

分体机平台
加密文档当前阅读人: 分体机平台
Hisense

Version: 1.3

Window Air Conditioner

SERVICE MANUAL



Hisense Corporation

MODEL:

AW-08CW1RVFUE20	AW-08DR1RVFU21	AW-12CW1RWFUE20
AW-08DR1RVFU20	AW-10CW1RVFUE20	AW-08CW1RVFUE21
AW-12DR3RYFU20	AW-18CW3RXFUE20	

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1. Safety Considerations

IMPORTANT!

Please Read Before Starting

This air conditioning system meets strict safety and operating standards. As the installer or service person, it is an important part of your job to install or service the system, so it operates safely and efficiently.

For safe installation and trouble-free operation, you must:

- Carefully read this instruction booklet before beginning.
- Follow each installation or repair step exactly as shown.
- Observe all local, state, and national electrical codes.
- Pay close attention to all warning and caution notices given in this manual.



WARNING

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



CAUTION

This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

If Necessary, Get Help

These instructions are all you need for most installation sites and maintenance conditions. If you require help for a special problem, contact our sales/service outlet or your certified dealer for additional instructions.

In Case of Improper Installation

The manufacturer shall in no way be responsible for improper installation or maintenance service, including failure to follow the instructions in this document.

SPECIAL PRECAUTIONS

When Wiring

WARNING



ELECTRICAL SHOCK CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. ONLY A QUALIFIED, EXPERIENCED ELECTRICIAN SHOULD ATTEMPT TO WIRE THIS SYSTEM.

- Do not supply power to the unit until all wiring and tubing are completed or reconnected and checked.
- Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause accidental injury or death.
- Ground the unit following local electrical codes.
- Connect all wiring tightly. Loose wiring may cause overheating at connection points and a possible

fire hazard.

When Transporting

Be careful when picking up and moving the indoor and outdoor units. Get a partner to help, and bend your knees when lifting to reduce strain on your back. Sharp edges or thin aluminum fins on the air conditioner can cut your fingers.

When Servicing

△ Turn the power OFF at the main power box (mains) before opening the unit to check or repair electrical parts and wiring.

△ Keep your fingers and clothing away from any moving parts.

△ Clean up the site after you finish, remembering to check that no metal scraps or bits of wiring have been left inside the unit being serviced.

Others



△ Ventilate any enclosed areas when installing or testing the refrigeration system. Escaped refrigerant gas, on contact with fire or heat, can produce dangerously toxic gas.

△ Confirm upon completing installation that no refrigerant gas is leaking. If escaped gas comes in contact with a stove, gas water heater, electric room heater or other heat source, it can produce dangerously toxic gas.

NOTE:

The figure, size and parameter of the product may not be identical with the service manual, please take the actual product as the standard.

2. Product Specifications

Model				AW-08DR1RVFU21	AW-10CW1RVFUE20	
Panel				F	F	
Electric parameter	Power supply	nameplate	V-ph-Hz	115/1/60	115/1/60	
	Input	nameplate	W	710	870	
	Input current	nameplate	A	6.1	7.7	
Efficiency	Cooling	Energy Class		---	---	
		CEER	BTU/W	10.90	11.40	
	Heating (Average Season)	Energy Class	N/A	---	---	
		COP	W/W	---	---	
Cooling	Capacity(T1)	Rated	W	2345	2931	
		Rated	Btu/h	8000	10000	
	Input Watts	Rated	W	710	870	
	Current	Rated	A	6.1	7.7	
	CEER	Rated	BTU/W	10.90	---	
	dehumidification amount	Rated	L/h(usgal/h)	0.9	1.4	
Heating	Capacity	Rated	W	1172	---	
		Rated	Btu/h	4000	---	
	Input Watts	Rated	W	1350	---	
	Current	Rated	A	12.0	---	
	COP	Rated	W/W	---	---	
Compressor	Model		—	KSN66E12VBZC3	KSN82E11VBZ	
	Type		—	ROTARY	ROTARY	
	Brand		—	美芝	美芝	
Indoor and outdoor units	Dimension	WxHxD	mm(inch)	470×330×445	470×330×445	
	Packing	WxHxD	mm(inch)	560×375×510	560×375×510	
	Weight	Net/Gross	kg(lbs)	23/26.5	23/26.6	
	Air Volume (indoor)	Hi/Med/Lo	m ³ /h	382/335/293	380/340/300	
		Hi/Med/Lo	CFM	225/197/172	224/200/176	
	Noise Level(db)-indoor	Hi/Med/Lo	dB(A)	57/52/48	57/54/51	
	Noise Level(db)-outdoor	Hi/Med/Lo	dB(A)	63/60/58	64/60/56	
	Refrigerant	Type	—	R32	R32	
		Amount	kg	0.29	0.36	
	Design pressure	H/L	Mpa	3.8/2.07	3.8/2.07	
	Electronic	Electronic			YES	YES
		Digital Time/Temp Display			YES	YES
		Mode			COOL, DRY, FAN, ENERGY SAVER, HEAT	COOL, DRY, FAN, ENERGY SAVER
		Fan Speeds - Cool/Fan			3	3

