

COOLEX

MINI SPLIT AIR CONDITIONERS DC Inverter R410A



50 Hz



For more technical information please visit www.coolex.com.kw

TABLE OF CONTENTS

SPECIFICATIONS	3
SAFETY PRECAUTION	6
NAME OF PARTS	10
REMOTE CONTROL	12
INSTALLATION PRECAUTIONS	14
INDOOR UNIT INSTALLATION	15
OUTDOOR UNIT INSTALLATION	17
MAINTENANCE	20
TROUBLESHOOTING	21
ABOUT RIC	26
COOLEX DISTRIBUTORS	27

OTHER COOLEX PRODUCTS

- 1. Air Cooled Screw Water Chillers**
- 2. Air Cooled Scroll Water Chillers**
- 3. Air Cooled Package Units**
- 4. Air Handling Units**
- 5. Concealed Split Units**
- 6. Fan Coil Units**

SPECIFICATIONS



ColdCatalyst Filter

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

فلتر الهواء:

يعمل على تنقية الهواء من المواد العضوية والغازات الضارة والروائح الكريهة. من أجل بيئة نظيفة 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 الصدأ 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 التأثير 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				CIWE-C012AC7C/ CIWC-C012AC7C	CIWE-C018AC7C/ CIWC-C018AC7C	CIWE-C024AC7C/ CIWC-C024AC7C	CIWE-C030AC7C/ CIWC-C030AC7C
Power supply			Ph-V-Hz	1Ph-220~240V-50Hz	1Ph-220~240V-50Hz	1Ph-220~240V-50Hz	1Ph-220~240V-50Hz
Cooling	Capacity@95/118.4°F		Btu/h	12092/11104	18152/16910	22085/20549	30631/25121
	Power Input		kW	0.99/1.14	1.50/1.75	1.70/2.11	2.34/2.60
	Rated Current		A	4.59/4.80	6.91/7.40	7.88/8.89	9.86/10.88
kW/Ton @118.4 F				1.23	1.24	1.23	1.24
Compressor	Type			Rotary	Rotary	Rotary	Rotary
	Rated current(RLA)		A	4.3	6.0	5.6	5.6
Indoor unit	Indoor fan motor	Power output	W	15	35	45	45
		Capacitor	uF	1.2	3.0	3.0	3.0
	Indoor air flow		CFM	347	519	627	802
	Noise level		dB(A)	42	46	48	48
	Unit dimension (WxDxH)		mm	820x195x306	1100x222x333	1100x222x333	1186x258x340
	Packing (WxDxH)		mm	890x265x380	1165x295x405	1165x295x405	1262x337x420
Outdoor unit	Outdoor fan motor	Power output	W	50	72	70	85
		Capacitor	uF	2.5	4	/	/
	Condenser	Fin type		Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
	Noise level		dB(A)	54	56	56	59
	Unit dimension (WxDxH)		mm	795x305x549	853x349x602	967x421x803	975x433x808
	Packing (WxDxH)		mm	835x340x585	890x385x628	1025x480x840	1020x475x845
	Refrigerant type			R410A	R410A	R410A	R410A
Refrigerant pipe	Gas side		inch	9 (3/8")	12 (1/2")	15.88 (5/8")	15.88 (5/8")
	Liquid side		inch	6 (1/4")	6 (1/4")	6 (1/4")	6 (1/4")
	Max. refrigerant pipe length		m	12	14	15	15
	Max. difference in level		m	7	7	8	8

SPECIFICATIONS

Model				CIWE-012AC7C/ CIWC-012AC7C	CIWE-018AC7C/ CIWC-018AC7C	CIWE-024AC7C/ CIWC-024AC7C	CIWE-030AC7C/ CIWC-030AC7C
Power supply			Ph-V-Hz	1Ph-220~240V-50Hz	1Ph-220~240V-50Hz	1Ph-220~240V-50Hz	1Ph-220~240V-50Hz
Cooling	Capacity@95/118.4°F		Btu/h	12092/11104	18152/16910	22085/20549	30631/25121
	Power Input		kW	0.99/1.14	1.50/1.75	1.70/2.11	2.34/2.60
	Rated Current		A	4.59/4.80	6.91/7.40	7.88/8.89	9.86/10.88
kW/Ton @118.4 F				1.23	1.24	1.23	1.24
Heating	Capacity@44.6 F		Btu/h	12000	18000	22000	30000
	Power Input		kW	1.05	1.60	1.78	2.71
Compressor	Type			Rotary	Rotary	Rotary	Rotary
	Rated current(RLA)		A	4.3	6.0	5.6	5.6
Indoor unit	Indoor fan motor	Power output	W	15	35	45	45
		Capacitor	uF	1.2	3.0	3.0	3.0
	Indoor air flow		CFM	347	519	627	802
	Noise level		dB(A)	42	46	48	48
	Unit dimension (WxDxH)		mm	820x195x306	1100x222x333	1100x222x333	1186x258x340
	Packing (WxDxH)		mm	890x265x380	1165x295x405	1165x295x405	1262x337x420
Outdoor unit	Outdoor fan motor	Power output	W	50	72	70	85
		Capacitor	uF	2.5	4	/	/
	Condenser	Fin type		Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
	Noise level		dB(A)	54	56	56	59
	Unit dimension (WxDxH)		mm	795x305x549	853x349x602	967x421x803	975x433x808
	Packing (WxDxH)		mm	835x340x585	890x385x628	1025x480x840	1020x475x845
	Refrigerant type			R410A	R410A	R410A	R410A
Refrigerant pipe	Gas side		inch	9 (3/8")	12 (1/2")	15.88 (5/8")	15.88 (5/8")
	Liquid side		inch	6 (1/4")	6 (1/4")	6 (1/4")	6 (1/4")
	Max. refrigerant pipe length		m	12	12	15	15
	Max. difference in level		m	7	14	8	8

