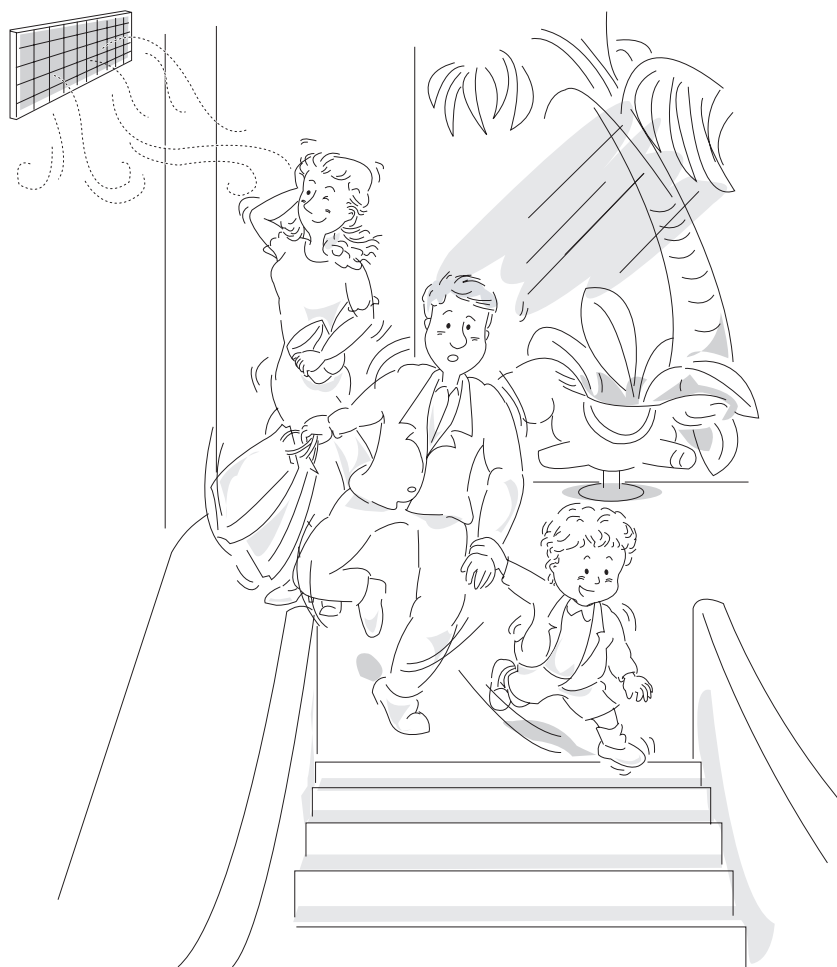
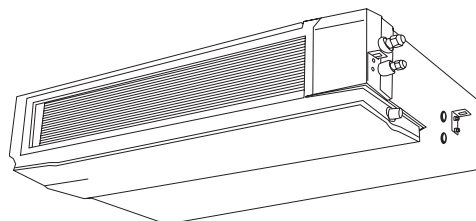




# Installation & Owner's Manual

## MINISPLIT AIR BLOWER

MODELS  
YUHC 18-60  
YUKC 07-18



EN 035M00065-000



Please read this installation manual carefully before starting the installation. It will tell you necessary information.

### Quality POLICY

We will continuously strive to satisfy our customers with consistent reliability in product, service and support through superior quality, service culture and distinctive technology.

## CONTENTS

Safety Precautions .....	3
Part Names.....	4
Technical Specifications.....	5
Outdoor Unit Dimensions.....	9
Preparation Before Installation .....	10
Installation.....	10
Condensate Drainage .....	14
Refrigerant Piping Connects .....	15
Fan Speeds .....	16
Wiring Diagrams.....	17
Defrosting Operation.....	20
Service and Maintenance .....	20
Operation Tips .....	21
Trouble Shooting Guide.....	22
Declaration of Conformity .....	23

Refrigerant	DC INVERTER R-410A		
	18-24	36-48	60
Set	YUHCxxDUBAAR-K	YUHCxxDUBACR-K	YUHCxxDSBACR-K
Outdoor	YUJCxxDU-BAR	YUJCxxDU-BCR	YUJCxxDS-BCR
Indoor	YUKCxxDU-BAR-K	YUKCxxDU-BCR-K	YUKCxxDS-BCR-K

	Multi Inverter R-410A
	50Hz/1Ph
Outdoor	RRJCxxAA-AAA
Indoor	YUKCxxAA-AAR

### Standard

Refrigerant	R-410A	
	18-24	30-60
Set	YUHCxxFUAAAR	YUHCxxFUAAACR
Outdoor	YUJCxxFU-AAR	YUJCxxFU-ACR
Indoor	YUKCxxFU-AAR	YUKCxxFU-ACR

### With Low Ambient Kit

Refrigerant	R-410A	
	18-24	30-60
Set	YUHCxxFUBAAR	YUHCxxFUBACR
Outdoor	YUJCxxFU-AAR	YUJCxxFU-ACR
Indoor	YUKCxxFU-AAR	YUKCxxFU-ACR



## REQUIRED TOOLS

1. Screw driver
2. Hexagonal wrench
3. Torque wrench
4. Spanner
5. Reamer
6. Hole core drill
7. Tape measure
8. Thermometer
9. Manifold gauge
10. Gas leak detector
11. Vacuum pump
12. Pipe clamp
13. Pipe cutter
14. Flare tool set
15. Electrical circuit tester

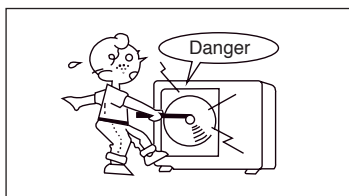
## EXTENDED PARTS

1. Refrigerant Pipe : See Technical Specification
2. Pipe insulation material (Polyethylene foam 9 mm thick)
3. Vinyl tape
4. Putty

## SAFETY PRECAUTIONS

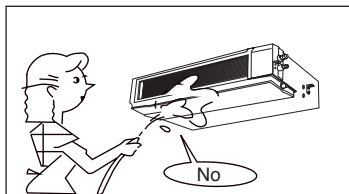
- Please read this installation manual carefully before starting installation of the unit.
- This air conditioning system contains refrigerant under pressure, rotating parts and electrical connection which may be dangerous and can cause injury. Installation and maintenance of this air conditioning system should only be carried out by trained and qualified personnel.
- After unpacking, please check the unit carefully for possible damage.
- Before undertaking any work on the unit, make sure that the power supply has been disconnected.

## WARNING & CAUTIONS



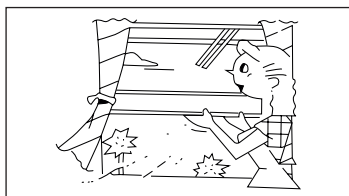
### CAUTION

Do not attempt to install this unit by yourself. This unit requires installation by qualified persons.



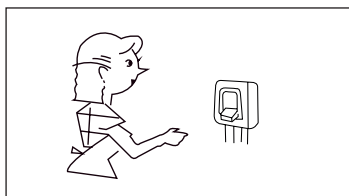
### DANGER

Do not attempt to service the unit yourself. This unit has no user serviceable components. Opening or removing the cover will expose you to dangerous voltage. Turning off the power supply will not prevent potential electric shock.



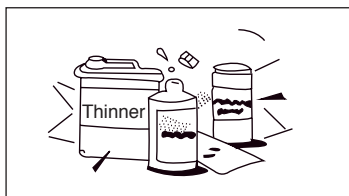
### DANGER

Never put hands or objects into the Air Outlet of indoor or outdoor units. These units are installed with a fan running at high speed. To touch the moving fan will cause serious injury.



### DANGER

To avoid the risk of serious electrical shock, never sprinkle or spill water or liquids on unit.



### WARNING

Ventilate the room regularly while the air conditioner is in use, especially if there is also a gas appliance in use in this room. Failure to follow these directions may result in a loss of oxygen in the room.

### WARNING

To prevent electric shock, turn off the power or disconnect the power supply plug before beginning any cleaning or other routine maintenance. Follow the directions for cleaning in this manual.

### WARNING

Do not use liquid cleaners or aerosol cleaners, use a soft and dry cloth for cleaning the unit. To avoid electric shock, never attempt to clean the unit by sprinkling water.