分体机平台		On/Off Timer (24 Hour)		YES	YES
		Energy Saver		YES	YES
		Auto Fan		YES	YES
		Dehumidify Function		YES	YES
		Sleep Mode		YES	YES
		Infrared Remote Control		YES	YES
		Mechanical		—	—
	Mechanical	Control Panel Design		—	—
		Fan Speeds - Cool/Fan/Heat		—	—
		Thermostat		—	—
		Control Panel Design		—	—
		Filter Type		dustproof	dustproof
		Filter Access		Easy Access	Easy Access
		Chassis Type		Slide-out	Fix
other function		—	—		
Room temperature	setting temperature range	Cooling	°C	16-30	16-30
		Heating	°C	16-30	—
	Operating Temperature Range	Cooling	°C	(17~32)/(18~43)	16-43
		Heating	°C	(0~27)/(-7~24)	—

Note:

1、 This table just is for reference, when relate parameters is different from actual specification, please use the parameters of the actual specification which you can get from the product manager.

Model				AW-12CW1RWFUE20	AW-12DR3RYFU20	
Panel				F	F	
Electric parameter	Power supply	电源	nameplate	V-ph-Hz	115/1/60	208/230/60
	Input	铭牌功率	nameplate	W	1040	1020/1050
	Input current	铭牌电流	nameplate	A	9.4	5.1/4.7
Efficiency	Cooling	能效等级	Energy Class		E-star	—
		能效值	CEER	BTU/W	12.0	10.9
	Heating (Average Season)	能效等级	Energy Class	N/A	—	—
		能效值	COP	W/W	—	—
Cooling	Capacity(T1)	额定制冷量	Rated	W	3517	3280/ 3370
			Rated	Btu/h	12000	11200/11500
	Input Watts	功率	Rated	W	1040	1020/1050
	Current	电流	Rated	A	9.4	5.1/4.7
	EER	能效值	Rated	BTU/W	11.4	10.9
dehumidification amount	除湿量	Rated	L/h(usgal/h)	1.5	1.6	
Heating	Capacity	额定制热量	Rated	W	—	2989/ 3136
			Rated	Btu/h	—	10200/ 10700
	Input Watts	功率	Rated	W	—	—
	Current	电流	Rated	A	—	16.0/15.0
COP	能效值	Rated	W/W	—	—	
Compressor	Model	型号		—	GSD100UW-F6AU3	GSD100UW-F6AU3
	Type	类型		—	ROTARY	ROTARY
	Brand	品牌		—	HIGHLY	HIGHLY
Indoor and outdoor units	Dimension	裸机尺寸 (宽*高*深)	WxHxD	mm(inch)	480×370×545	500×385×548
	Packing	包装尺寸 (宽*高*深)	WxHxD	mm(inch)	565×445×600	560×445×660
	Weight	重量 (净重/ 毛重)	Net/Gross	kg(lbs)	27.2/31.5(59.8/69.3)	36.0/40.5(79/89.1)
	Air Volume (indoor)	内侧风量 (高/中/ 低)	Hi/Med/Lo	m ³ /h	571/508/433	550/489/423
			Hi/Med/Lo	CFM	336/299/255	323/288/249
	Noise Level(db)-indoor	声压级 (室内)	Hi/Med/Lo	dB(A)	59/56.2/53.6	60.3/57.5/54.6
	Noise Level(db)-outdoor	声压级 (室外)	Hi/Med/Lo	dB(A)	65.9/62.6/58	66.1/63.4/59.1
	Refrigerant	冷媒种类	Type	—	R32	R32
		冷媒量	Amount	kg	0.355	0.44
	Design pressure	设计压力	H/L	Mpa	3.8/2.07	3.8/2.07
Electronic	电子式	Electronic		YES	YES	