SAFETY PRECAUTIONS

Safety rules and recommendations for the installer

1. Read this guide before installing and using the appliance.
2. During the installation of the 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 cannot enter the refrigerant system and check for refrigerant leaks when moving the air conditioner.
5. Carry out a 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 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.
8. Check that the socket is suitable for the plug, otherwise have the socket changed.
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.

SAFETY PRECAUTIONS

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.
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 earthed in accordance with current legislation and insert a thermal magnetic circuit breaker.
26. The batteries in the 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.

SAFETY PRECAUTIONS

- 30. Have repairs carried out only by an authorised Service Centre 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.

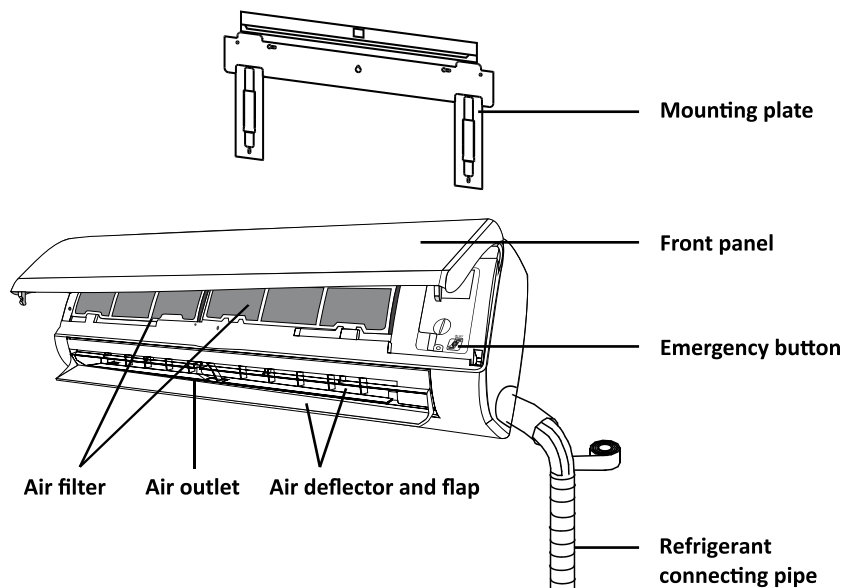
SAFETY PRECAUTIONS

SAFETY RULES AND PROHIBITIONS

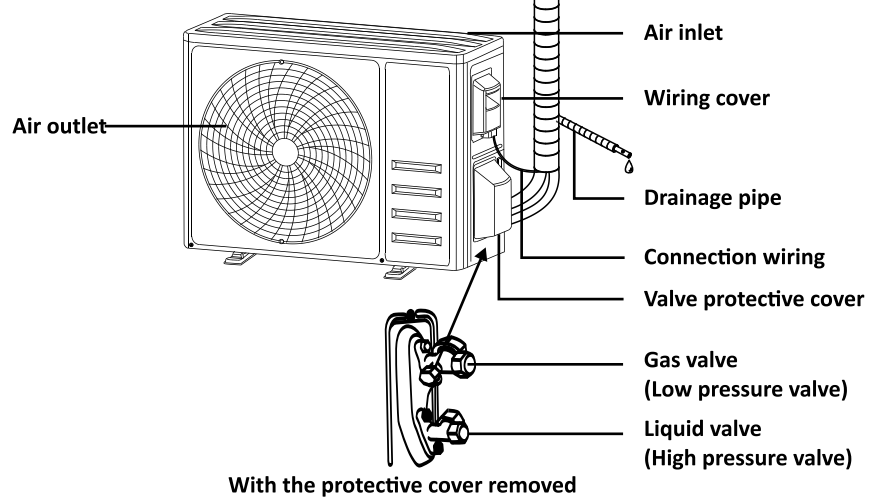
1. Do not bend, tug or compress the power cord since this could damage it. Electrical shocks or fire are probably due to a damaged power cord. Specialized technical personnel only must replace a damaged power cord.
2. Do not use extensions or gang modules.
3. Do not touch the appliance when barefoot 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 of these openings causes a reduction in the operative efficiency of the conditioner with possible consequent failures or damages.
5. In no way alter the characteristics of the appliance.
6. Do not install the appliance in environments where the air could contain gas, oil or sulphur or near sources of heat.
7. This appliance is not intended for 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 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. A long direct exposition to the flow of cold air of the conditioner could have negative effects on plants and animals.
12. Do not put the conditioner in contact with water. The electrical insulation could be damaged and thus causing 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. 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