### WARNING

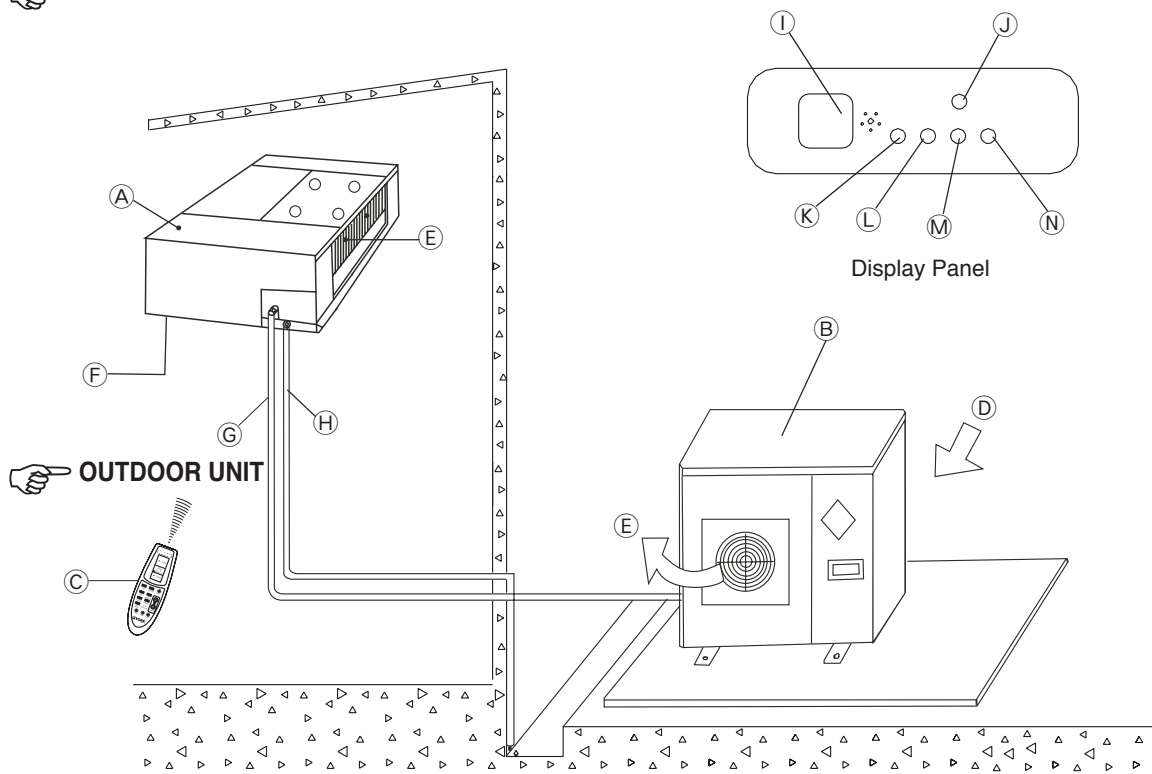
Do not use caustic household drain cleaners in the unit. Drain cleaners can quickly destroy the unit components (drain pan and heat exchanger coil, etc.)

### WARNING

For proper performance, operate the unit in temperature and humidity ranges indicated in this manual. If the unit is operated beyond these conditions, it may cause abnormal functions of the unit or dew dripping from the unit.

# PART NAMES

## INDOOR UNIT



### INDOOR & OUTDOOR UNIT

- A. Indoor unit
- B. Outdoor unit
- C. Remote controller
- D. Air-in
- E. Air-out
- F. Air inlet
- G. Connecting pipe
- H. Drain hose

### DISPLAY PANEL

- I. Infrared signal receiver
- J. Emergency button
- K. Running indicator
- L. Timer indicator
- M. Frost indicator (cooling and heating type)  
or fan indicator (cooling only type)
- N. Pump indicator

### NOTE

All the pictures in this manual are for explanation purpose only. They may be slightly different from the air conditioner you purchased. The actual shape shall prevail.

# TECHNICAL SPECIFICATIONS

## Technical Specifications : Duct Type YUHC "R-410A" -50Hz

Models			Indoor Unit		YUKC							
			18	24	30	36	48	60				
			Outdoor Unit		YUJC							
			18	24	30	36	48	60				
Power Supply			V/Ph/Hz		220-240/1/50				380/3/50			
			Ph		1	1	3	3	3	3		
Power Consumption			W		1,900/1,900	2,560/2,500	3,250/3,250	3,700/3,350	4,700/4,900	6,000/6,000		
Running Current			A		8.8/8.8	12.2/11	5.5/5.5	6.5/5.8	8.2/8.6	9.8/9.8		
Refrigerant Type					R-410A							
Refrigerant Charge			gr		2,050	2,600	3,100	3,100	4,000	4,200		
Noise level			Indoor		dB(A)		38	38	44	44	46	47
			Outdoor		48	55	57	57	58	58		
Power Supply			V/Ph/Hz		220-240/1/50							
			Ph		1	1	1	1	1	1		
Fan			Air flow		m³/h		1,160	1,460	2,070	2,070	2,400	2,800
			Input Power		W		117	170	118	118	118	227
Running Current			A		0.53	0.77	0.54	0.54	0.54	1.03		
			Height		mm		300	300	300	300	300	320
Dimension			Width		mm		1,000	1,000	1,350	1,350	1,350	1,350
			Depth		mm		800	800	800	800	800	800
Weight			kg		36	38	48	48	50	70		
System Operation Control					Wireless Control with LCD Display							
Power Supply			V/Ph/Hz		220-240/1/50				380/3/50			
			Ph		1	1	3	3	3	3		
Compressor			Qty		1	1	1	1	1	1		
Dimension			Compressor Type		Rotary				Scroll			
			Height		mm		695	860	960	960	1,245	1,245
Weight			Width		mm		845	895	990	990	940	940
			Depth		mm		335	330	360	360	360	360
Piping			Type		Flare + Nuts							
Pipe Size			Suction		inch		1/2	5/8	3/4	3/4	3/4	3/4
			Liquid		inch		1/4	3/8	1/2	1/2	1/2	1/2

### Technical Specification: Ducted Dc Inverter “YUHC” R-410A, 50Hz.

Model		Set	YUHC18DUBAAR-K	YUHC24DUBAAR-K	YUHC36DUBACR-K	YUHC48DUBACR-K	YUHC60DSBACR-K
		Indoor	YUKC18DU-BAR-K	YUJC24DU-BAR-K	YUKC36DU-BCR-K	YUKC48DU-BCR-K	YUJC60DS-BCR-K
		Outdoor	YUJC18DU-BAR	YUJC24DU-BAR	YUJC36DU-BCR	YUJC48DU-BCR	YUJC60DS-BCR
Power supply		V-Ph-Hz	220~240-1-50	220~240-1-50	380V~3~50Hz	380V~3~50Hz	380V~3~50Hz
Cooling	Capacity	Btu/h	18,000	24,000	36,000	48,000	60,000
	Input	W	1,570	2,130	3,260	4,250	4,840
	Rated current	A	7	10	9	11	11
Heating	Capacity	Btu/h	21,000	28,000	40,000	53,000	62,000
	Input	W	1,630	2,190	3,120	4,140	4,800
	Rated current	A	7	10	8	11	11
Max. input consumption		W	2,600	2,800	3,560	4,750	5,950
Max. current		A	10	11	10	13	16
Starting current		A	1	1	1	1	1
Compressor	Type		DC Inverter Rotary			DC Inverter Scroll	
	Input	W	1,650	1,650	3,665	3,665	3,665
	Rated current (RLA)	A	8	8	8	8	8
	Locked rotor Amp (LRA)	A	28	28	28	28	28
	Protector		Thermal				
	Capacitor	μF	50	50	50	50	50
	Refrigerant oil	ml	480	480	500	500	500
Indoor fan motor	Type		AC Motor				
	Input	W	117	170	118	324	160
	Capacitor	μF	3	7	3	10	10
	Speed (Hi/Me/Lo)	r/min	900/800/690	1,100/1,020/900	820/695/620	870/770/700	870/770/700
Indoor coil	Number of rows		3	3	3	3	3
	Fin spacing	mm	2	2	2	2	2
	Fin type		Hydrophilic aluminium				
	Tube outside dia.	mm	Ø9.52				
	Material Type		Innergroove tube				
	Coil length x height x width	mm	800×254×66	800×254×66	1,150×254×66	1,150×254×66	1,150×305×66
Indoor air flow (Hi/Me/Lo)	m³/h	1,020/870/700	1,275/1,170/1,030	2,070/1,950/1,860	2,400/2,300/2,200	2,800/2,700/2,600	
Indoor external static pressure (Hi)	Pa	40	40	70	70	96	
Indoor noise level (Hi/Me/Lo)	dB(A)	50/-/-	53/-/-	49/47/44	51/47/44	52/48/46	
Indoor unit	Dimension (WxHxD)	mm	1,095×805×290	1,095×805×290	1,350×298×800	1,350×320×800	1,350×320×800
	Packing (WxHxD)	mm	1,205×940×370	1,205×940×370	1,555×940×370	1,555×440×940	1,555×440×940
	Net/Gross weight	kg	38/45	38/45	48/57	70/80	70/80
Outdoor fan motor	Input	W	129	150	307	150×2	150×2
	Capacitor	μF	3	3	10	3.5×2	3.5×2
	Speed	r/min	770	800	740	800	800
Outdoor coil	Number of rows		2	2	1	1	1
	Fin spacing	mm	2	2	2	2	2
	Fin type		Hydrophilic aluminium				
	Tube outside dia.	mm	Ø9.52				
	Tube Material		Innergroove tube				
	Coil length x height x width	mm	630×660×44	620×813×44	955×915×22	715×610×22	1150×305×66
Outdoor air flow	m³/h	2,400	3,000	5,000	6,000	6,000	
Outdoor noise level	dB(A)	56	55	57	58	58	
Outdoor unit	Dimension (WxHxD)	mm	840×677×310	894×860×302	990×960×340	940×1,245×340	940×1245×340
	Packing (WxHxD)	mm	965×770×395	1,043×915×395	1,120×1015×435	1,058×1300×435	1,058×1,300×435
	Net/Gross weight	kg	62.5/66.5	72/76.5	106/111	117/126	112/127
Refrigerant R-410A	g	1,650	2,200	2,600	3,550	4,200	
Throttle type		EXV&Capillary					
Refrigerant piping	Liquid side/ Gas side	mm	6.35/12.7	9.53/16	9.53/16	9.53/16	9.53/16

