COOLEX

COMFORT BEYOND EXPECTATIONS

MINI SPLIT
AIR CONDITIONERS
DC Inverter R410A

R410a
Environment Friendly

50/60 Hz

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ABOUT THE COMPANY

Refrigeration Industries & Storage and Oil Services Company, occupies a leading position as one of the largest industrial companies in Kuwait which was established in 1973. It plays a proactive role in providing various services and diverse activities such as manufacturing, storage, and oil services to meet the needs of customers both inside and outside Kuwait.

Since its inception, RIC has been committed to excellence and advancing its progress, leading to the establishment of the brand (Coolex) in 1986, a true milestone in the Kuwaiti market as the first in the region in the sector of manufacturing air conditioning systems and cooling solutions.

Furthermore, the company has consistently empowered its workforce, enhanced safety and competitiveness, and utilized innovative technologies to launch new products that meet the needs of various sectors, contributing to company's expansion and supporting growth and prosperity.

To ensure the highest performance in the future, RIC harnesses its continuous research to enhance efficiency and quality, while continuing its efforts to manufacture products capable of adapting to climate, environmental, and energy challenges.

Facts throughout the years

1973 Warehouses were established by Amiri Decree.

1979 RIC Constructed the Medical Cold Stores Complex, the world's largest at that time.

1980 RIC Air Conditioning manufacturing plant set up in Sulaibya.

1981 Production of Package & Mini-Split A/Cs started under York-Gulf.

1984 RIC was listed in Kuwait Stock Exchange.

1986 COOLEX brand Production Launched.

1991 RIC rebuilt the manufacturing plant destroyed during the war.

1997 Achieved ISO Certification ISO 9001:1994.

2002 ETL Designed testing lab became fully operational.

2004 Privatization of RIC.

2010 COOLEX becomes the first A/C Unit to Pass MEW's new regulations.

2010 RIC Factory Renovation and Expansion into neighboring countries.

2012 Achieved UL & AHRI Certification for Coolex Units.

2014 Achieved SASO Certification for Concealed Ducted Split Series.

2014 Achieved EUROVENT Certification for Air Handling Units AHU.

2014 Achieved UL Certification for Air Cooled Chillers.

2015 Achieved ISO 17025 Certification for Psychrometric Laboratory.

2016 Achieved Energy Efficiency Certification for Concealed Ducted Split Series & Rooftop Package units (Kingdom of Bahrain).

2016 Acquisition of Gulf Paramount for Electrical Services Company.

2021 Acquisition of Kuwait Pipes Industries & Oil Services factory, resulting in a change of the company's name from Refrigeration Industries & Storage Co. to Refrigeration Industries & Storage and Oil Services Co.

SPECIFICATIONS

ColdCatalyst Filter
Eliminate formaldehyde and other volatile organic compounds (VOCs) as well as harmful gases and odors.

فلتر الهواء:
يعمل علي تنقية الهواء من المواد العضوية والغازات الضارة والروائح الكريهة. من اجل بيئة نقية وصحية داخل الغرفة.

Air Swing
Equipped with vertical louvers motor for proper air distribution.

موزع الهواء:
مزود بفتحات تهوية ذاتية الحركة لتعطي افضل كفاءة في توزيع الهواء داخل الغرف

Anti-Rust Cabinet
With this technique, the cabinet is well protected from being rusted.

غلاف خارجي مقاوم للصدأ:
الغلاف الخارجي معالج خصيصا بطبقة حماية ضد الصدا والعوامل الخارجية.

Low Noise Airflow System
Without decreasing the airflow volume and capacity output, large diameter cross flow fan can bring down the indoor unit noise level by lowering the fan speed.

صوت منخفض:
زودت الوحدة بمروحة داخلية ذات قطر اكبر لخفض صوت الوحدة بدون التاثير علي كمية الهواء او الطاقة التبريدية.

Turbo Operation
With this function, the air conditioner will maximize the output of cooling or heating capacity, make the room cool down or heat up rapidly, and attain the desired temperature in the shortest time.

وضع التشغيل التوربيني:
تقوم هذه الوظيفة بالحصول على الطاقة القصوى للتبريد مما يجعل تبريد الغرفة أسرع في وقت قصير.

Sleep Mode
This function enables the air conditioner to automatically increase (cooling) or decrease (heating) 1°C per hour for the first two hours, then holds steady for the next 5 hours, after that it will switch off. This characteristic maintains both energy saving and comfort in night operation.

ضبط التشغيل اثناء النوم:
في هذه الميزة يقوم الجهاز تلقائياً بزيادة التبريد 1 درجة مئوية واحدة لأول ساعتين. ويحتفظ بدرجة الحرارة ثابتة لمدة خمسة ساعات ثم يتوقف عن العمل.
هذه الميزة تؤدي إلى حفظ الطاقة الكهربائية والحصول على الراحة المطلوبة.

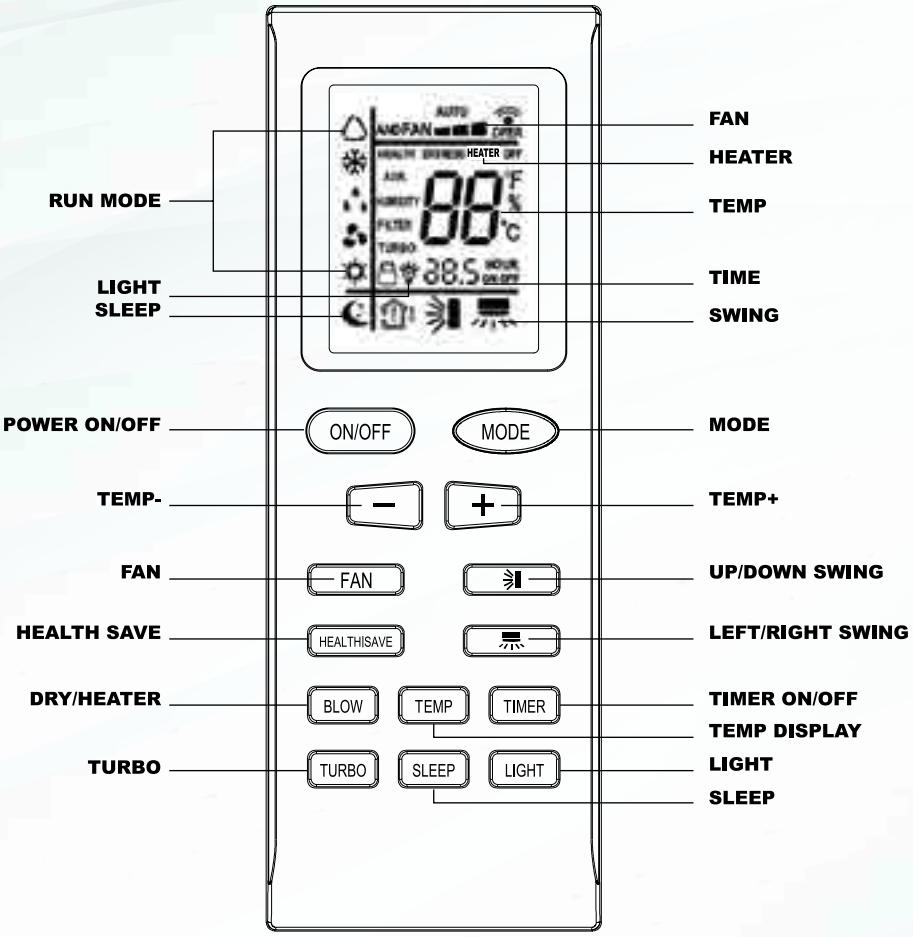
Auto-Restart
If the air conditioner breaks off unexpectedly due to the power cut, it will restart with the previous function setting automatically when the power resumes.