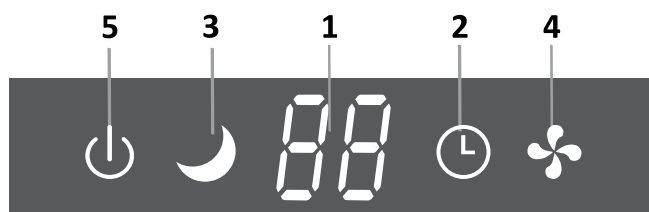
Outdoor Unit



Note: This figure shown may be different from the actual object. Please take the latter as the standard.

NAME OF PARTS

Indoor Display



No.	LED	Function
1		Indicator for Timer, temperature and Error codes.
2		Lights up during Timer operation.
3		SLEEP mode
4		The symbol appears when the unit is turned on, and disappear when the unit is turned off.
5		The symbol appears when power on.

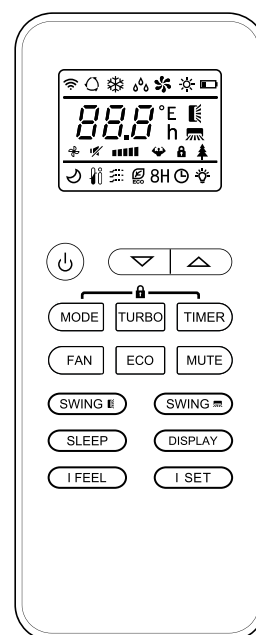
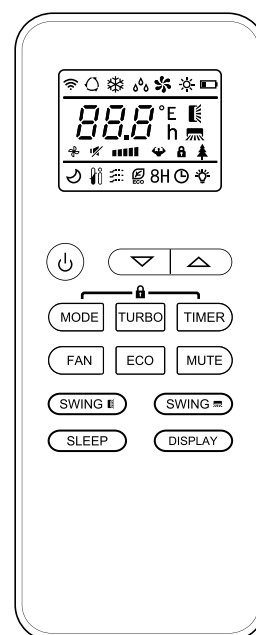


The shape and position of switches and indicators may be different according to the model, but their function is the same.

REMOTE CONTROL

Remote control DISPLAY

No.	Symbols	Meaning
1		Battery indicator
2		Auto Mode
3		Cooling Mode
4		Dry Mode
5		Fan only Mode
6		Heating Mode
7		ECO Mode
8		Timer
9		Temperature indicator
10		Fan speed: Auto/ low/ low-mid/ mid/ mid-high/ high
11		Mute function
12		TURBO function
13		Up-down auto swing
14		Left-right auto swing
15		SLEEP function
16		Health function
17		I FEEL function
18		8°C heating function
19		Signal indicator
20		Gentle wind
21		Child-Lock
22		Display ON/OFF



⚠ The display and some functions of the remote control may vary according to the model.

REMOTE CONTROL

No.	Button	Function
1		To turn on/off the air conditioner .
2	^	To increase temperature, or Timer setting hours.
3	∨	To decrease temperature, or Timer setting hours.
4	MODE	To select the mode of operation (AUTO, COOL, DRY, FAN, HEAT).
5	ECO	To activate/deactivate the ECO function.
		Long press to activate/deactivate the 8°C heating function (depending on models).
6	TURBO	To activate/deactivate the TURBO function.
7	FAN	To select the fan speed of auto/low/mid/high.
8	TIMER	To set the time for timer on/off.
9	SLEEP	To switch-on/off the function SLEEP.
10	DISPLAY	To switch-on/off the LED display.
11	SWING 	To stop or start horizontal louver movement or set the desired up/down air flow direction.
12	SWING < >	To stop or start horizontal louver movement or set the desired left/right air flow direction.
13	I FEEL	To switch-on/off the I FEEL function.
14	MUTE	To switch-on/off the MUTE function.
		Long press to activate/deactivate the GEN function (depending on models).
15	MODE + TIMER	To activate/deactivate the CHILD-LOCK function.
16	SWING  + SWING < >	To activate/deactivate the SELF-CLEAN function (depending on models).
17	FAN + MUTE	To activate/deactivate the GENTLE WIND function (depending on models).
18	SLEEP + DISPLAY	To activate/deactivate the HEALTH function (depending on models).
19	I SET	To memory the setting temperature, setting mode and setting fan speed as you need.

⚠ The display and some functions of the remote control may vary according to the model.

⚠ The shape and position of buttons and indicators may vary according to the model, but their function is the same.

⚠ The unit confirms the correct reception of each button with the beep.