	时间/温度显示	Digital Time/Temp Display		YES	YES	
	模式	Mode		COOL, DRY, FAN, ENERGY SAVER	COOL, DRY, FAN, ENERGY SAVER	
	风扇转速	Fan Speeds - Cool/Fan		3	3	
	24 定时开关	On/Off Timer (24 Hour)		YES	YES	
	节能模式	Energy Saver		YES	YES	
	自动风	Auto Fan		YES	YES	
	除湿功能	Dehumidify Function		YES	YES	
	睡眠模式	Sleep Mode		YES	YES	
	遥控器控制	Infrared Remote Control		YES	YES	
	Mechanical	机械式	Mechanical		—	—
控制面板图案		Control Panel Design		—	—	
风速（制冷/送风/制热）		Fan Speeds - Cool/Fan/Heat		—	—	
温控器型式		Thermostat		—	—	
控制面板图案		Control Panel Design		—	—	
过滤网类型		Filter Type		dustproof	dustproof	
过滤网可拆卸		Filter Access		Easy Access	Easy Access	
底座类型		Chassis Type		Fix	Fix	
other function	其他功能		—	WIFI	—	
Room temperature	setting temperature range	制冷	Cooling	℃	16-30	16-30
		制热	Heating	℃	—	16-30
	Operating Temperature Range	制冷	Cooling	℃	(17-32)/(18-43)	(17-32)/(18-43)
		制热	Heating	℃	—	(0-27)/(-7-24)





Note:

1、This table just is for reference, when relate parameters is different from actual specification, please use the parameters of the actual specification which you can get from the product manager.

3. Product Picture and Drawing

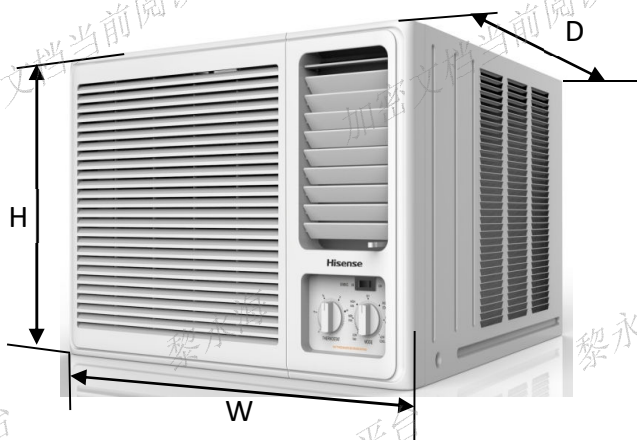
3-1. Product Pictures

Indoor units:

Front Panel	A
View	
Front Panel	B
View	
Front Panel	M
View	
Front Panel	Q
View	
Front Panel	Q