ميزة اعادة التشغيل التلقائي:
في حال انقطاع التيار الكهربائي المفاجئ يقوم الجهاز باعادة التشغيل التلقائي على نفس الضبط السابق.

SPECIFICATIONS

MODEL			Indoor	IWLF-00184FC	IWLF-00244FC	IWLF-00304FC
			Outdoor	IWCF-00184HFC	IWCF-00244HFC	IWCF-00304HFC
Power supply			Ph-V-Hz	1Ph-220~240V-50/60Hz		
Rated Performance	Cooling (T1 / T4)		Btu / Hr	19000 / 15770	25000 / 21300	30500 / 25000
			kW	5.568 / 4.622	7.327 / 6.243	8.939 / 7.327
	Power Input (T1 / T4)		Watts	1423 / 1742	1923 / 2367	2479 / 2809
	Current (T1 / T4)		A	6.0 / 8.5	8.5 / 10.5	11.0 / 13.5
	EER		(Btu / Hr.)/W	13.35 / 9.0	13.0 /9.0	12.3 / 8.9
	kW/Ton			0.90 / 1.33	0.60 / 1.33	0.98 / 1.35
Compressor	Motor Type			Hermetic Compressor	Hermetic Compressor	HermeticCompressor
	Pump Type			"Twin Cylinder Rotary Inverter"	"Twin Cylinder Rotary Inverter"	"Twin Cylinder Rotary Inverter"
Indoor unit	Indoor motor	Type		BLDC	BLDC	BLDC
		Power Output	W	30	57	57
	Airflow		m^3/hr (cfm)	1100 (647)	1350 (794)	1350 (794)
	Noise level		dB(A)	46	48	48
	Unit dimension (WxDxH)		mm	1000 x 230 x 295	1100 x 250 x 330	1100 x 250 x 330
	Packing dimension (WxDxH)		mm	1108 x 360 x 300	1198 x 408 x 330	1198 x 408 x 330
Outdoor unit	Net Weight		Kg	11	13.8	14.2
	Outdoor motor	Type		BLDC	BLDC	BLDC
		Power Output	W	60	60	120
	Condenser	Fin type		Aluminium Hydrophilic	Aluminium Hydrophilic	Aluminium Hydrophilic
	Noise level		dB(A)	56	56	59
	Unit dimension (WxDxH)		mm	1021 x 397 x 804	1021 x 397 x 804	1021 x 397 x 892
	Net Weight		Kg	52	57	69
	Refrigerant type			R410A	R410A	R410A
Refrigerant pipe	Expansion Device			Fix	Fix	Fix
	Gas side		inch (mm)	1 / 2 " (12.70)	5 / 8 " (15.88)	5 / 8 " (15.88)
	Liquid side		inch (mm)	3 / 8 " (9.52)	3 / 8 " (9.52)	3 / 8 " (9.52)
	Max. refrigerant pipe length		m	14	15	15
	Max. difference in level		m	7	8	8

REMOTE CONTROL FUNCTIONS



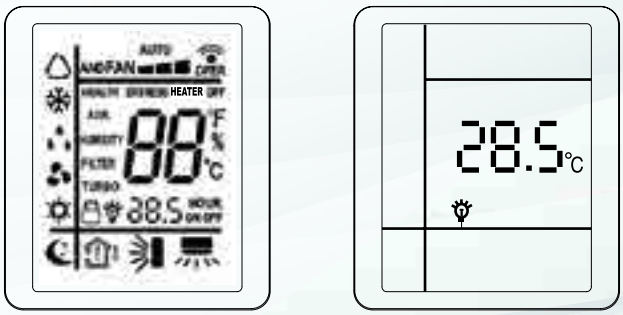
1.POWER ON DEFAULT

1.1 When the remote control is not powered on, there is no display on the LCD screen.

1.2 When the remote controller is powered on for the first time, the LCD screen wi display full screen for 2 seconds (entering the power-on state, Auto mode, swing off, 25°C), the full screen is displayed as shown below.

1.3 The default wind speed setting is automatic.

1.4 When the remote control sends a code, the code sending icon ≡ flashes and then disappears.



Full Display Power-On Default State

REMOTE CONTROL FUNCTIONS

2. BUTTON OPERATION INSTRUCTIONS

2.1 ON/OFF

2.2 When in standby mode, press the power button to enter the running state. After powering on, press the power button once to enter the standby state.

3. MODE

3.1 After pressing this button, the air conditioner (indoor unit) mode will be changed in a cyclic manner.

3.2 Press the mode button and the operation mode is in Cool> DRY > FAN >Heat> Auto > Cool.

4. FAN

4.1 FAN key “Wind speed control”

4.2 Each time you press FAN, air conditioner (indoor) speed range will be different Cycle through HIGH > AUTO > LOW > MED > HIGH.

5. TEMPERATURE ADJUSTMENT +/-

5.1 Press +/—key, the setting temperature rise or reduce 1°C, long press the + or - for 1 second, the temperature is adjusted continuously (increase by 0.25 seconds 1°C), release it and send the code.