**TECHNICAL SPECIFICATION: EVEREST MULTI INVERTER “YUKC-RRJC” 50Hz**

**Indoor Unit Duct Type YUKC 07-18**

Model			YUKC 07AA-AAR	YUKC 09AA-AAR	YUKC 12AA-AAR	YUKC 18AA-AAR
Power supply		Ph-V-Hz	1Ph, 220-240V~, 50Hz	1Ph, 220-240V~, 50Hz	1Ph, 220-240V~, 50Hz	1Ph, 220-240V~, 50Hz
Capacity	Cooling Capacity	BTU/h	7,000	9,000	12,000	18,000
	Heating Capacity	BTU/h	8,000	11,000	14,000	21,000
	Power input	w	40	40	40	65
Indoor fan motor	Input	W	38	38	38	63
	Capacitor	μF	1.0μF/450V	1.0μF/450V	1.0μF/450V	2.5μF/450V
	Speed (Hi/Mi/Lo)	r/min	735/650/560	735/650/560	735/650/560	930/830/660
Indoor coil	Number of rows		2	2	2	2
	Fin spacing	mm	1.5	1.5	1.5	1.7
	Fin type		Hydrophilic aluminium			
	Tube outside dia.	mm	Ø7	Ø7	Ø7	Ø9.53
	Tube Material		Innergroove tube			
	Coil length x height x width	mm	700x26x350	700x26x350	700x26x350	800x254x44
	Number of circuits		4	4	4	3
Indoor air flow (Hi/Mi/Lo)		m³/h	480/410/360	480/410/360	580/480/400	660/550/480
Indoor noise level (Hi/Mi/Lo)		dB(A)	35/32/30	36/33/30	38/35/33	40/38/35
Pipe size	Liquid side/ Gas side	mm	Ø6.35/Ø9.53	Ø6.35/Ø9.53	Ø6.35/Ø12.7	Ø6.35/Ø12.7
	Dimension (W*H*D)	mm	955x210x385	955x210x385	955x210x385	1,301X210X385
Indoor unit	Packing (W*H*D)	mm	1,114x277x469	1,114x277x469	1,114x277x469	1,114x277x469
	Net/Gross weight	Kg	15/19	15/19	15/19	18/22

## Outdoor Unit Multi Inverter RRJC 18-27

Model			RRJC 18AA-AAA		RRJC 27AA-AAA			
Indoor Units Combination			Single	Double	Single	Double	Treble	
Power supply			1Ph, 220-240V~, 50Hz		1Ph, 220-240V~, 50Hz			
Cooling	Capacity	Ph-V-Hz	Btu/h	7,000~12,000	18,000	7,000~12,000	16,000~24,000	27,000
			W	2,050~3,517	5,275	2,000~3,500	4,690~7,000	7,913
	Input		W	1,000~1,300	1,813	1,000~1,300	2,570~2,850	2,806
	Rated current		A	4.8~6.5	11.5	4.8~6.5	11.7~13.5	13.5
Heating	Capacity		Btu/h	9,000~14,000	21,000	10,000~14,000	24,000~27,000	30,000
			W	2,638~4,103	6,155	2,900~4,100	7,000~7,900	8,792
	Input		W	1,300~1,600	2,038	1,300~1,600	2,100~2,750	2,739
	Rated current		A	6.3~7.8	11.0	6.3~7.8	11.0~13.2	13.2
Max. input			W	3,200		3,200		
Max. current			A	20		20		
Compressor	Type		Rotary inverter		Rotary inverter			
	Input		W	1,690		1,690		
	Rated current (RLA)		A	11.6		11.6		
	Locked rotor Amp (LRA)		A	60		60		
	Thermal protector		Internal		Internal			
	Capacitor		μF	85μF/250V		85μF/250V		
	Refrigerant oil		ml	750		750		
Outdoor fan motor	Input		W	148		148		
	Capacitor		μF	3		3		
	Speed		r/min	775		775		
Outdoor coil	Number of rows		2		2			
	Fin spacing		mm	1.7		1.7		
	Fin type		Hydrophilic aluminium		Hydrophilic aluminium			
	Tube outside dia.		mm	Ø9.53		Ø9.53		
	Tube Material		Innergroove tube		Innergroove tube			
	Coil length x height x width		mm	776x660x22		776x660x22		
Number of circuits		2		2				
Outdoor air flow			m <sup>3</sup> /h	2,500		2,500		
Outdoor noise level			dB(A)	60		60		
Outdoor unit	Dimension (WxHxD)		mm	845X695X335		845X695X335		
	Packing (WxHxD)		mm	965X772X405		965X772X405		
	Net/Gross weight		kg	71/74		72/76		
Refrigerant Type R-410A			g	2,100		2,250		
Refrigerant piping	Liquid side/ Gas side		mm	Ø6.35/Ø9.53		3 X Ø6.35/Ø9.53		
	Transfer Connector (9.53~12.7)		mm	2		2		
	Max. refrigerant pipe length		m	15 (each indoor unit)		15 (each indoor unit)		
	Max. difference in level		m	10 (each indoor unit)		10 (each indoor unit)		

**Remark :** The above design and specifications are subject to change without prior notice for product improvement.

## OPERATING TEMPERATURE

Mode	Cooling operation	Heating operation	Drying operation
Room temperature	17°C~32°C	0°C~30°C	17°C~30°C
Outdoor temperature	21°C~43°C	-7°C~24°C	11°C~43°C

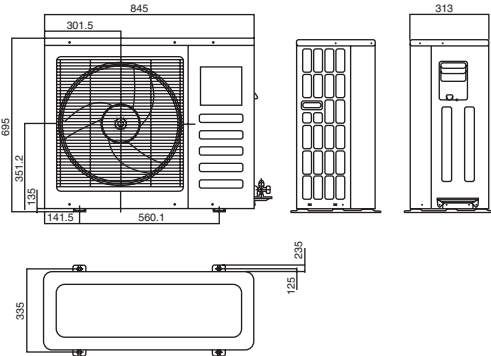
### CAUTIONS

1. If air conditioner is used outside of the above conditions, certain safety protection features may come into operation cause the unit to function abnormally.
2. Room relative humidity less than 80%. If the air conditioner operates in excess of this figure, the surface of the air conditioner may attract condensation. Please set the vertical air flow louver to its maximum angle (Vertically to the floor), and set HIGH fan mode.
3. Optimum performance will be achieved within these operating temperature.