INSTALLATION PRECAUTIONS

Pipe Length and Additional Refrigerant

Inverter Models Capacity (Btu/h)	CIWC012-		CIWC024/018-	
Length of pipe with standard charge	5m/16ft	5m/16ft	5m/16ft	5m/16ft
Length of pipe with standard charge (Like: North American, etc.)	7.5m/24ft	7.5m/24ft	7.5m/24ft	7.5m/24ft
Maximum distance between indoor and outdoor unit	15m/49ft	15m/49ft	25m/82ft	25m/82ft
Additional refrigerant charge	20g/m	15g/m	30g/m	25g/m
Max. diff. in level between indoor and outdoor unit	10m/32ft	10m/32ft	10m/32ft	10m/32ft
Type of refrigerant	R22/R410A	R32	R22/R410A	R32

ON-OFF Models Capacity (Btu/h)	CIWC012-		CIWC024/018-	
Length of pipe with standard charge	5m/16ft	5m/16ft	5m/16ft	5m/16ft
Maximum distance between indoor and outdoor unit	15m/49ft	15m/49ft	15m/49ft	15m/49ft
Additional refrigerant charge	20g/m	15g/m	30g/m	25g/m
Max. diff. in level between indoor and outdoor unit	5m/16ft	5m/16ft	5m/16ft	5m/16ft
Type of refrigerant	R22/R410A	R32	R22/R410A	R32

Torque Parameters

PIPE Size	Newton meter[N x m]	Pound-force foot (lbf-ft)	Kilogram-force meter (kgf-m)
1/4" (φ 6.35)	20 - 18	27.1 - 24.4	2.7 - 2.4
3/8" (φ 9.52)	35 - 30	47.4 - 40.6	4.8 - 4.1
1/2" (φ 12)	50 - 45	67.7 - 61.0	6.9 - 6.2
5/8" (φ 15.88)	65 - 60	88.1 - 81.3	8.9 - 8.2

Dedicated Distribution Device and Wire for Air Conditioner

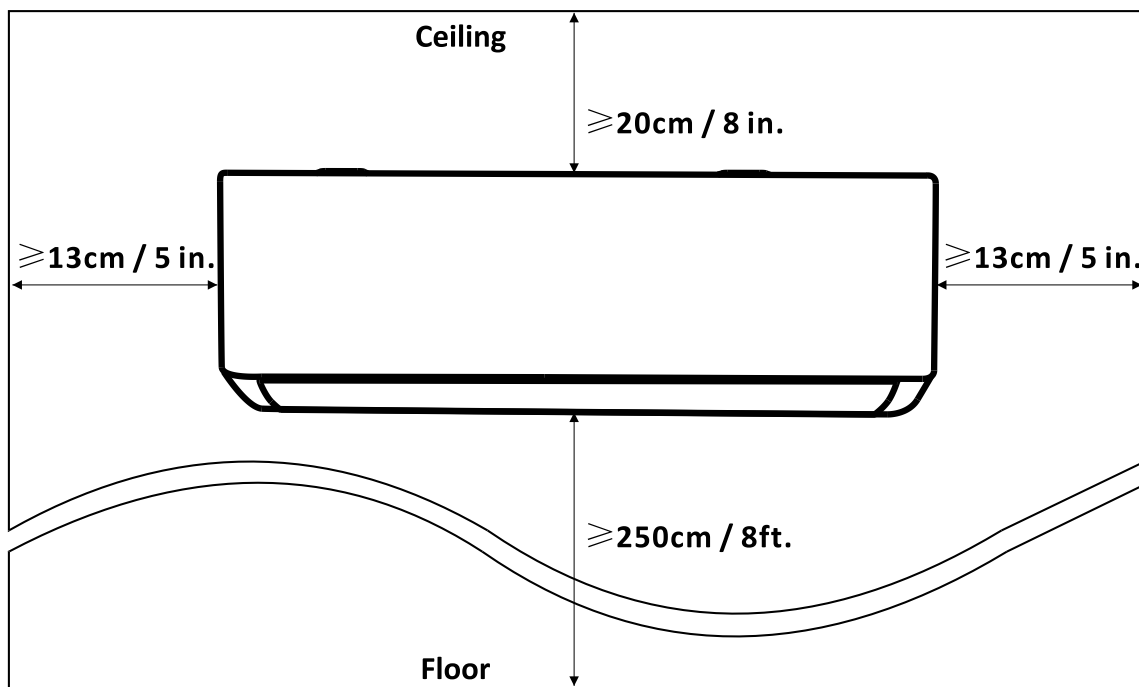
Maximum Operating Current of Air Conditioner (A)	Minimum Wire Cross-sectional Area(mm ²)	Specification of Socket or Switch (A)	Fuse Specification (A)
≤8	0.75	10	20
>8 and ≤10	1.0	10	20
>10 and ≤15	1.5	16	32
>15 and ≤24	2.5	25	32
>24 and ≤28	4.0	32	64
>28 and ≤32	6.0	40	64