5.2 Set the temperature range 16°C - 30°C;

Mode	Temperature Range
Cool	16°C - 30°C
Dry	16°C - 30°C
Fan	16°C - 30°C
Heat	16°C - 30°C
Auto	not shown on display

6.UP / DOWN SWING, LEFT / RIGHT SWING

6.1 Up / down swing, left and right function set.

6.2 This functions works in all mode.

REMOTE CONTROL FUNCTIONS

7. TURBO

7.1 This function is set by “TURBO” on the remote control.

7.2 Press the TURBO button, the wind speed cannot be adjusted, and TURBO is displayed. If the TURBO button is pressed again, a command to cancel the TURBO function is sent.

7.3 In sleep mode, the TURBO button is available.

7.4 In automatic, dehumidification and air supply modes, the TURBO button is not available. (The Turbo function will be disabled in the following ways)

7.4 Press the Mode button (Change Mode Operation).

7.5 Press the TUBRO button again.

8. LIGHT

8.1 Used to turn on/off the “LIGHT” function.

8.2 Press the “LIGHT” button, the front panel displays, press it again to cancel

9. TIMER

9.1 Timer OFF

9.1.1 This button is set by the TIMER button on the remote control. Press the TIMER button again to confirm the Timer OFF.

9.1.2 The total time is 24 hours, and the step is 0.5 hours, change by “+””-” key.

9.1.3 Press the on/off key, Timer OFF will be cancel.

9.2 Timer ON

9.2.1 This button is set by the TIMER button on the remote control. Press the TIMER button again to confirm the timer.

REMOTE CONTROL FUNCTIONS

9.2.2 The total time is 24 hours, and the step is 0.5 hours, change by +**-"key

9.2.3 This timer is only applicable to standby mode. Press the on/off key to cancel Timer ON.

10.LOCK (currently does not support this function)

10.1 When we press "+" and "-" at the same time".

10.2 It is applicable to both open and closed modes.

10.3 When we press the "+" and "-" at the same time for 2 seconds, Lock will be set.

10.4 When we press the "+" and "-" at the same time for 2 seconds, Lock will be cancel.

11.HEALTH | SAVE (currently does not support this function)

11.1 SAVE button on the remote control (the button on the right of HEALTH/SAVE).

11.2 Press the «SAVE» button and the LCD displays «SE», automatic wind speed.

11.3 Press the «SAVE» button again to stop the «SAVE» function. The LCD will display set temperature and wind speed.

11.4 This mode can be only COOL mode.

12.SLEEP (currently does not support this function)

12.1 Used to turn on/off the sleep function.

12.2 When setting the sleep function, pressing the ON/OFF or MODE button will cancel the sleep mode.

13.TEMP

13.1 Used to display indoor ambient temperature.

14.BLOW (currently does not support this function)

14.1 Used to turn on/off the drying /auxiliary heating.

14.2 In heating mode, pressing this button will turn on or off the electric auxiliary heating

Mode Set Function Limits	Cool	Auto	Dry	Fan	Heat
Temp Up/Down	√	√	√	√	√
V. Swing	√	√	√	√	√
H. Swing	√	√	√	√	√
Fan Speed	√	√	√	√	√
Turbo	√	X	X	X	√
Save	√	X	X	X	X
Health	√	√	√	√	√
Blow	√	√	√	X	√
Timer On/Off	√	√	√	√	√
Set Timer	√	√	√	√	√
Temperature	√	√	√	√	√
Sleep	√	X	√	X	√
Light	√	√	√	√	√

SAFETY PRECAUTIONS

Safety rules and recommendations for the installer

1.Read this guide before installing and using the appliance.

2.During the installation of indoor and outdoor units, access to the working area should be forbidden to children. Unforeseeable accidents could happen.

3.Make sure that the base of the outdoor unit is firmly fixed.

4.Check that air moisture cannot enter the refrigerant system and check for refrigerant leaks when moving the air conditioner.

5.Carry out test cycle after installing the air conditioner and record the operating data.

6.Protect the indoor unit with a fuse of suitable capacity for the maximum input current or with another overload protection device.

7.Ensure that power supply is as per data plate. Keep the switch or power plug clean. Insert the power plug correctly and firmly into the socket to avoid electric shock or fire due to insufficient contact.

8.Check that the socket is suitable for the plug, otherwise change the socket.

9.The appliance must be fitted with means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under over voltage category III conditions, and these means must be incorporated in the fixed wiring in accordance with the wiring rules.

10.The air conditioner must be installed by professional or qualified persons.

11.Do not install the appliance at a distance of less than 50 cm from inflammable substances (alcohol, etc.) or from pressurized containers (e.g. spray cans).

12.If the appliance is used in areas without the possibility of ventilation, precautions must be taken to prevent any leaks of refrigerant gas from remaining in the environment and creating a danger of fire.

13.The packaging materials are recyclable and should be disposed of in the separate waste bins. Take the air conditioner at the end of its useful life to a special waste collection center for disposal.

14.Only use the air conditioner as instructed in this booklet. These instructions are not intended to cover every possible condition and situation. As with any electrical household appliance, common sense and caution are therefore always recommended for installation, operation and maintenance.

15.The appliance must be installed in accordance with applicable national regulations.

16.Before accessing the terminals, all the power circuits must be disconnected from the power supply.

17.The appliance shall be installed in accordance with national wiring regulations.