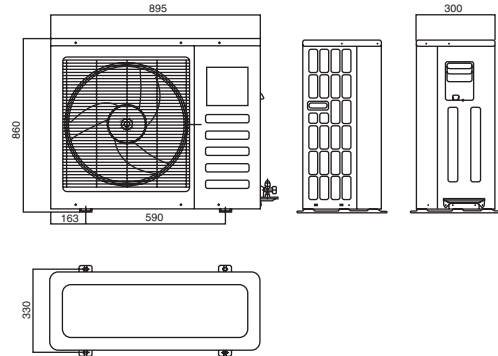


# OUTDOOR UNIT DIMENSIONS

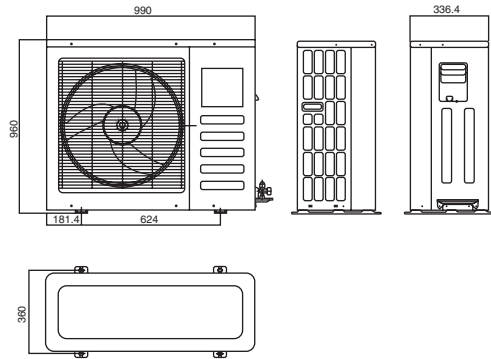
**YUJC 18**



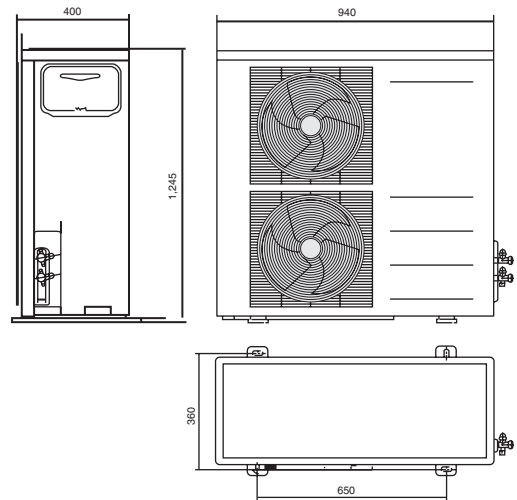
**YUJC 24**



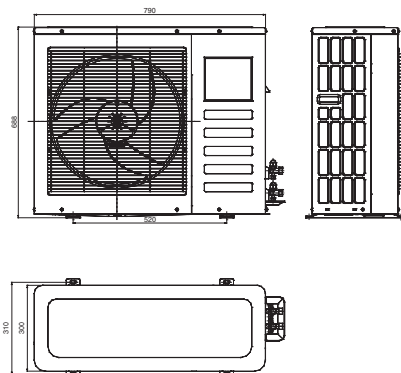
**YUJC 30-36**



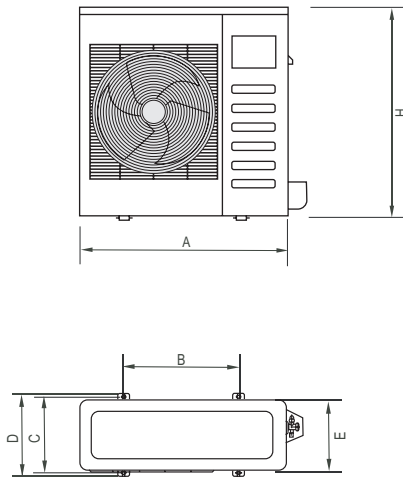
**YUJC 48-60**



**RRJC 18-27**



## DC Inverter R-410A



							mm
MODEL	A	B	C	D	E	H	REMARK
18	840	560	335	360	310	677	R-410A
24	894	590	333	355	302	860	
36	990	624	366	396	340	960	
48	940	600	376	400	340	1,245	

## PREPARATION BEFORE INSTALLATION

- Before doing any work, check the interior power supply cord and the main breaker capacity are sufficient and the installation area is sufficient and complies with the requirements.
- Check that the power supply available agrees with name plate voltage.
- Electrical work, wiring and cables must be performed in compliance with national and local wiring codes and standard.
- Do not use the extension cables. In the case extended cables are needed, use the terminal block.

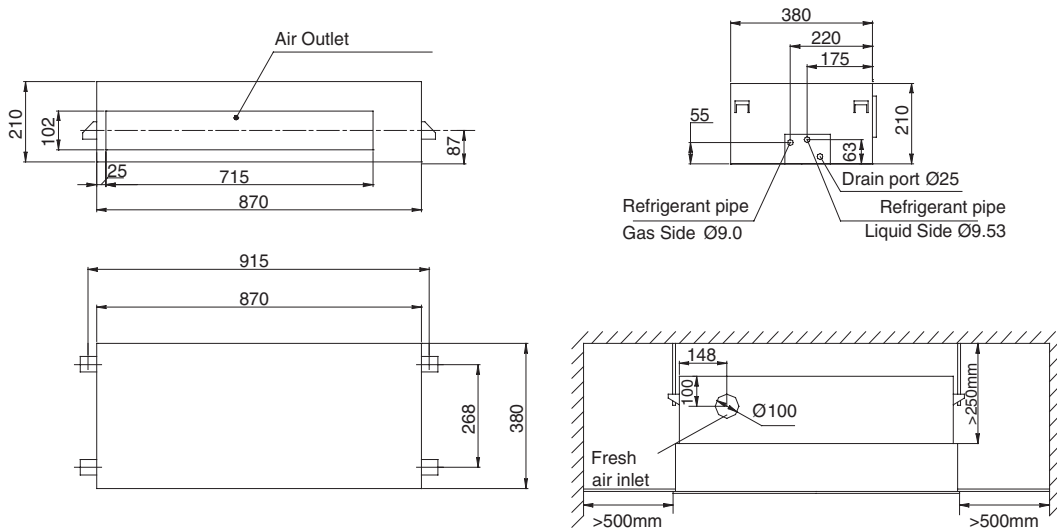
## INSTALLATION

### ■ Installation place

The indoor unit must be installed such that there is no short circuit of the cool discharge. Comply to the installation clearance recommended. Do not put the indoor unit where there is direct sunlight on unit. Make sure the location is suitable for piping and drainage.

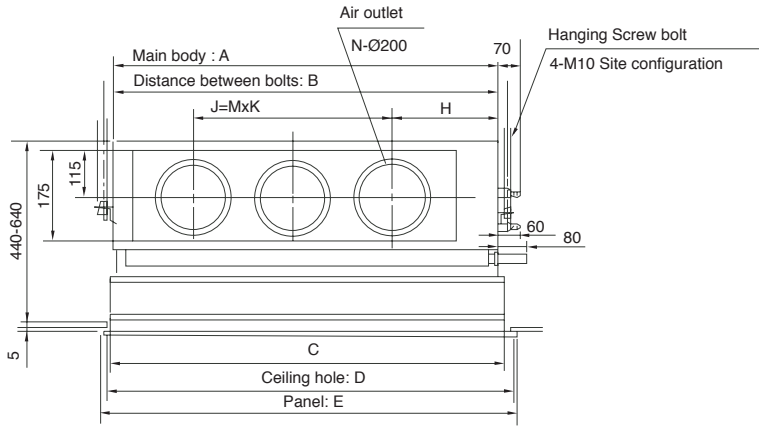
## INDOOR UNIT

### YUKC 07-12

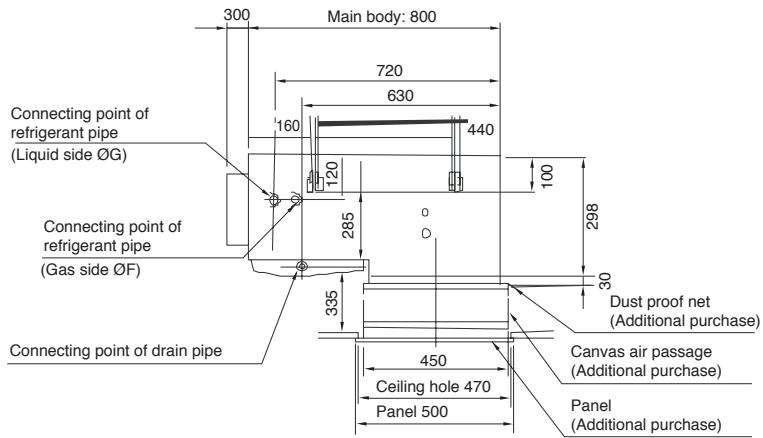


# YUKC 18-48

The positioning of ceiling hole and indoor unit and hanging screw bolt:



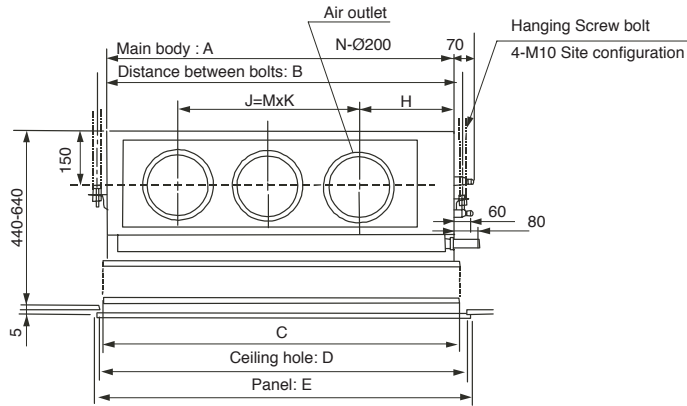
Install the main body:



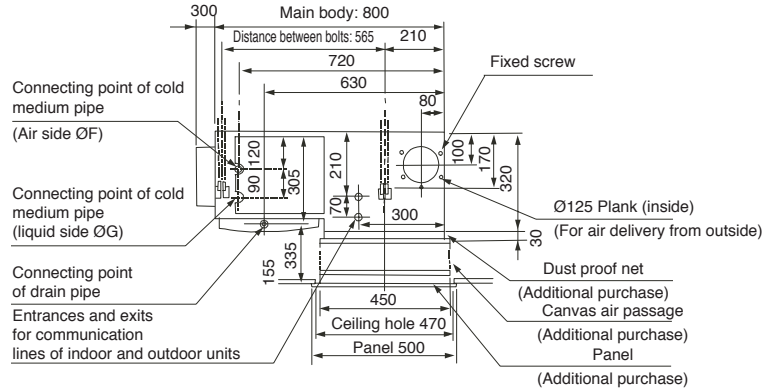
Capacity (Btu/h)	A	B	C	D	E	F	G	H	I	J	K	M	N
12000-18000	1082	1052	1115	1087	1408	12.7	6.35	-	-	-	-	-	-
24000						16	9.53						
30000-48000	1350	1400	1380	1400	1430	19	12.7	252	35	930	310	3	4

# YUKC 60

The positioning of ceiling hole and indoor unit and hanging screw bolt:

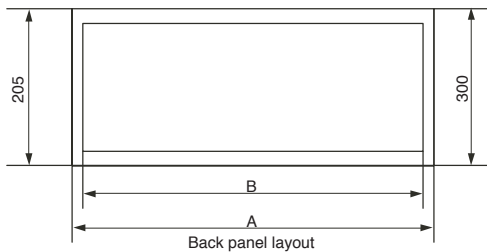


Install the main body:

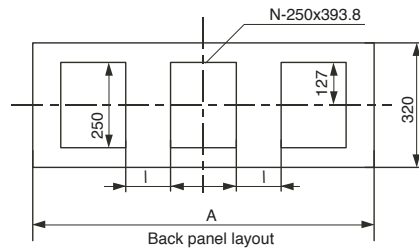


Capacity (Btu/h)	A	B	C	D	E	F	G	H	I	J	K	M	N
60000	1350	1400	1380	1400	1430	19	12.7	252	35	930	310	3	4

When using a back-air installation, please refer to the following:



YUKC 18-48



YUKC 60

## OUTDOOR UNITS

### CAUTIONS

- Keep this unit away from direct radiation of the sun or other heaters.
- If unavoidable, please cover it with a shelter.
- In places near coast or with a high attitude where the wind is violent, please install the outdoor unit against the wall to ensure normal performance.  
Use a baffle when necessary.
- In the case of extremely strong wind, please prevent the air from flowing backwards into the outdoor unit.  
(Refer to chart 1)
- Locate the outdoor unit as close to the indoor unit as possible.
- The minimum distance between the outdoor unit and obstacles described in the installation chart does not mean that the same is applicable to the situation of an airtight. Leave open two of three directions A, B, C.

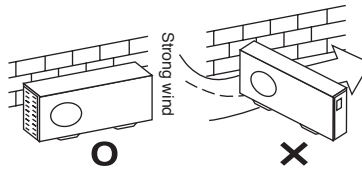


Chart 1

## NECESSARY ROOM FOR INSTALLATION AND MAINTENANCE

(Refer to chart 2, chart 3)

Remove the obstacles nearby to prevent the performance from being impeded by too little of air circulation. The minimum distance between the outdoor unit and obstacles described in the installation chart does not mean that the same is applicable to the situation of an airtight room. Leave open two of the three directions (A, B, C).

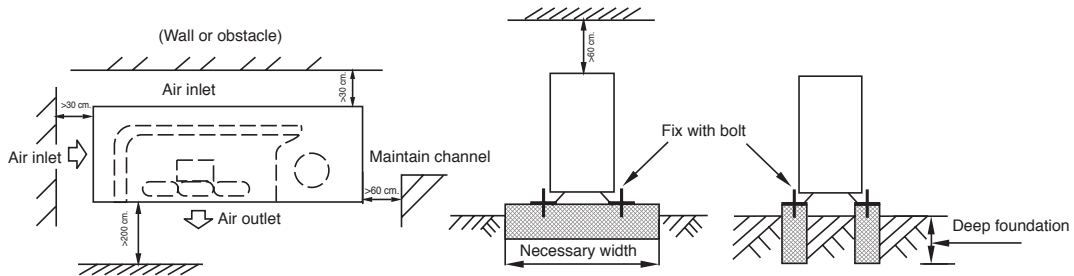


Chart 2

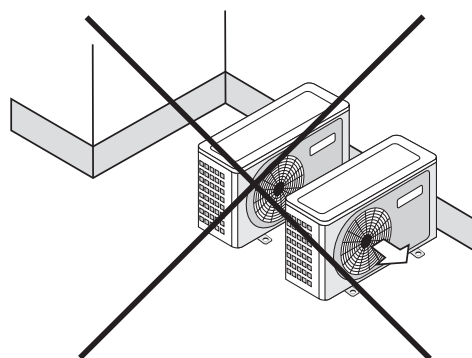
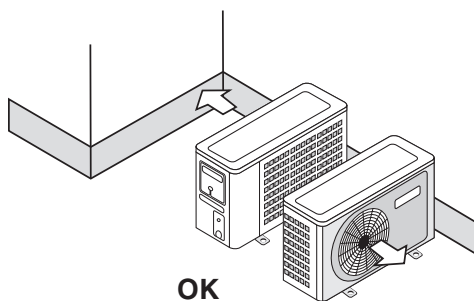
Chart 3

## MOVING AND INSTALLING

- Since the gravity center of this unit is not at its physical center, so please be careful when lifting it with a sling.
- Never hold the air-in of the outdoor unit to prevent it from deforming.  
Do not touch the fan with hands or other objects.
- Do not lean it more than 45°, and do not lay it sidelong.
- Please fasten the feet of this unit with bolts firmly to prevent it from collapsing in case of earthquake or strong wind.
- Make concrete foundation of the size of 590 x 328. (Refer to chart 3)

## COLD AREA RECOMMENDATION

- Outdoor heat pump unit : install the unit at least 10 cm above ground level to facilitate drainage of defrost water and prevent accumulation of ice. In effect, defrost water can cause accumulation of ice under the unit during subfreezing outdoor temperatures.
- In areas with heavy snowfall it is best to install the unit on wall supports.
- In some regions, it is necessary to heat the bottom of the condensate drainage pan and the condensate drainage piping to avoid ice formation, and resulting ice build-up in the fan compartment (heater strip must be at least 25 W/m).



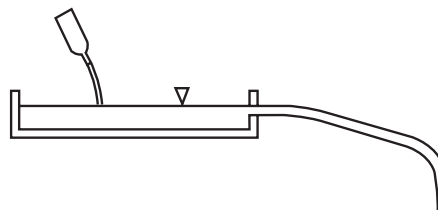
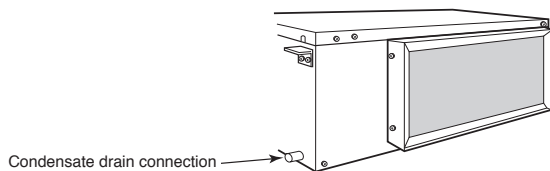
## CONDENSATE DRAINAGE

Condensate drainage is provided on the unit. The connection is located at the rear.

To ensure correct condensate drainage, the drain line must be installed with a gradient of at least 2% (2 cm per meter) and without any upward slopes. An elbow trap at least 50 mm in height must also be provided.

If possible, install a U bend fitted with an inspection cap.

Where the condensate lines from several units are joined together, each individual outlet must be fitted with an elbow trap. After routing and connecting condensate lines, pour water into the collecting pan and check that it drains correctly. An auxiliary condensate pump could be installed in cases where drain lines cannot be routed the correct gradient.



# REFRIGERANT PIPING CONNECTIONS

## Fixing and Piping

- Piping must be performed by qualified personnel according to good refrigeration system practices.
- Piping materials and insulation materials must be of refrigerant quality.
- Select the pipe diameters according to the size of unit and cut the pipe to design length by using pipe cutter.
- Install the flare nuts and flare the end of the pipes.
- Check that no foreign bodies are inside the piping.
- Align the central of the connection pipes and tighten the flare nut.
- Fix piping with pipe clamps and check that any pipe vibrations cannot be transmitted to the building structure.

## NOTES

- Connect the pipe correctly.
- Do not apply the excessive torque.
- Use an appropriate bending tool to form curves and avoid over-tightening the refrigerant tubes.
- To prevent heat loss, the two lines must be insulated separately.

## Maximum Piping Length

Unit size	18	24	30	36	48	60
(m)	30	30	30	30	30	30

The suction line must have a 2% gradient up to the compressor on horizontal sections.

Where piping lengths are unusually long and include a large number of oil traps, it may be necessary to adjust to compressor charge.

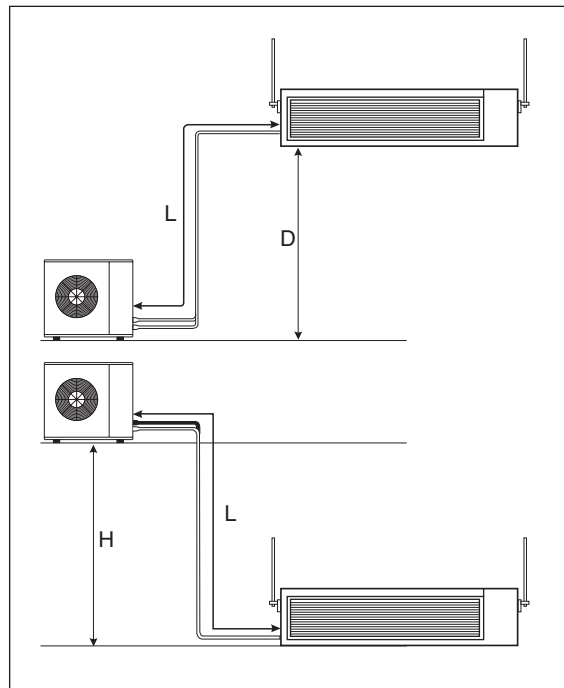
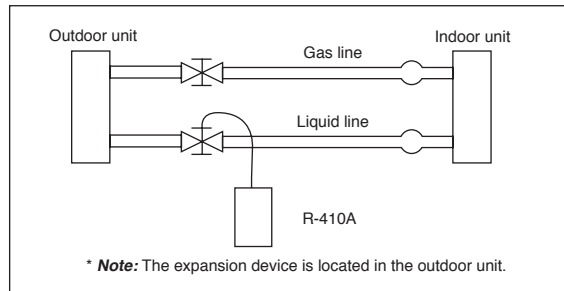
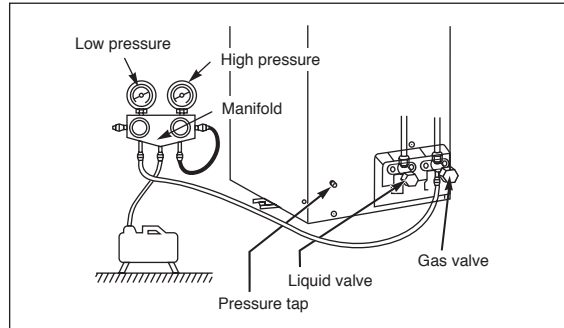
## Refrigerant charge to be added per extra meter of piping length when more than 5 meters.