3-2. Product dimensions

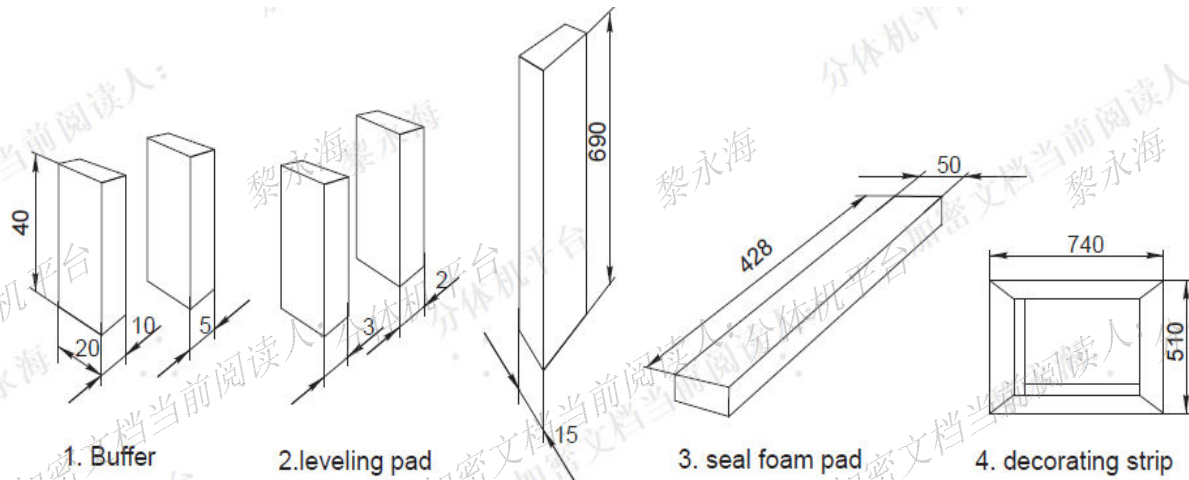


Model	W (mm)	H (mm)	D (mm)
AW-12DR3RYFU10	550	385	548
AW-08CW1RVFUE20	470	330	445
AW-08DR1RVFU20	470	330	445
AW-12CW1RWFUE20	480	370	545
AW-08CW1RVFUE21	470	330	445
AW-08DR1RVFU21	470	330	445
AW-10CW1RVFUE20	470	330	445
AW-12DR3RYFU20	550	385	548
AW-18CW3RXFUE20	660	445	640

4. Installation Instruction

4-1. Installation instruction

Installation accessories



Note: All above accessories are prepared or purchased by user

Installation requirements

1. Leave a space more than 100 cm at the rear of the appliance and ensure the outdoor air intake not be blocked.
2. A wooden frame as shown in fig.1 is advisable if the appliance is installed through a window. The installation bracket as shown in fig.2 should not be welded with the window sash.
3. The square hole should be smooth enough if the appliance is installed through a wall. A space as shown in fig.3 for outdoor air intake should be prepared if the wall is too thick.
4. The metallic installation bracket should be constructed as fig.4.
5. All the installation structure should be strong enough.
6. For appliances with supplementary heaters, the minimum clearance from the appliance to combustible surfaces (IEC 60335-2-40:2018)

