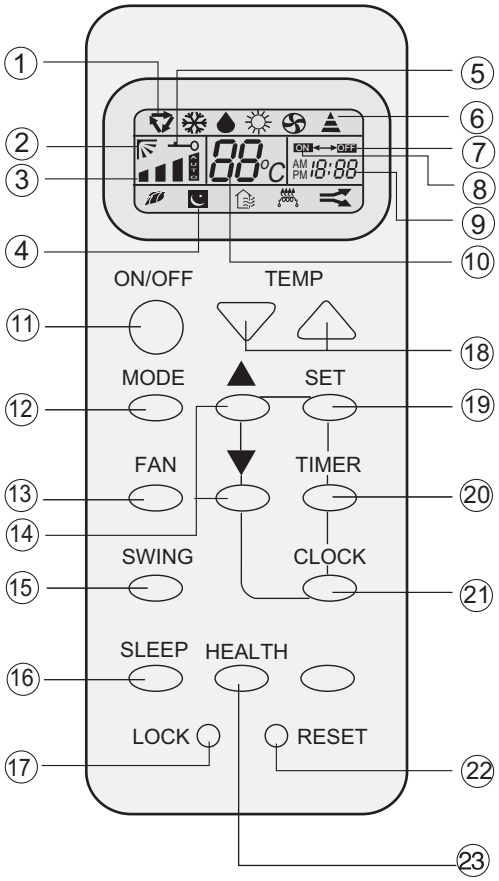
Hints

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 

4. SLEEP display
5. LOCK display
6. SIGNAL SENDING
7. TIMER OFF display
8. TIMER ON display
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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
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.

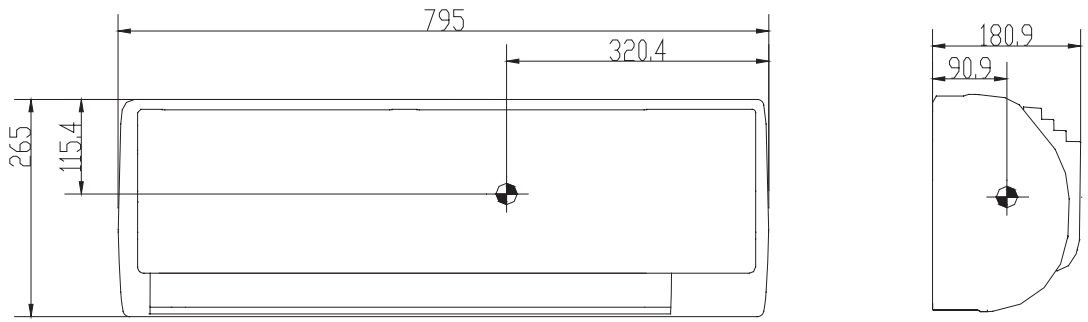
NOTE: Cooling only unit do not have displays and functions related with heating

Hints

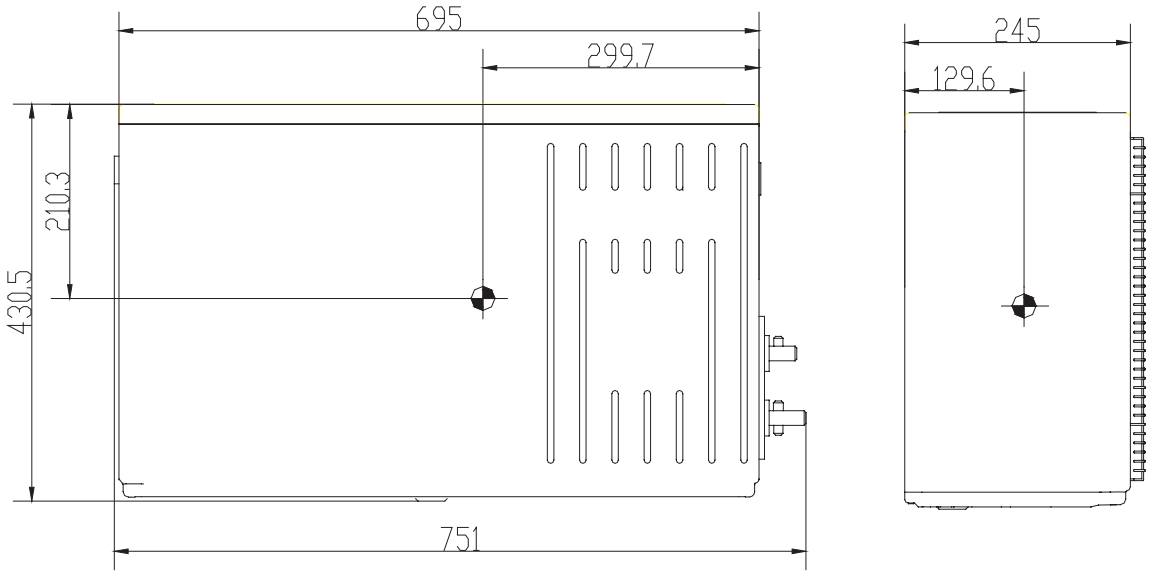
After replacing with new batteries, remote controller will conduct self-check, displaying all information on LCD. Then, it will become normal.