Unit size	Models					
	18	24	30	36	48	60
(g/m)	30	65	90	90	90	90

Prefabricated refrigerant piping is available as an accessory. If this is not used, piping and insulating materials employed must be compatible with this type of installation.

The pre-charged outdoor unit does not require charging if piping length is 5 m or less. However, the interconnecting piping and the indoor unit must be pumped down before releasing R-410A refrigerant into them from the outdoor unit.

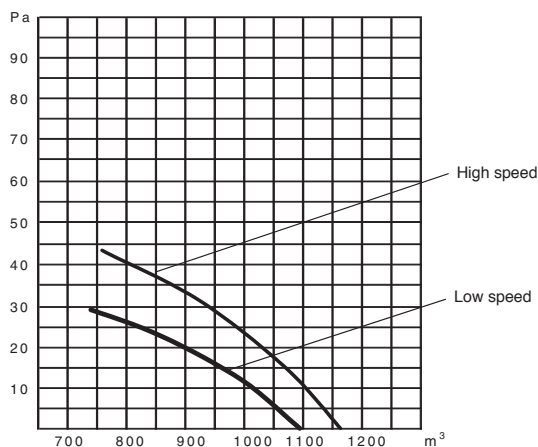
1. Remove the cap from the service valve.
2. Connect the line to a vacuum pump and pump down to 5 Pa.
3. When pump down is finished, wait 15 minutes to detect potential circuit leakage. Open service valves on the outdoor unit.



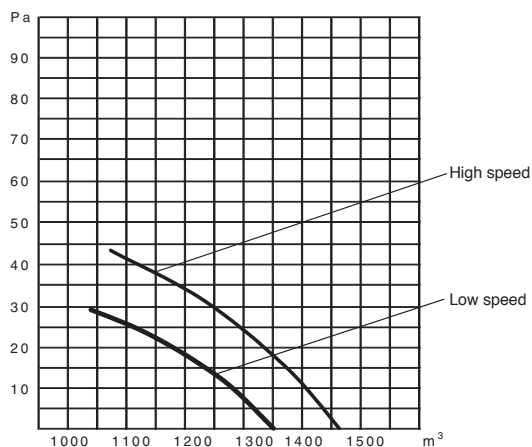
# FAN SPEEDS

For ducted installations, check air flow and static pressure against values shown in the following diagrams.

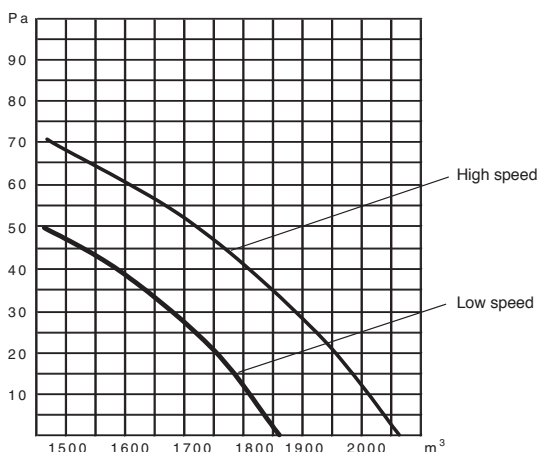
Insufficient air flow can cause operating problems such as icing which may damage the compressor in the outdoor unit.



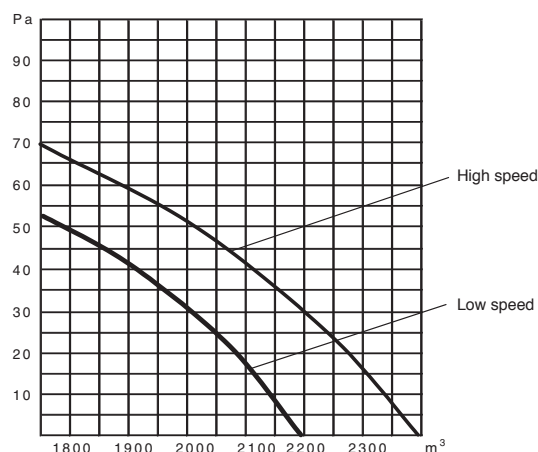
**Model 18**



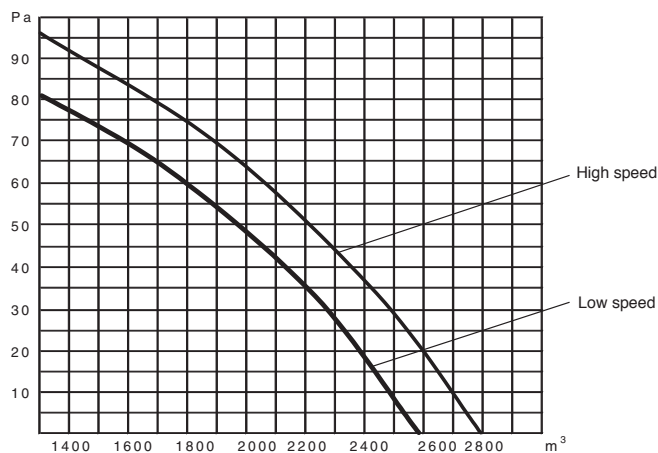
**Model 24**



**Model 30-36**



**Model 48**



**Model 60**

Note : 07-18K for free blow application.



# WIRING DIAGRAMS

## ■ Wiring

Prepare the power source for exclusive with the air conditioner.

The supply voltage must comply with the rated voltage of the air conditioner. The plug socket shall be accessible after installation.

**Remark:** All the wiring must be based on the wiring nameplate which is shown on the model.

## CAUTIONS

- Perform the wiring with sufficient capacity. Installation places legally require a short circuit isolator to be attached to prevent electrical shock.
- Do not extend the power cable code by cutting.
- Power voltage should be in the range of 90%-110% of rated voltage.
- The plug of the air conditioner takes a grounding leg, and clients should use a grounding socket so that the air conditioner can be grounded efficiently.
- If the power cord is damaged, replacement should be conducted by qualified technician or a serviceman.

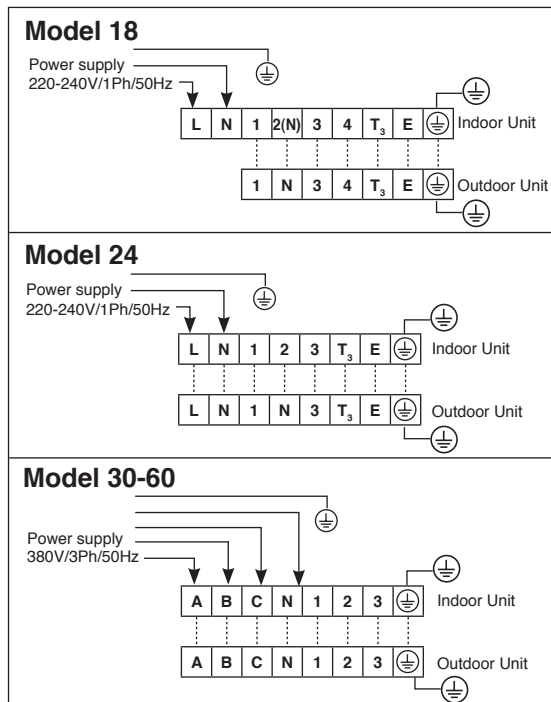
**NOTE** Remark per EMC Directive 89/336/EEC

To prevent flicker impressions during the start of the compressor (technical process), following installation conditions do apply.

1. The power connection for the air conditioner has to be done at the main power distribution.  
The distribution has to be of a low impedance, normally the required impedance reaches at a 32 A fusing point.
2. No other equipment has to be connected with this power line.
3. For detailed installation acceptance, please refer to your contract with the power supplier if restrictions do apply for products like washing machines, air conditioner or electrical ovens.
4. For power details of the air conditioner, refer to the rating plate of the product.
5. For any question, contact your local dealer.

## CAUTIONS

- Never modify the unit by removing any of the safety guards or by bypassing any of the safety interlock switches.
- Connect the connecting cable correctly and connect the connecting cable to terminal as identified with their respective marks.
- Do not scratch the conductive core & inner insulator of power supply cables and do not deform or smash on the surface of cables.