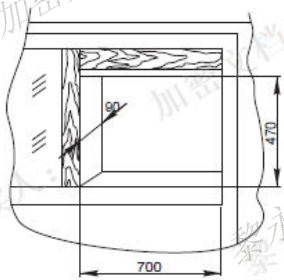


Fig.1

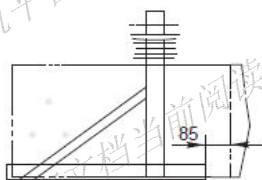


Fig.2

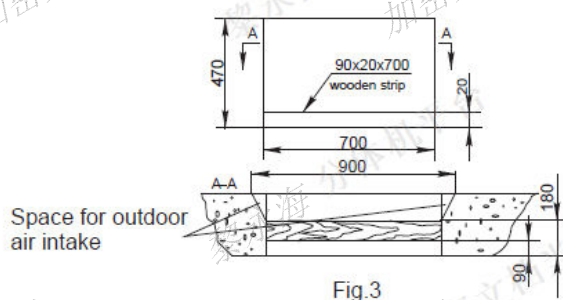


Fig.3

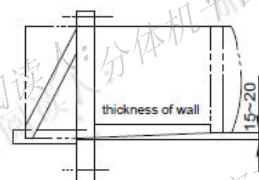


Fig.4

Installation steps

1. Test the appliance by plugging the power supply cord in a correct outlet of power source before installation.
2. A clearance of 20 mm is advisable between the appliance cabinet and the wall. Fix the indoor air intake panel with the cabinet by employing two screws which packed in the packing bag as shown in Fig.5.
3. Put the buffers on the installation bracket as shown in Fig.6. Adjust the appliance as shown in Fig.4.
4. The leveling pads are employed to tilt the appliance in order that the indoor side is about (15~20) mm higher than the outdoor side for fear the condensate overflow into the room.
5. The seal foam pads are employed to prevent outside air from leaking into the room (Fig.7) and the decorating strip is presented for aesthetical appearance as Fig.8.

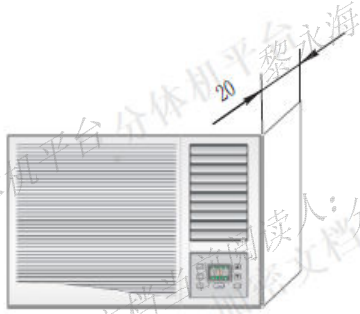


Fig.5

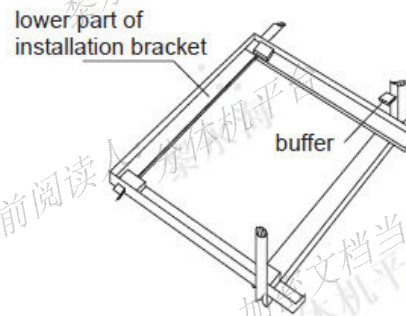


Fig.6

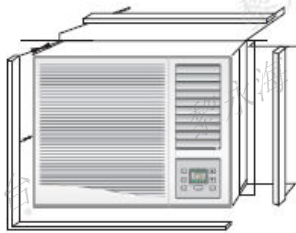


Fig.7

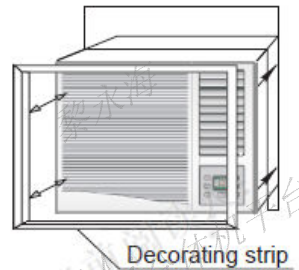


Fig.8

Drainage

1. Condensate will form during the cooling or dry operation, user can choose drainage or no drainage.
2. Remove the drainage tip and fix the drainage hose when drainage is chosen.
3. On the contrary, the condensate is splashed to cool the condenser so that the cooling capacity and energy conservation is improved with a little high noise when no drainage is chosen.