18.This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

SAFETY PRECAUTIONS

19.Do not try to install the conditioner alone, always contact specialized technical personnel.
20.Cleaning and maintenance must be carried out by specialized technical personnel. In any case disconnect the appliance from the mains electricity supply before carrying out any cleaning or maintenance.
21.Ensure that the mains voltage corresponds to that stamped on the rating plate. Keep the switch or power plug clean. Insert the power plug correctly and firmly into the socket, thereby avoiding the risk of electric shock or fire due to insufficient contact.
22.Do not pull out the plug to switch off the appliance when it is in operation, since this could create a spark and cause a fire, etc.
23.This appliance has been made for air conditioning domestic environments and must not be used for any other purpose, such as for drying clothes, cooling food, etc.
24.Always use the appliance with the air filter mounted. The use of the conditioner without air filter could cause an excessive accumulation of dust or waste on the inner parts of the device with possible subsequent failures.
25.The user is responsible for having the appliance installed by a qualified technician, who must check that it is earth in accordance with current legislation and insert a thermos magnetic circuit breaker.
26.The batteries in remote controller must be recycled or disposed of properly. For disposal of scrap batteries, please discard the batteries as sorted municipal waste at the accessible collection point.
27.Never remain directly exposed to the flow of cold air for a long time. The direct and prolonged exposition to cold air could be dangerous for your health. Particular care should be taken in the rooms where there are children, old or sick people.
28.If the appliance gives off smoke or there is a smell of burning, immediately cut off the power supply and contact the Service Center.
29.The prolonged use of the device in such conditions could cause fire or electrocution.
30.Have repairs carried out only by an authorized Service Center of the manufacturer. Incorrect repair could expose the user to the risk of electric shock, etc.
31.Unhook the automatic switch if you foresee not to use the device for a long time. The airflow direction must be properly adjusted.
32.The flaps must be directed downwards in the heating mode and upwards in the cooling mode.
33.Ensure that the appliance is disconnected from the power supply when it will remain inoperative for a long period and before carrying out any cleaning or maintenance.
34.Selecting the most suitable temperature can prevent damage to the appliance.

SAFETY PRECAUTIONS

SAFETY RULES AND PROHIBITIONS

1.Do not bend, tug or compress the power cord since this could damage it. Electrical shocks or fire are probably due to a damaged power cord. Specialized technical personnel only must replace a damaged power cord.

2.Do not use extension wires or gang modules.

3.Do not touch the appliance with barefoot or parts of the body are wet or damp.

4.Do not obstruct the air inlet or outlet of the indoor or the outdoor unit. The obstruction causes a reduction in the operative efficiency of the conditioner with possible consequent failures or damages.

5.Do not alter the characteristics of the appliance.

6.Do not install the appliance in environments where the air could contain gas, oil, Sulphur or near sources of heat.

7.This appliance is not intended to use by persons (including children with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning to use of the appliance by a person responsible for their safety.

8.Do not climb onto or place any heavy or hot objects on top of the appliance.

9.Do not leave windows or doors open for long when the air conditioner is operating.

10.Do not direct the airflow onto plants or animals.

11.Long direct flow of air conditioner cold air have negative effects on plants and animals.

12.Do not put the conditioner in contact with water. The electrical insulation could be damaged and can cause electrocution.

13.Do not climb onto or place any objects on the outdoor unit.

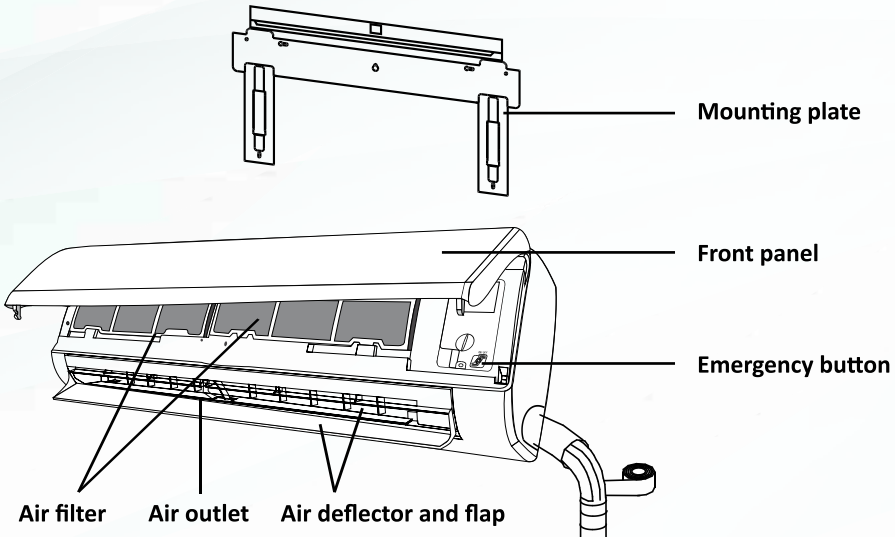
14.Never insert a stick or similar object into the appliance, it could cause injury.

15.Children should be supervised to ensure that they do not play with the appliance.

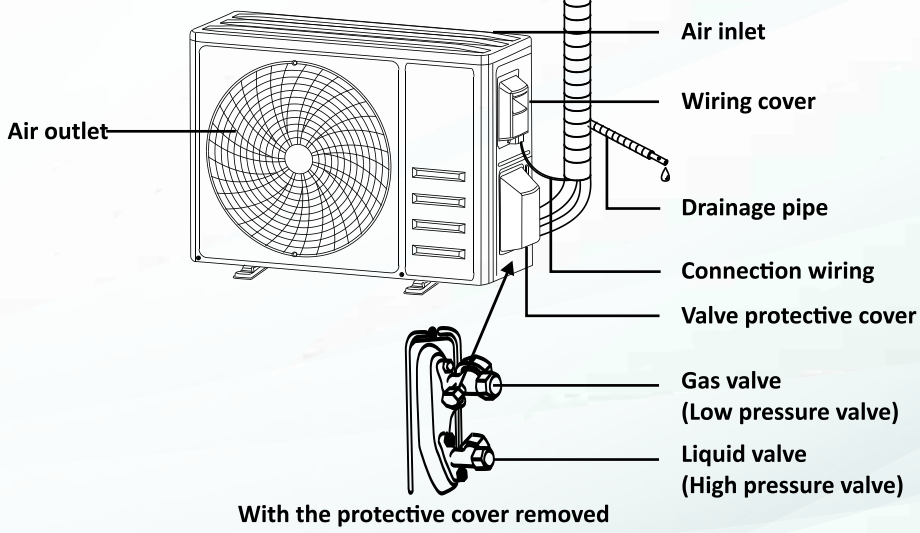
16.If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

NAME OF PARTS

Indoor Unit



Outdoor Unit



With the protective cover removed

Note: Unit apperance is for instaltaion illustration only, actual maybe different in looks.