⚠ **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

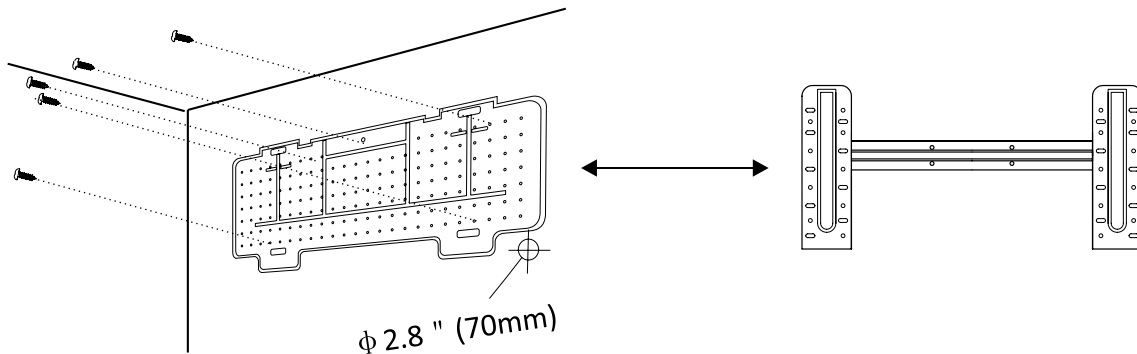
- 1.1 Ensure the installation complies with the installation minimum dimensions (defined below) and meets the minimum and maximum connecting piping length and maximum change in elevation as defined in the System Requirements section.
- 1.2 Air inlet and outlet will be clear of obstructions, ensuring 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.

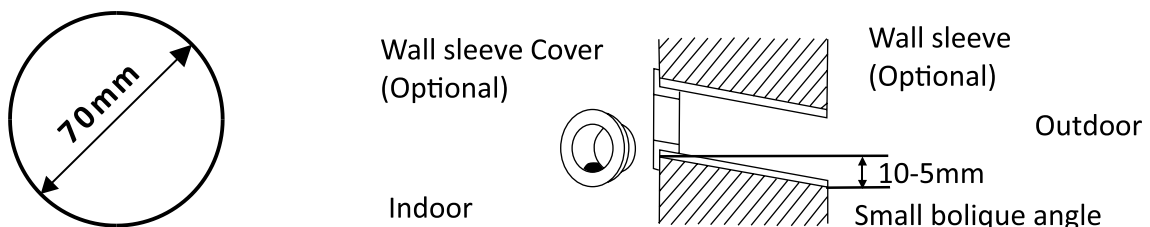
Step3: Drill Wall Hole

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.

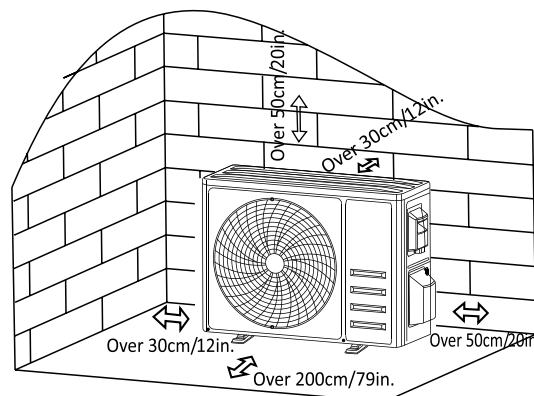


OUTDOOR UNIT INSTALLATION

Step1: Select Installation Location

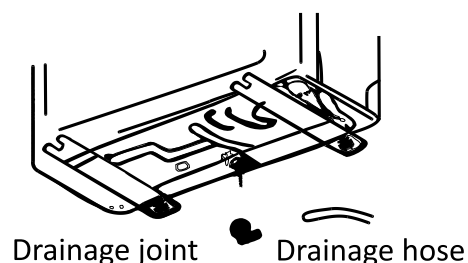
Select a site that allows for the following:

- 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.



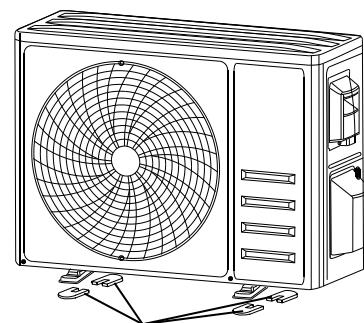
Step2: Install Drainage Hose

- 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.



Install 4 rubber blankets (Optional)

NOTE:

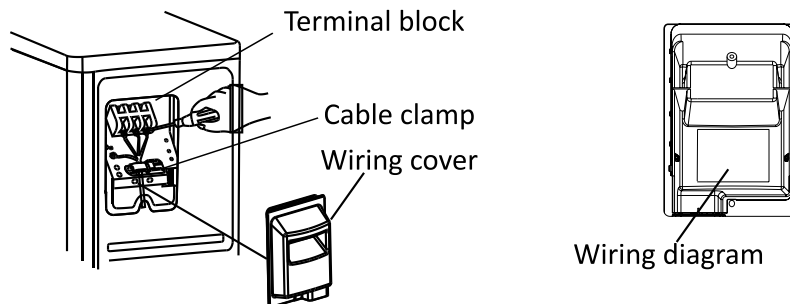
The outdoor unit can be fixed on a wall-mounting bracket. Follow the instruction of the wall-mounting bracket to fix the wall-mounting bracket on the wall, and then fasten the outdoor unit on it and keep it horizontal. The wall-mounting bracket must be able to support at least 4 times of the weight of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

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.