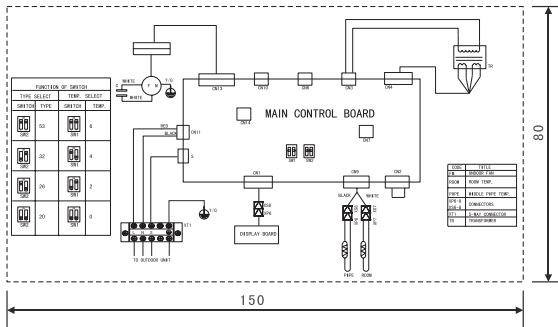
## ■ Electrical work

Model	Power source	Circuit breaker/fuse	Wiring size
18000 Btu/h	220-240V - 50Hz	30/25A	3 x 1.5 mm <sup>2</sup>
24000 Btu/h	220-240V - 50Hz	40/25A	3 x 2.5 mm <sup>2</sup>
30000 Btu/h	380V 3N - 50Hz	20/15A	5 x 1.5 mm <sup>2</sup>
36000-60000 Btu/h	380V 3N - 50Hz	25/15A	5 x 2.5 mm <sup>2</sup>

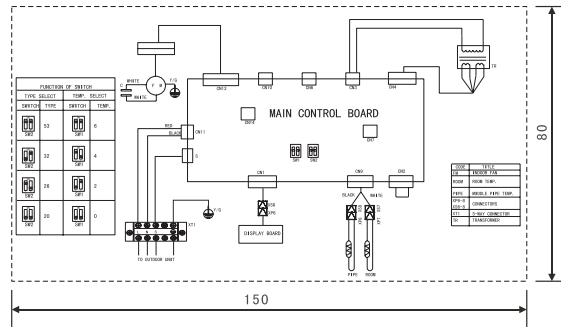
## NOTE

The supply voltage must be consistent with the rate voltage of the air conditioner.