INSTALLATION PRECAUTIONS

Pipe Length and Additional Refrigerant

Inverter Models Capacity (Btu/h)	IWCF-00184HFC	IWCF-00244HFC	IWCF-00304HFC
Length of pipe with standard charge	7.5 meter / 24 ft	7.5 meter / 24 ft	7.5 meter / 24 ft
Maximum distance between indoor and outdoor unit	15.0 meter / 49 ft	15.0 meter / 49 ft	25.0 meter / 82 ft
Additional refrigerant charge	30 grams / meter	30 grams / meter	30 grams / meter
Max. diff. in level between indoor and outdoor unit	10.0 meter / 32 ft	10.0 meter / 32 ft	10.0 meter / 32 ft
Type of refrigerant	R410A	R410A	R410A

Torque Parameters

PIPE Size	Newton meter[N x m]	Pound-force foot (lbf-ft)	Kilogram-force meter (kgf-m)
1/4" (ϕ6.35)	18 - 20	24.4 - 27.1	2.4 - 2.7
3/8" (ϕ9.52)	30 - 35	40.6 - 47.4	4.1 - 4.8
1/2" (ϕ12)	45 - 50	61.0 - 67.7	6.2 - 6.9
5/8" (ϕ15.88)	60 - 65	81.3 - 88.1	8.2 - 8.9

Dedicated Distribution Device and Wire for Air Conditioner

Maximum Operating Current of Air Conditioner (A)	Minimum Wire Cross-sectional Area(mm^2)	Specification of Socket or Switch (A)	Fuse Specification (A)
≤8	0.75	10	20
>8 and ≤10	1.0	10	20
>10 and ≤15	1.5	16	32
>15 and ≤24	2.5	25	32
>24 and ≤28	4.0	32	64
>28 and ≤32	6.0	40	64

⚠ **Note: This table is only for reference, the installation shall meet the requirements of local laws and regulations.**

INDOOR UNIT INSTALLATION

Step1: Select Installation location

1.1 Ensure the installation complies with the installation minimum dimensions (defined below) and meets the minimum and maximum connecting piping length and maximum change in elevation as defined in the System Requirements section.

1.2 Air inlet and outlet will be clear of obstructions, ensuring proper airflow throughout the room.

1.3 Condensate can be easily and safely drained.

1.4 All connections can be easily made to outdoor unit.

1.5 Indoor unit is out of reach of children.

1.6 A mounting wall strong enough to withstand four times the full weight and vibration of the unit.

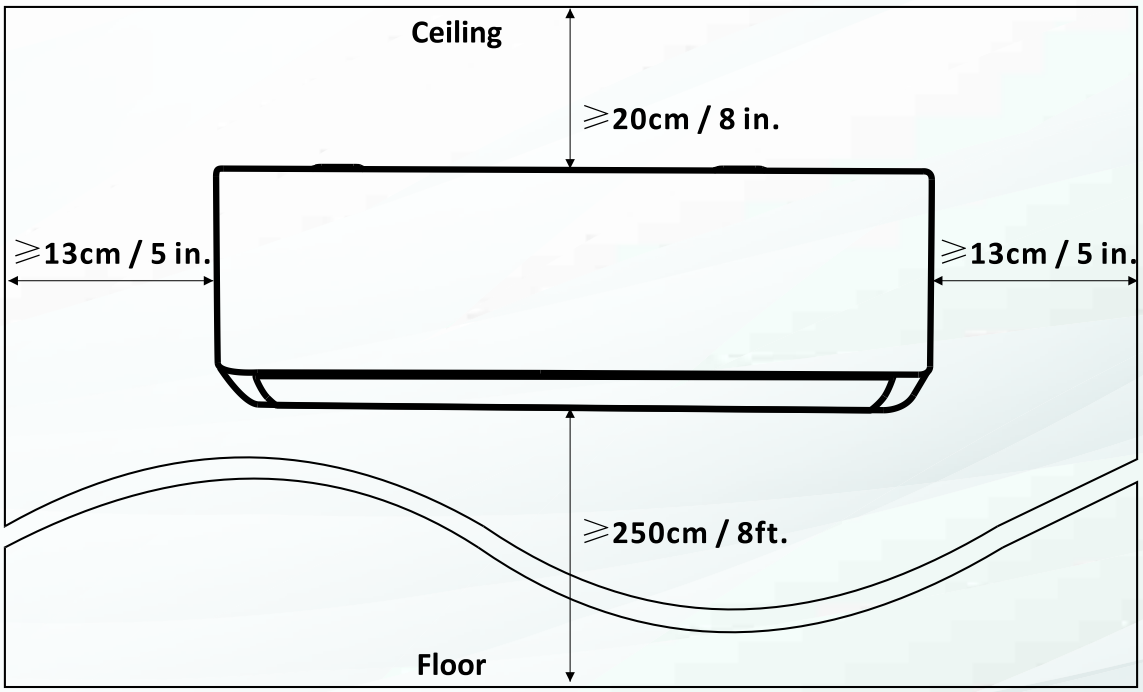
1.7 Filter can be easily accessed for cleaning.

1.8 Leave enough free space to allow access for routine maintenance.

1.9 Install at least 10 ft. (3 m) away from the antenna of TV set or radio. Operation of the air conditioner may interfere with radio or TV reception in areas where reception is weak. An amplifier may be required for the affected device.

1.10 Do not install in a laundry room or by a swimming pool due to the corrosive environment.

1.11 For ETL certification area, Caution: Mount with the lowest moving parts at least 8 ft. (2.4 m) above floor or grade level.



INDOOR UNIT INSTALLATION

Step2: Install Mounting Plate

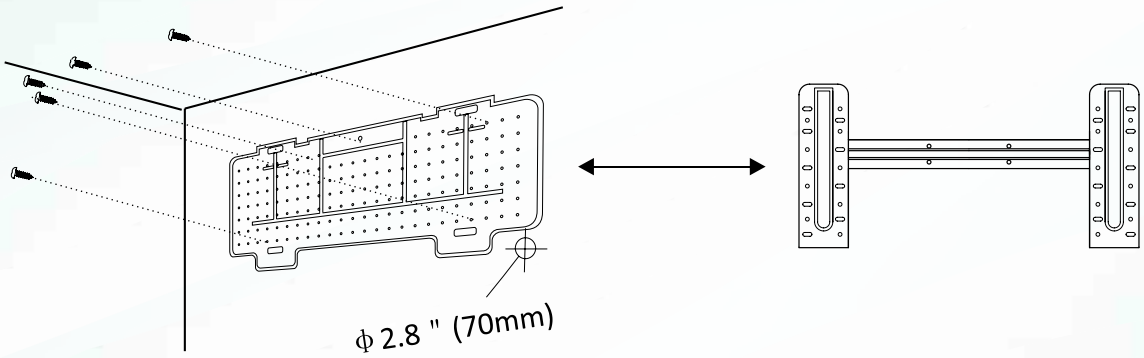
2.1 Take the mounting plate from the back of indoor unit.