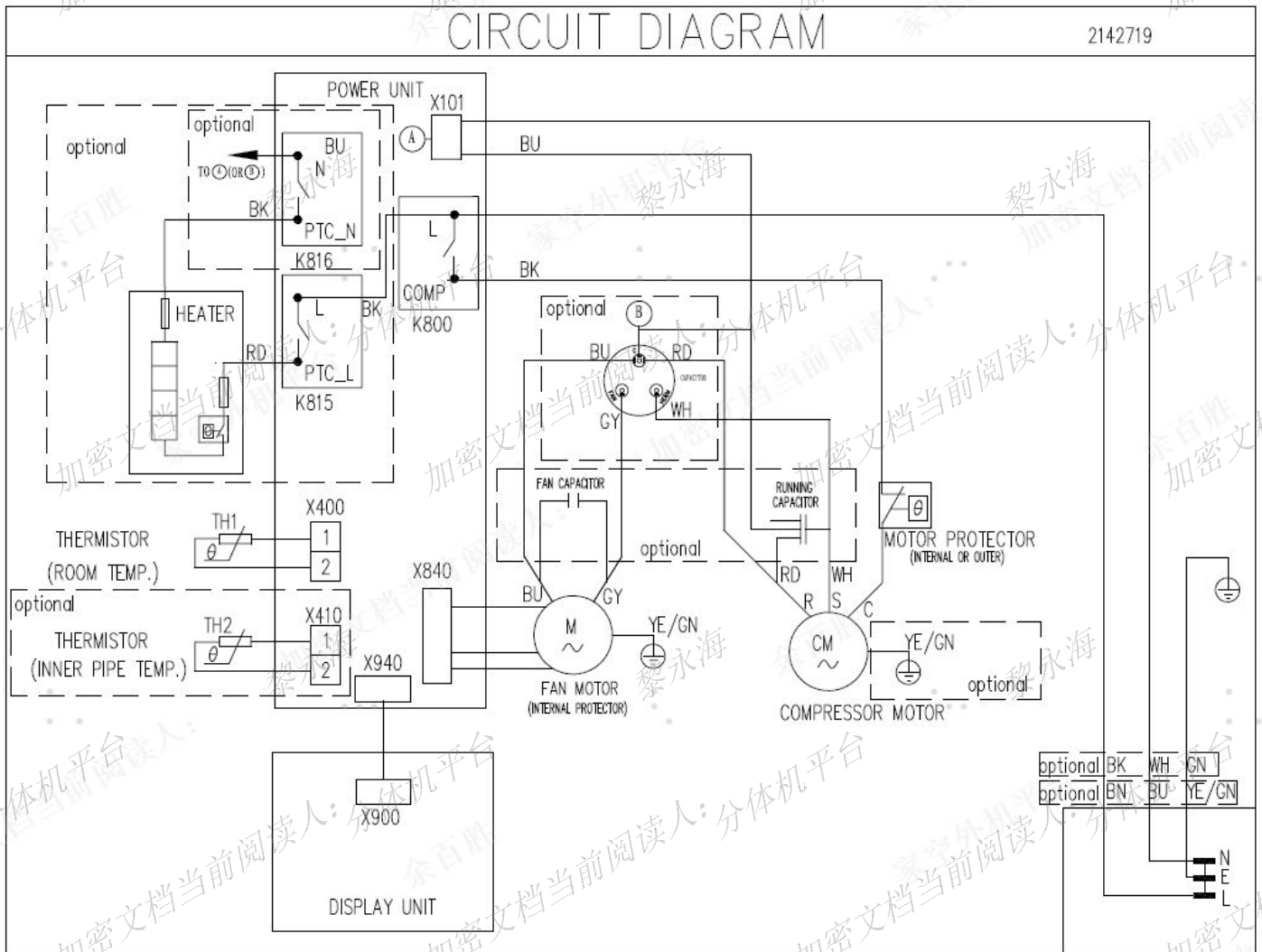
Fuse and grounding

1. A proper time-delay fuse should be employed in the power supply circuit.
2. For your personal safety, this air conditioner must be grounded.
3. The extension of power supply cord is inadvisable.
4. Connect this air conditioner to its own individual wall receptacle to prevent itself and other appliances or household lights from causing a overload that could cause a power outage.