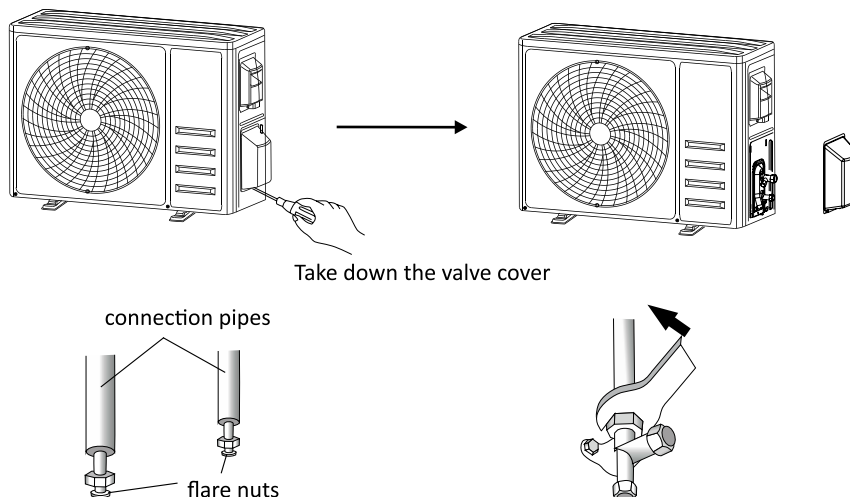
Note: When connecting the wires of indoor and outdoor units, the power should be cut off.



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.

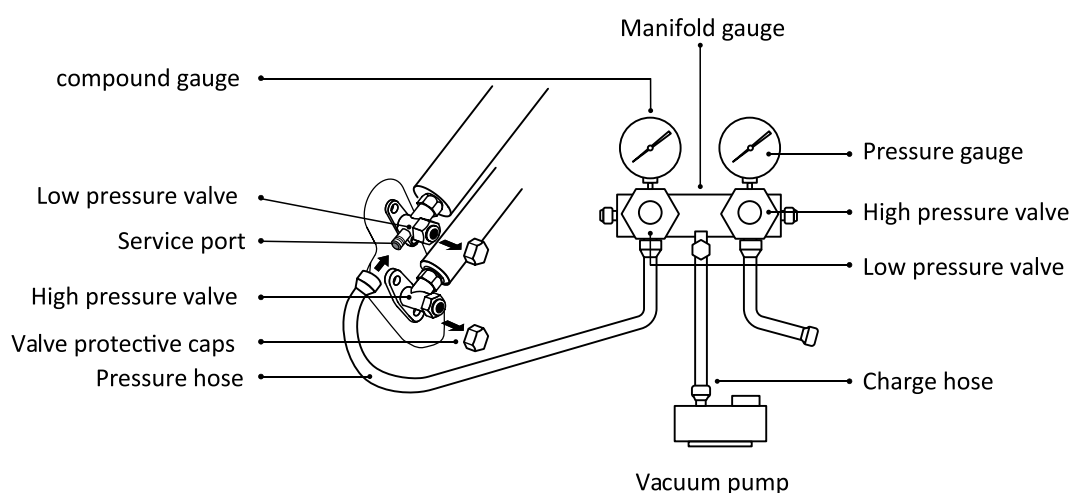
INSTALLATION PRECAUTIONS)



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, either hot 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
E1	Indoor room temperature sensor fault
E2	Indoor pipe temperature sensor fault
E3	Outdoor pipe temperature sensor fault
E4	Refrigerant system leakage or fault
E6	Malfunction of indoor fan motor
E7	Outdoor ambient temperature sensor fault
E0	Indoor and outdoor communication fault
E8	Outdoor discharge temperature sensor fault
E9	Outdoor IPM module fault
EA	Outdoor current detect fault
EE	Outdoor PCB EEPROM fault
EF	Outdoor fan motor fault
EH	Outdoor suction temperature sensor fault

NOTES

NOTES

NOTES

About RIC

Refrigeration Industries Company (KSE 504) is a group holding company with diversified interests in manufacturing, contracting and services. Recognized regionally for our engineering capabilities and management excellence, RIC and its subsidiaries offer a wide range of high quality products and services that cater to both residential and commercial customers, in the areas of climate control technologies and specialized storage solutions.

In view of the growing Kuwait infrastructure and the limitations imposed on it by the country's arid climate, the Refrigeration Industries Company was established 43 years ago in 1973, by Amiri Decree. The company's operations began with the construction of the first cold stores in the region, to enable the storage of the imported foods, on which Kuwait relied. Along with the development and advancement of the country, so has RIC prospered and expanded, and is now a milestone in the history of modern Kuwait.

RIC takes pride in its successful record and the many accolades it has garnered over time, but the greatest achievement has been the provision of comfort and protection from the harsh climate, to the people of Kuwait.