2.2 Ensure to meet the minimum installation dimension requirements as step 1, according to the size of mounting plate, determine the position and stick the mounting plate close to the wall.

2.3 Adjust the mounting plate to a horizontal state with a spirit level, then mark out the screw hole positions on the wall.

2.4 Put down the mounting plate and drill holes in the marked positions with drill.

2.5 Insert expansion rubber plugs into the holes, then hang the mounting plate and fix it with screws.



NOTE:

(I) Make sure the mounting plate is firm enough and flat against the wall after installation.

(II) This figure shown may be different from the actual object, please take the latter as the standard.

Step3: Drill Wall Hole

A hole in the wall should be drilled for refrigerant piping ,the drainage pipe, and connecting cables.

3.1 Determine the location of wall hole base on the position of mounting plate.

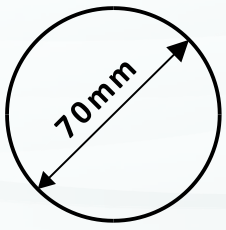
3.2 The hole should be have a 70mm diameter at least and a small oblique angle to facilitate drainage.

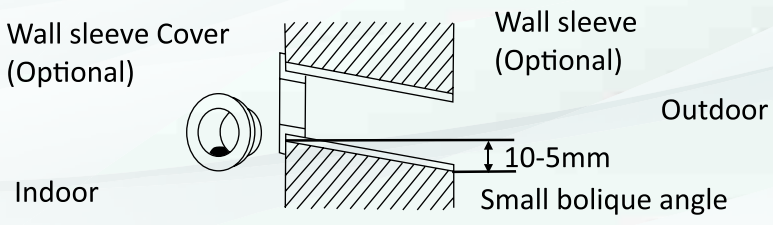
3.3 Drill the wall hole with 70mm core drill and with small oblique angle lower than the indoor end about 5mm to 10mm.

3.4 Place the wall sleeve and wall sleeve cover(both are optional parts) to protect the connection parts.

Caution:

When drill the wall hole, maker sure to avoid wires, plumbing and other sensitive components.





OUTDOOR UNIT INSTALLATION

Step1: Select Installation Location

Select a site that allows for the following:

1.1 Do not install the outdoor unit near sources of heat, steam or flammable gas.

1.2 Do not install the unit in too windy or dusty places.

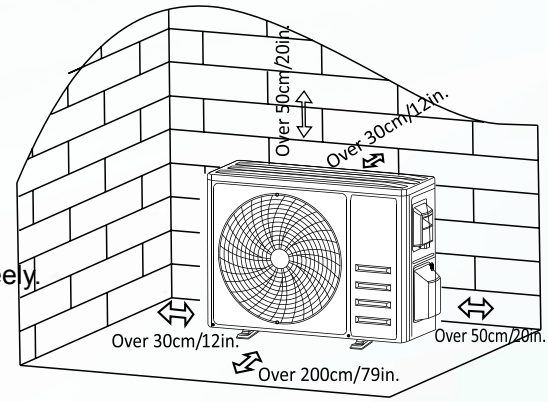
1.3 Do not install the unit where people often pass. Select a place where the air discharge and operating sound will not disturb the neighbors.

1.4 Avoid installing the unit where it will be exposed to direct sunlight (other wise use a protection, if necessary, that should not interfere with the air flow).

1.5 Reserve the spaces as shown in the picture for the air to circulate freely.

1.6 Install the outdoor unit in a safe and solid place.

1.7 If the outdoor unit is subject to vibration, place rubber blankets onto the feet of the unit.

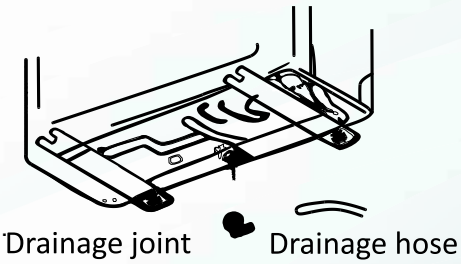


Step2: Install Drainage Hose

2.1 This step only for heating pump models.

2.2 Insert the drainage joint to the hole at the bottom of the outdoor unit.

2.3 Connect the drainage hose to the joint and make the connection well enough.



Step3: Fix Outdoor Unit

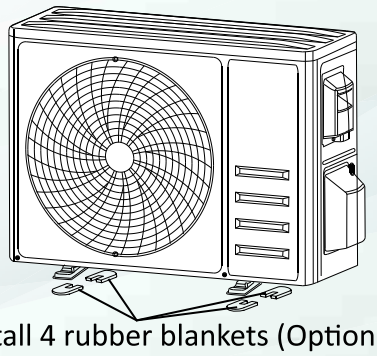
3.1 According to the outdoor unit installation dimensions to mark the installation position for expansion bolts.

3.2 Drill holes and clean the concrete dust and place the bolts .

3.3 If applicable install 4 rubber blankets on the hole before place the outdoor unit (Optional).This will reduce vibrations and noise.

3.4 Place the outdoor unit base on the bolts and pre-drilled holes.

3.5 Use wrench to fix the outdoor unit firmly with bolts.



NOTE:

The outdoor unit can be fixed on a wall-mounting bracket. Follow the instruction of the wall-mounting bracket to fix the wall-mounting bracket on the wall, and then fasten the outdoor unit on it and keep it horizontal. The wall-mounting bracket must be able to support at least 4 times of the weight of outdoor unit.

Unit apperance is for installation illustration purposes only, actual unit maybe different in looks.

OUTDOOR UNIT INSTALLATION

Step4: Install Wiring

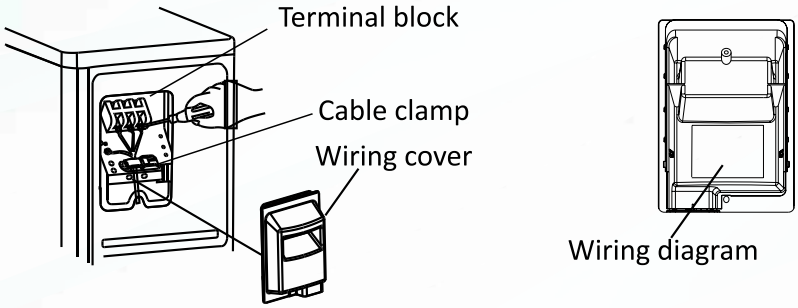
4.1 Use a phillips screwdriver to unscrew wiring cover, grasp and press it down gently to take it down.