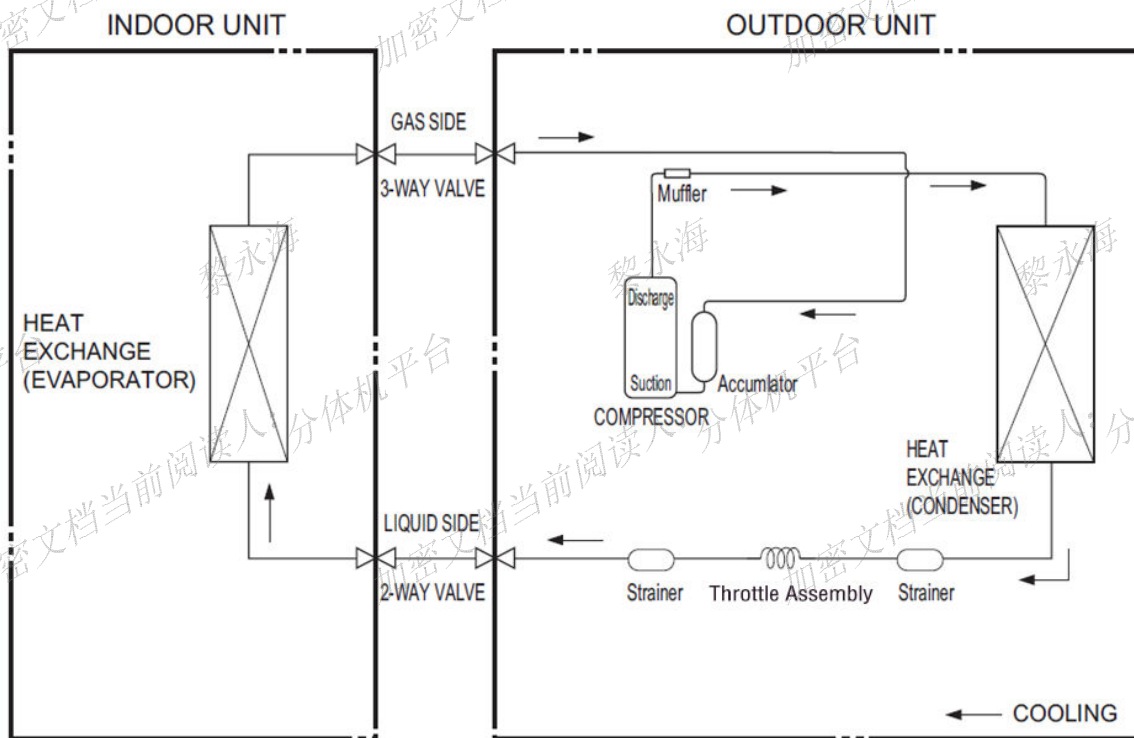
4-2. Electric Wiring Diagram

Model	Code
AW-08CW1RVFUE20	2142719
AW-08DR1RVFU20	2142719
AW-12CW1RWFUE20	2142719
AW-08CW1RVFUE21	2142719
AW-08DR1RVFU21	2142719
AW-10CW1RVFUE20	2142719
AW-12DR3RYFU20	2142719
AW-18CW3RXFUE20	2142719
AW-08CW1RVFUE20	2142719

2142719



4-3. Refrigerant Flow System



4-4. Test Running

△ Check after Installation

Items to be checked	Possible malfunction
Has it been fixed firmly?	The unit may drop, shake or emit noise.
Have you done the refrigerant leakage test?	It may cause insufficient cooling(heating)capacity
Is heat insulation sufficient?	It may cause condensation and dripping.
Is water drainage satisfactory?	It may cause condensation and dripping.
Is the voltage in accordance with the rated voltage marked on the nameplate?	It may cause electric malfunction or damage the product.
Is the electric wiring and piping connection installed correctly and securely?	It may cause electric malfunction or damage the part.
Has the unit been connected to a secure earth connection?	It may cause electrical leakage.
Is the power cord specified?	It may cause electric malfunction or damage the part.
Are the inlet and outlet openings blocked?	It may cause insufficient cooling(heating)capacity.
Is the length of connection pipes and refrigerant capacity been recorded?	The refrigerant capacity is not accurate.

△Operation Test

1. Before Operation Test

- (1) Do not switch on power before installation is finished completely.
- (2) Electric wiring must be connected correctly and securely.
- (3) Cut-off valves of the connection pipes should be opened.
- (4) All the impurities such as scraps and thrums must be cleared from the unit.

2. Operation Test Method

- (1) Switch on power and press "ON/OFF" button on the remote controller to start the operation.
- (2) Press MODE button to select the COOL, HEATER (Cooling only unit is not available), FAN to check whether the operation is normal or not.

5. Function Operation

5-1. Operation Range (Cooling and Heater)

Middle East T3 Model:

	Temperature	Indoor Air Intake Temp.	Outdoor Air Intake Temp
COOLING	Maximum	/	52 °C
	Minimum	21 °C	/
ELECTRIC HEATER	Maximum	32 °C	/
	Minimum	/	/