More than 43 years of uninterrupted service, overcoming extreme weather conditions, war, economic recessions and ever increasing competition, is testimony to the fact that RIC has met the expectations and responsibilities that was envisioned at the beginning and also highlights the tenacity and vision to exceed them in the future.

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).

نبذة عن الشركة

شركة صناعات التبريد (متداولة في سوق الكويت للأوراق المالية برقم 504) هي شركة متنوعة الأنشطة تعمل في مجال التصنيع والمقاولات والخدمات. ونحن نقدم مجموعة كبيرة من المنتجات والخدمات والحلول التقنية في مجال مواجهة الظروف المناخية وحلول التخزين. وقد حازت الشركة على إقرار إقليمى بقدراتها الهندسية وكفاءتها الإدارية.

شركة صناعات التبريد هي مجموعة شركات تهدف إلى توفير أعلى مستويات الجودة من حيث المنتجات والخدمات التي تلبي احتياجات عملائها السكنية والتجارية. وعلى مدى ثلاثة وأربعين عاماً مضت على إنشاء شركتنا فقد استطعنا أن نوطد أقدامنا في جميع قطاعات السوق الكويتي. ونحن إذ نفتخر بالإنجازات التي حققناها، إلا أننا أشد فخرًا بأننا تمكنا من الوقوف إلى جانب أهل الكويت على مدى سنوات طويلة في مواجهة تقلبات الظروف المناخية القاسية سواء من حيث درجات الحرارة العالية أو الأتربة أو الرطوبة.

وباعتبارها إحدى الشركات الصناعية العاملة في دولة الكويت، فقد واجهت الشركة تحديات وأمال كبيرة في سعيها لتحقيق النجاح، وقد كانت الشركة - ولا تزال - معلماً من المعالم المهمة في نظر أهل الكويت لما قدمته من منتجات وخدمات استطاعت أن تغير الطبيعة القاسية لمناخ الكويت. فبعد نحو 43 عاماً تقريباً، لا يزال السؤال مطروحاً حول تحقيقنا لهذه التوقعات، فهل استطاعت الشركة أن تتحمل مسؤولياتها على الوجه الأكمل؟ ويأتي الرد بالإيجاب، فعلى مدى ثلاثة وأربعين عاماً تقريباً لم تتوقف الشركة خلالها عن الإستمرار في تقديم خدماتها وأعمالها رغم الصعوبات التي تمثلت في ظروف الطقس القاسية أو الحروب أو الكساد الاقتصادي أو ارتفاع حدة المنافسة، فقد كانت كل واحدة من هذه الظروف بمثابة شهادة على أننا حققنا ما وعدنا به وما عقدنا العزم على تنفيذه.

حقائق وتواريخ

- 1973 تم إنشاء المستودعات بناء على مرسوم أميري.
- 1979 عهدت وزارة الصحة الكويتية لشركة صناعات التبريد بإنشاء مجمع مستودعات مخازن التبريد الطبية، وقد كان هذا المجمع حينها هو الأضخم من نوعه على مستوى العالم، وقد وصلت تكلفته إلى 12,000,000 دينار كويتي.
- 1980 تم إنشاء مصنع مكيفات الهواء التابع لشركة صناعات التبريد في الصليبية.
- 1981 بدء إنتاج أجهزة التكييف المدمجة والمنفصلة الصغيرة تحت علامة York-Gulf.
- 1984 تم قيد شركة صناعات التبريد في سوق الكويت للأوراق المالية.
- 1986 بدء إنتاج مكيفات علامة كولكس.
- 1991 قامت شركة صناعات التبريد بإعادة بناء مصنعها الذي دمرته الحرب.
- 1997 الحصول على شهادة الأيزو 9001:1994.
- 2002 بدء تشغيل مختبر فحص وحدات التكييف (ETL).
- 2004 خصخصة شركة صناعات التبريد.
- 2010 كانت وحدات كولكس أول وحدات تكييف هواء تجتاز اللوائح التي أقرتها (وزارة الكهرباء والماء).
- 2010 تم تجديد مصنع شركة صناعات التبريد وبدء التوسع والتصدير إلى الدول المجاورة.
- 2012 الحصول على شهادة UL و AHRI لأجهزة التكييف كولكس.
- 2014 الحصول على شهادة SASO لأجهزة التكييف المنفصلة.
- 2014 الحصول على شهادة EUROVENT لأجهزة مناولة الهواء.
- 2014 الحصول على شهادة UL لمبردات الهواء الشيلر.
- 2015 الحصول على شهادة الأيزو 17025 لمختبر السيكرومترية.
- 2016 الحصول على شهادة كفاءة الطاقة لأجهزة التكييف المنفصلة والوحدات المدمجة (مملكة البحرين).