4.2 Unscrew the cable clamp and take it down.

4.3 According to the wiring diagram pasted inside the wiring cover, connect the connecting wires to the corresponding terminals, and ensure all connections are firmly and securely.

4.4 Reinstall the cable clamp and wiring cover.

Note: When connecting the wires of indoor and outdoor units, the power should be cut off.



Step5: Connecting Refrigerant Pipe

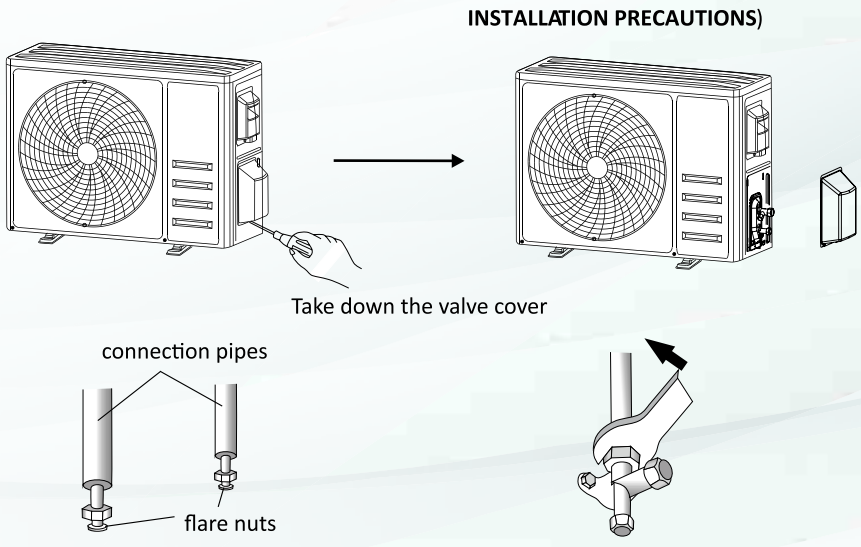
5.1 Unscrews the valve cover, grasp and press it down gently to take it down(if the valve cover is applicable).

5.2 Remove the protective caps from the end of valves.

5.3 Take off the plastic cover in the pipe ports and check whether there is any sundry on the port of the connecting pipe and make ensure the port is clean.

5.4 After align the center, rotate the flare nut of the connecting pipe to tighten the nut as tightly as possible by hand.

5.5 Use a spanner hold the body of the valve and use a torque wrench to tighten the flare nut according to the torque values in the torque requirements table.



OUTDOOR UNIT INSTALLATION

Step6: Vacuum Pumping

6.1 Use a spanner to take down the protective caps from the service port, low pressure valve and high pressure valve of the outdoor unit.

6.2 Connect the pressure hose of manifold gauge to the service port on the outdoor unit low pressure valve.

6.3 Connect the charge hose from the manifold gauge to the vacuum pump.

6.4 Open the low pressure valve of the manifold gauge and close the high pressure valve.

6.5 Turn on the vacuum pump to vacuum the system.

6.6 The vacuum time should not be less than 15 minutes, or make sure the compound gauge indicates -0.1 MPa (-76 cmHg)

6.7 Close the low pressure valve of the manifold gauge and turn off the vacuum.

6.8 Hold the pressure for 5 minutes, make sure that the rebound of compound gauge pointer does not exceed 0.005 MPa.

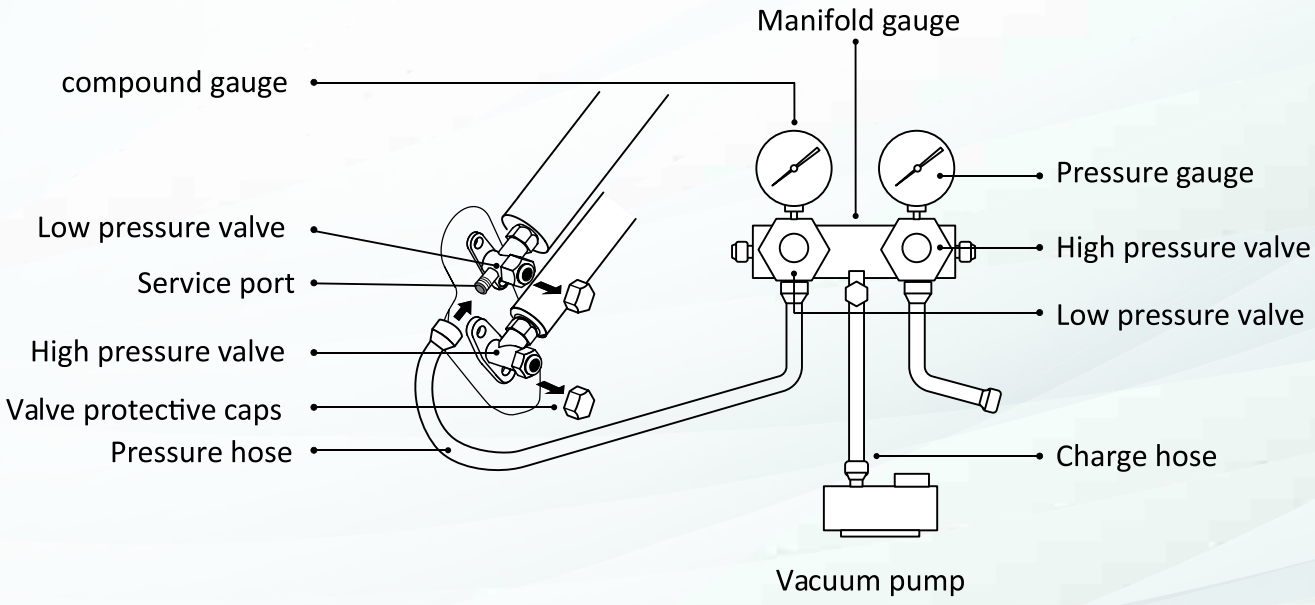
6.9 Open the low pressure valve counterclockwise for 1/4 turn with hexagonal wrench to let a little refrigerant fill in the system, and close the low pressure valve after 5 seconds and quickly remove the pressure hose.