13 Center of gravity

Indoor unit



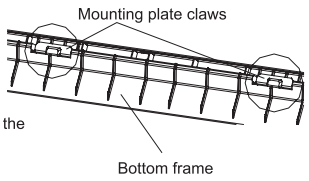
Outdoor unit

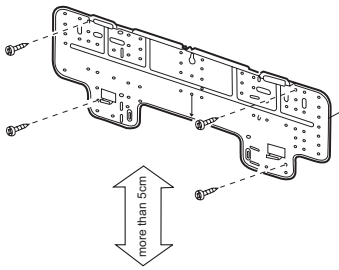


14 Installations

Indoor unit installation drawings

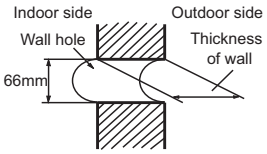
■ How to attach the indoor unit.
Hook the claws of the bottom frame to the mounting plate.
If the claws are difficult to hook ,remove the front panel.
■ How to remove the indoor unit.
Push up the marked area (at the lower part of the front panel) to release the the claws . If it is difficult to release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

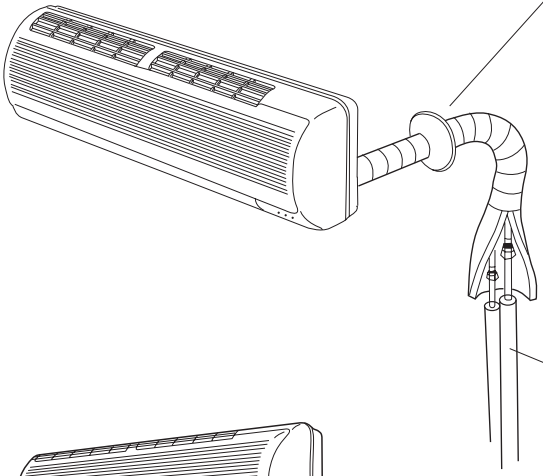


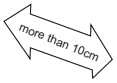


The mounting plate should be installed on a wall which can support the weight of the indoor unit.

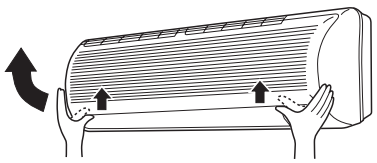
(Section of wall hole)

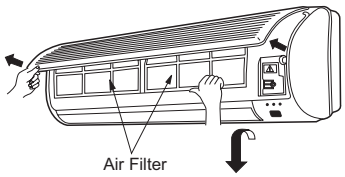


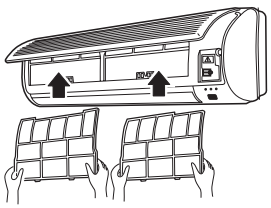




Cut thermal insulation pipe to an appropriate length and wrap it with tape, making sure that no gap is left in the insulation pipe's cut line .







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.

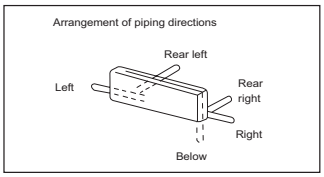
Outdoor unit installation drawings

HSU-07,09,12LE03

Outdoor

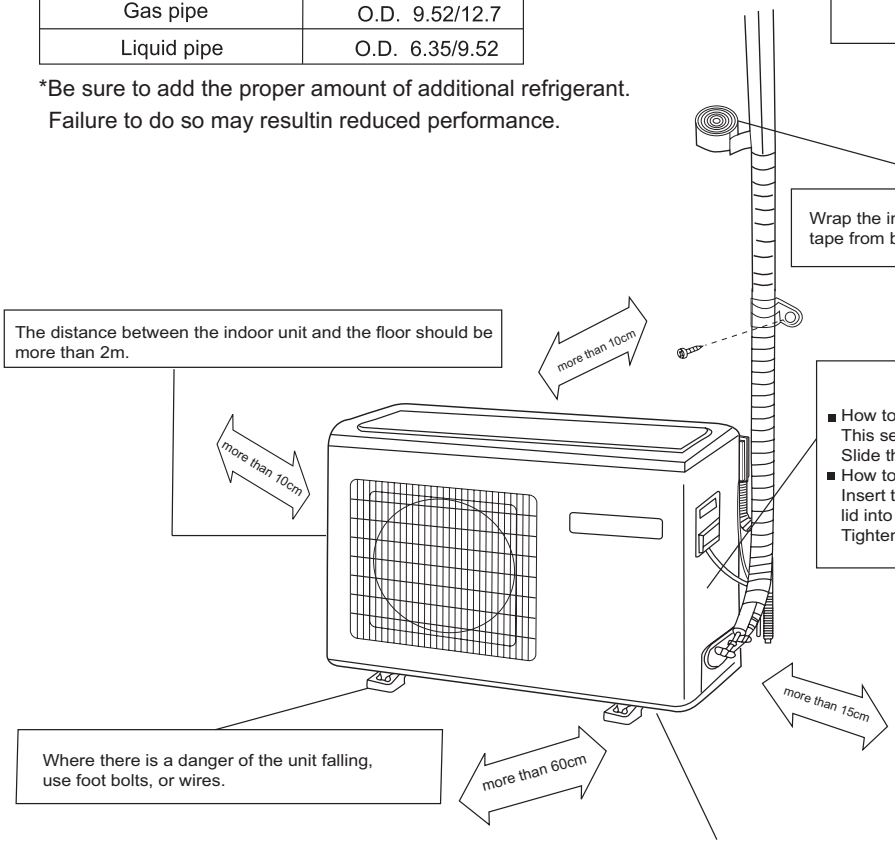
Model	26/28 class
Max.allowable length	Cooling only：7 m Heat pump：7 m
Max.allowable height	5m
Additional refrigerant required for refrigerant pipe exceeding 5m in length	16g/m
Gas pipe	O.D. 9.52/12.7
Liquid pipe	O.D. 6.35/9.52

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



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

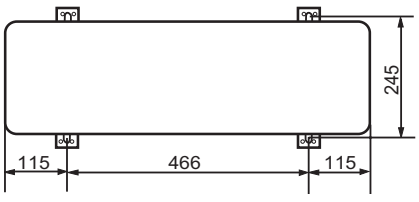
The distance between the indoor unit and the floor should be more than 2m.



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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