COOLEX DISTRIBUTORS

Sultanate of Oman

Al Noor Projects Engineering & Trading Company

Address: Third Floor, Oman House
P.O. Box: 1047, P.C: 114 Hay Al Mina - Muscat
Tel : +968 24709402/403
Fax : +968 24709401
Email : info@alnoorprojects.com
Email : gm@alnoorprojects.com
Website: www.alnoorprojects.com

United Arab Emirates UAE

Obaid Humaid Al-Tayer Engineering Division Al Tayer Group

Address: Dubai – UAE, PO Box 2623
Tel : +971 4 2011272
Fax : +971 4 2825008
Mobile : +971 50 3500747
Email : bkrishnan@altayer-eng.com
Website: www.altayer.com

Kingdom of Bahrain

Y.K. Almoayyed & Sons

Address: EHAD – Project Department, Sehla Workshop
P.O. Box 143, Manama, Kingdom of Bahrain
Tel : +973 17 400 444, Extn. 205
Direct : +973 17 405 250
Fax : +973 17 400 388
Email : Pradeep@almoayyed.com.bh
Email : anshul.bawa@almoayyed.com.bh
Website: www.almoayyed.com

Kingdom of Saudi Arabia KSA

Al-Etmad for Refrigeration and Air Conditioning Industries Company

Address: Al Qortobah Quartier, King Abdullah Road
Riyadh – KSA, P.O. Box 50467 Riyadh 11533
Tel : + 966 11 2447789
Fax : + 966 11 4958812
Mobile : + 966 560034240
Email : abunaif722@ksacoollex.com
Website: www.Coollex.com

Republic of Iraq

SWEER Company Limited

Address: Al Senak -Jumhuri Street - Baghdad-Iraq
P.O. Box: 8095
Tel : +964 1 8181196
Mobile : +964 7705 884444
Email : sweerco@yahoo.com
Website: www.sweerco.com

State of Qatar

Al Jaber for air conditioning & Refrigeration industries

Address: PO.Box 23546 Doha
Tel : +974 44210963
Fax : +974 44448919
Mobile : +974 55610321
Mobile : +974 55843255
Email : Customercare@jaric-qatar.com
Website: www.jaric-qa.com

Iran

Capital ICEBERG Limited Company

Address: No. 31, 3rd Floor, Aghdasieyh Trade Center
Aghdasieyh Street. Tehran – Iran
Tel : +98 (021) 26110510
Fax : +98 (021) 26110510
Mobile : +98 912 119 2961
Email : info@capitaliceberg.com
Email : saeed.s@capitaliceberg.com
Email : sara.s@capitaliceberg.com
Website: www.capitaliceberg.com

Sudan

Abina For Advises And Engineering Work Company

Address: Katrena Street - East Qurashi Park
Sudan – Khartoum
Tel : +249 574064
Fax : +249 574064
Mobile : +249 900900246/247/248/249/250/251/252
Email : maha1237@yahoo.com

Islamic Republic of Pakistan

AG TEK Pvt. Ltd.

Address: 179-S, Imperial Garden Paragon City
Lahore - Pakistan
Tel : +92-42-37187640-43
Fax : +92-42-37187644
Cell : +92-300-4745624
Mobile : +92-321-2280011
Email : info@agtek.com.pk
Email : coo@agtek.com.pk
Website: www.agtek.com.pk

Egypt

Total Group Egypt Company

Address: 4 Buildings Al-Noor – Sheraton Housings
Cairo – Egypt
Tel : +202267240/837
Mobile : +20109966627
Mobile : +21201299444
Email : adel@coollex-eg.com
Email : ahmad@coollex-eg.com
Website: www.coollex-eg.com

Syrian Arab Republic

Team for Engineering & Trading co.

Address: Damascus - Kafer Souseh
P.O.Box: 16311
Tel : +963 11 222 2996
Tel-Fax : +963 11 222 1125
Mobile : +963 93 322 6288
Mobile : +963 94 421 1146
Email : info@team-syr.net
Email : georgeyoussef@team-syr.net
Website: www.team-syr.net

Nepal

Global Air Conditioning And Trading Pvt Ltd

Address: SINAMANGAL-9, KATHMANDU-NEPAL
Tel : +977 9813388560
Email : ajay.sharma2852@gmail.com

Please contact Sales and Marketing Department
sales@ric.com.kw or www.coollex.com.kw for
specific information on the current design and
specifications. **Ref no.: BMSK 22-5-000**

CENTRAL AIR CONDITIONING AND SPLIT UNIT
Coollex continuously works towards the improvement of
its products. Hence, the design and specifications of the
ordered product may vary without prior notice.

COOLEX is a subsidiary of the **RIC Group**
www.ric.com.kw

www.ric.com.kw

AFKA GROUP



الموزع الحصري بالكويت: مجموعة أفكا للتكييف المركزي

المركز الرئيسي: الري قطعة ١ - قسيمة ١٧١٧ - خلف شارع مكاتب السيارات

تلفون: +965 24737204 / +965 24737205

إدارة المبيعات والمعرض: الكويت - الشرق - مجمع الأوقاف - برج ١٢ - دور ٢ - مكتب ٥

تلفون: +965 22447489 فاكس: +965 22447486

E-mail: afkahvac@hotmail.com

www.coolex.com.kw