6.10 Check all indoor and outdoor joints for leakage with soapy water or leak detector.

6.11 Fully open the low pressure valve and high pressure valve of the outdoor unit with hexagonal wrench.

6.12 Reinstall the protective caps of the service port, low pressure valve and high pressure valve of the outdoor unit.

6.13 Reinstall the valve cover.

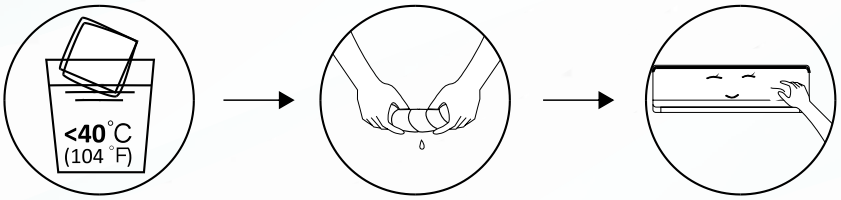


MAINTENANCE

⚠ Warning

- When cleaning, you must shut down the machine and cut off the power supply for more than 5 minutes.
- Under no circumstances should the air conditioner be flushed with water.
- Volatile liquid (e.g. thinner or gasoline) will damage the air conditioner, so only use soft dry cloth or wet cloth dipped with neutral detergent to clean the air conditioner.
- Pay attention to cleaning the filter screen regularly to avoid dust covering which will affect the filter screen effect. When the operating environment is dusty, the cleaning frequency should be increased appropriately.
- After removing the filter screen, do not touch the fins of the indoor unit to avoid scratching.

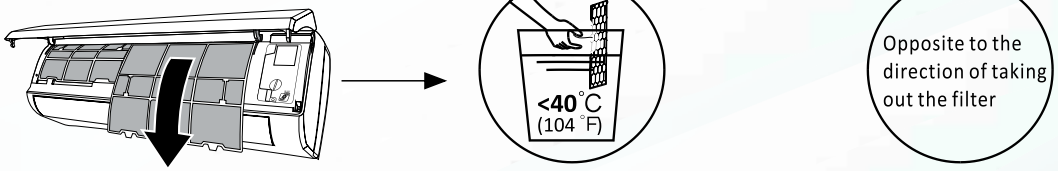
Clean the unit



Wring it dry Gentle wipe the unit surface

Tip: Wipe frequently to keep air conditioner clean and good appearance .

Clean the filter



Take out the filter from the unit

Clean the filter with soapy water and air dry it

Replace the filter

Tip: When you find accumulated dust in the filter, please clean the filter in time to ensure the clean, healthy and efficient operation inside the air conditioner.

Service and maintenance

- When the air conditioner is not in use for a long time, do the following work:
  Take out the batteries of the remote controller and disconnect the power supply of the air conditioner.
- When starting to use after long-term shutdown:
  1. Clean the unit and filter screen;
  2. Check whether there are obstacles at the air inlet and outlet of indoor and outdoor units;
  3. Check whether the drain pipe is unobstructed;
  Install the batteries of the remote controller and check whether the power is on.

TROUBLESHOOTING

MALFUNCTION	POSSIBLE CAUSES
The appliance does not operate	Power failure/plug pulled out.
	Damaged indoor/outdoor unit fan motor.
	Faulty compressor thermomagnetic circuit breaker.
	Faulty protective device or fuses.
	Loose connections or plug pulled out.
	It sometimes stops operating to protect the appliance.
	Voltage higher or lower than the voltage range.
	Active TIMER-ON function.
	Damaged electronic control board.
Strange odor	Dirty air filter.
Noise of running water	Back flow of liquid in the refrigerant circulation.
A fine mist comes from the air outlet	This occurs when the air in the room becomes very cold, for example in the “COOLING” or “DEHUMIDIFYING/DRY” modes.
A strange noise can be heard	This noise is made by the expansion or contraction of the front panel due to variations in temperature and does not indicate a problem.
Insufficient airflow, eitherhot or cold	Unsuitable temperature setting.
	Obstructed air conditioner intakes and outlets.
	Dirty air filter.
	Fan speed set at minimum.
	Other sources of heat in the room.
	No refrigerant.
The appliance does not respond to commands	Remote control is not close enough to indoor unit.
	The batteries of remote control need to be replaced.
	Obstacles between remote control and signal receiver in indoor unit.
The display is off	Active DISPLAY function.
	Power failure.
Switch off the air conditioner immediately and cut off the power supply in the event of:	Strange noises during operation.
	Faulty electronic control board.
	Faulty fuses or switches.
	Spraying water or objects inside the appliance.
	Overheated cables or plugs.
	Very strong smells coming from the appliance.

TROUBLESHOOTING

ERROR CODE ON THE DISPLAY

In case of error, the display on the indoor unit shown the following error codes:

Display	Description of the trouble
E00	INDOOR AMBINET TEMP.SENSOR FAILURE (WIRED CONTROLLER ONLY)
E01	INDOOR EVAPORATOR SENSOR FAILURE
E02	OUTDOOR CONDENSER SENSOR FAILURE
E03	OUTDOOR AMBIENT SENSOR FAILURE
E04	COMPRESSOR DISCHARGE SENSOR FAILURE
E05	COMM. FAULT MAIN CONTROLLER AND WIRE THERMOSTAT
E06	COMM. FAULT MAIN CONTROLLER AND DC FAN BOARD
E07	PHASE FAULT
E08	COMM. FAULT MAIN CONTROLLER AND DRIVER BOARD
E09	DC OVER VOLTAGE
E10	DC UNDER VOLTAGE
E11	COMPRESSOR SOFT CURRENT
E12	COMPRESSOR HARD CURRENT
E26	AC OVER VOLTAGE
E27	AC UNDER VOLTAGE
E32	INDOOR EVAPORATOR OUTLET SENSOR FAILURE
E33	INDOOR DC FAN ERROR
E34	OUTDOOR DC FAN ERROR
E35	COMM. FAULT IDU CONTROLLER AND ODU CONTROLLER
E36	INDOOR EVAPORATOR INLET SENSOR FAILURE

شركة صناعات التبريد والتخزين والخدمات النفطية

Refrigeration Industries & Storage and Oil Services Co. KSC

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