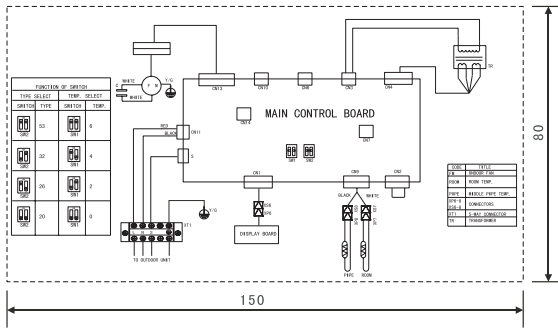
### YUKC 07



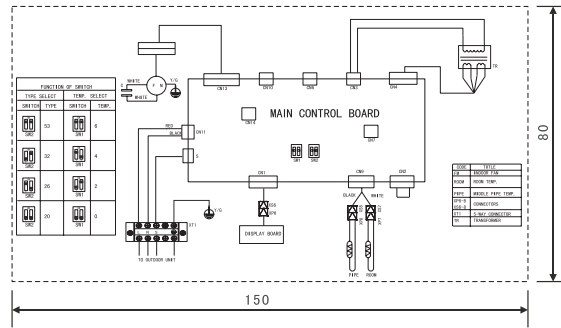
### YUKC 09



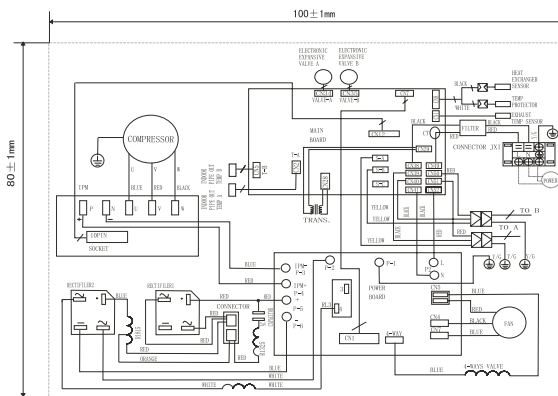
### YUKC 12



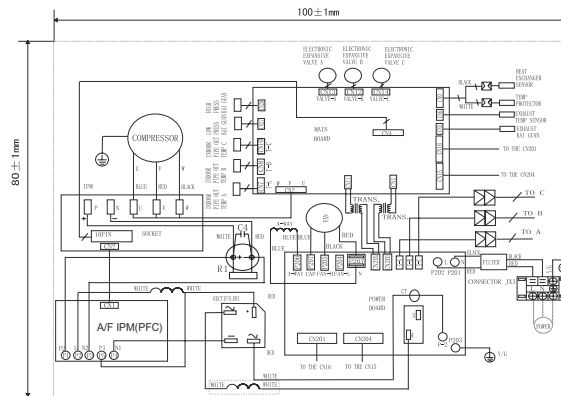
### YUKC 18



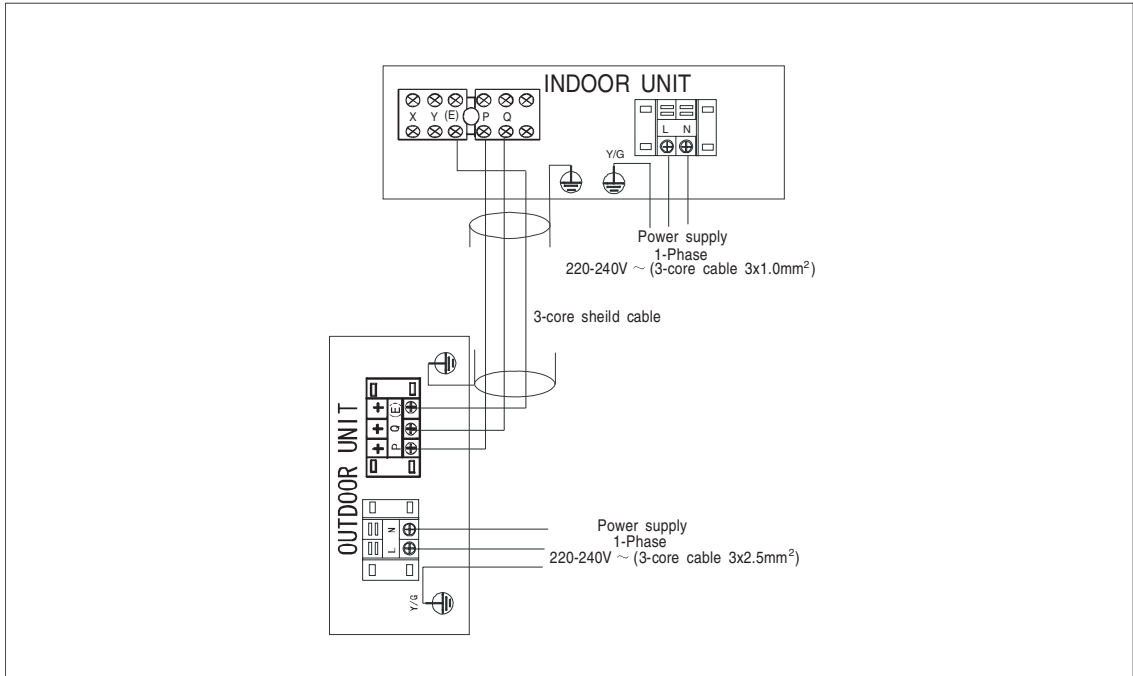
### RRJC 18



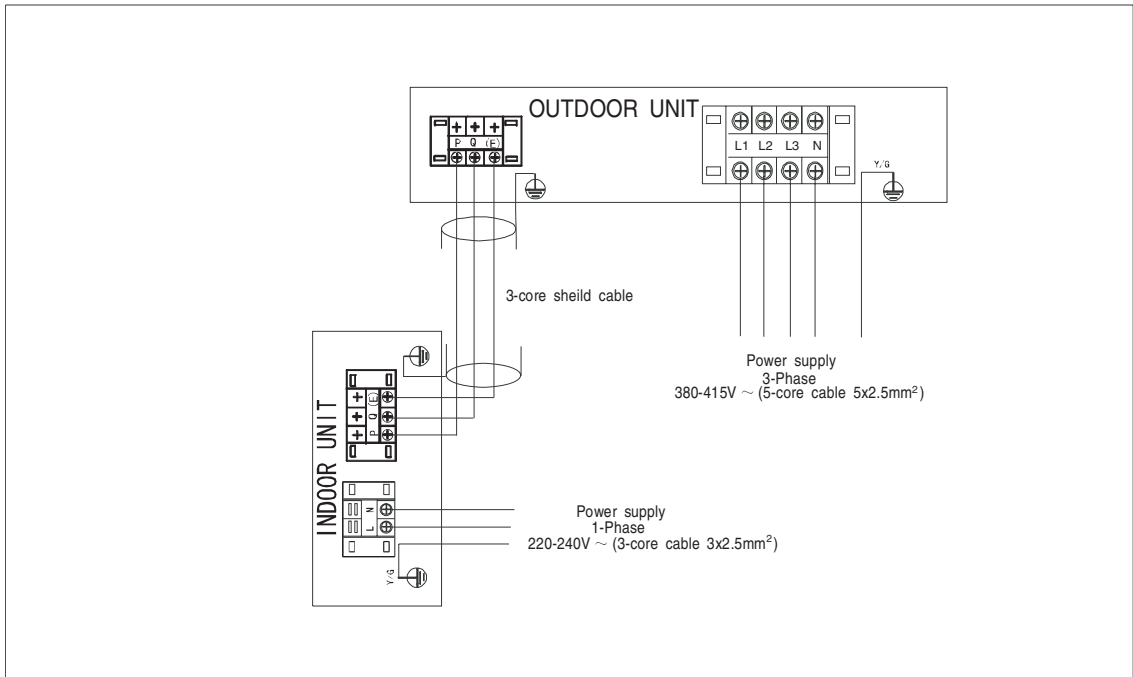
### RRJC 27



# DC Inverter R-410A



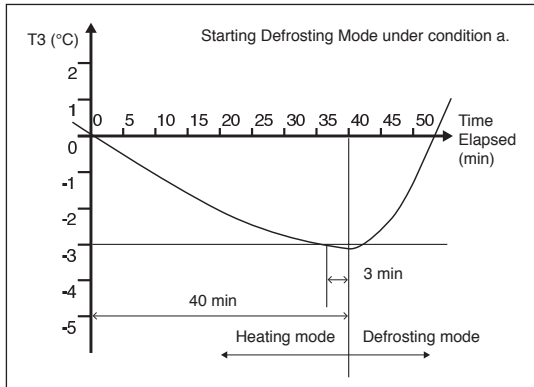
For 18,000-24,000 Btu/h



For 36,000-60,000 Btu/h

## DEFROSTING OPERATION (Available for heating only)

- Condition to start defrosting: Units will switch to defrosting mode when either of the following conditions is met.
  - Unit has been running under  $T3 < 0^{\circ}\text{C}$  for 40 minutes and  $T3 < -3^{\circ}\text{C}$  for 3 minutes.
  - Unit has been running at high temperature protection mode\* for 90 minutes. (\*High temperature protection mode: when coil temperature of indoor unit reaches  $55^{\circ}\text{C}$ , outdoor unit will turn off external unit fan but still keep compressor running).



- Condition to stop defrosting: Units will switch back to heating mode when either of the following conditions is met.
  - Unit has been running at defrosting mode for 10 minutes.
  - $T3 > 20^{\circ}\text{C}$

**Remark:** T3 is coil temperature of outdoor units.

## SERVICE AND MAINTENANCE

The units are designed to operate for long periods of time with a minimum of maintenance. However, the following operations must be performed regularly.

COMPONENT	MAINTENANCE OPERATIONS	RECOMMENDED FREQUENCY
Air filter	1 - Clean with a vacuum cleaner or tap gently then wash in warm water ( $40^{\circ}\text{C}$ ) with a mild detergent. 2 - Rinse and dry before replacing on unit. 3 - Never use petrol, alcohol or any other chemical product.	Every month or more often if necessary.
Unit casing	1 - Remove dust from the front panel with a soft duster or wipe a damp cloth with a mild soap solution. 2 - Never use petrol, alcohol or any other chemical product.	Every month or more often if necessary.
Drain pan and evacuation piping	1 - Clean and check for obstructions.	Each season before start up.
Indoor / Outdoor coils	1 - Check condition and remove dust from between coil fins.	Each season before start up.
Compressor	1 - No maintenance required.	—

# OPERATION TIPS

The following events may occur during normal operation.

## 1. Protection of the air conditioner.

Compressor protection

- The compressor can not restart for 3 minutes after it stops.

Anti-cold air (Cooling and heating models only)

- The unit is designed not to blow cold air on HEAT mode, when the indoor heat exchanger is in one of the following three situations and the set temperature has not been reached.
  - A) When heating has just starting.
  - B) Defrosting.
  - C) Low temperature heating.
- The indoor or outdoor fan stop running when defrosting (Cooling and heating models only).

Defrosting (Cooling and heating models only)

- Frost may be generated on the outdoor unit during heat cycle when outdoor temperature is low and humidity is high resulting in lower heating efficiency of the air conditioner.
- During this condition air conditioner will stop heating operation and start defrosting automatically.
- The time to defrost may vary from 4 to 10 minutes according to the outdoor temperature and the amount of frost buildup on the outdoor unit.

## 2. A white mist coming out from the indoor unit.

- A white mist may generate due to a large temperature difference between air inlet and air outlet on COOL mode in an indoor environment that has a high relative humidity.
- A white mist may generate due to moisture generated from defrosting process when the air conditioner restarts in HEAT mode operation after defrosting.

## 3. Low noise of the air conditioner.

- You may hear a low hissing sound when the compressor is running or has just stopped running. This sound is the sound of the refrigerant flowing or coming to a stop.
- You can also hear a low "squeak" sound when the compressor is running or has just stopped running. This is caused by heat expansion and cold contraction of the plastic parts in the unit when the temperature is changing.
- A noise may be heard due to louver restoring to its original position when power is first turned on.

## 4. Dust is blown out from the indoor unit.

This is a normal condition when the air conditioner has not been used for a long time or during first use of the unit.

## 5. A peculiar smell comes out from the indoor unit.

This is caused by the indoor unit giving off smells permeated from building material, from furniture, or smoke.

## 6. The air conditioner turns to FAN only mode from COOL or HEAT (for cooling and heating models only) mode.

When indoor temperature reaches the temperature setting on air conditioner, the compressor will stop automatically, and the air conditioner turns to FAN only mode. The compressor will start again when the indoor temperature rises on COOL mode or falls on HEAT mode (for cooling and heating models only) to the set point.

## 7. Dripping water may generate on the surface of the indoor unit when cooling in a high relatively humidity (relative humidity higher than 80%). Adjust the horizontal louver to the maximum air outlet position and select HIGH fan speed.

## 8. Heating mode (For cooling and heating models only)

The air conditioner draws in heat from the outdoor unit and releases it via the indoor unit during heating operation. When the outdoor temperature falls, heat drawn in by the air conditioner decreases accordingly. At the same time, heat loading of the air conditioner increases due to larger difference between indoor and outdoor temperature. If a comfortable temperature can not be achieved by the air conditioner, we suggest you use a supplementary heating device.

## 9. Auto-restart function

Power failure during operation will stop the unit completely. For the unit without Auto-restart feature, when the power restores, the RUN indicator on the indoor unit starts flashing. To restart the operation, push the ON/OFF button on the remote controller. For the unit with Auto-restart feature, when the power restores, the unit restarts automatically with all the previous settings preserved by the memory function.

## 10. Lightning or a car wireless telephone operating nearby may cause the unit to malfunction.

Disconnect the unit with power and then re-connect the unit with power again. Push the ON/OFF button on the remote controller to restart operation.

# TROUBLE SHOOTING GUIDE

Problem	Probable cause	Remedy
A. The air conditioner does not run.	<ol style="list-style-type: none"> <li>1. Power failure.</li> <li>2. Fuse blown or circuit breaker open.</li> <li>3. Voltage is too low.</li> <li>4. Faulty contactor or relay.</li> <li>5. Electrical connections loose.</li> <li>6. Thermostat adjustment too low (in heating mode) or too high (in cooling mode).</li> <li>7. Faulty capacitor.</li> <li>8. Incorrect wiring, terminal loose.</li> <li>9. Pressure switch tripped.</li> </ol>	<ol style="list-style-type: none"> <li>1. Wait for power resume.</li> <li>2. Replace the fuse or reset the breaker.</li> <li>3. Find the cause and fix it.</li> <li>4. Replace the faulty component.</li> <li>5. Retighten the connection.</li> <li>6. Check thermostat setting.</li> <li>7. Find the cause then replace capacitor.</li> <li>8. Check and retighten.</li> <li>9. Find the cause before reset.</li> </ol>
B. The outdoor fan runs but the compressor will not start.	<ol style="list-style-type: none"> <li>1. Motor winding cut or grounded.</li> <li>2. Faulty capacitor.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the wiring and the compressor winding resistance.</li> <li>2. Find the cause then replace capacitor.</li> </ol>
C. There is insufficient heating or cooling.	<ol style="list-style-type: none"> <li>1. There is a gas leak.</li> <li>2. Liquid and gas line insulated together.</li> <li>3. The room was probably very hot (cool) when you started the system.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove charge, repair, evacuate and recharge.</li> <li>2. Insulate them separately.</li> <li>3. Wait while unit has enough time to cool the room.</li> </ol>
D. The compressor runs continuously.	<ol style="list-style-type: none"> <li>1. Thermostat adjustment too low (in heating mode) or too high (in cooling mode).</li> <li>2. Faulty fan.</li> <li>3. Refrigerant charge too low, leak.</li> <li>4. Air or incondensables in refrigerant circuit.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check thermostat setting.</li> <li>2. Check condenser air circulation.</li> <li>3. Find leak, repair and recharge.</li> <li>4. Remove charge, evacuate and recharge.</li> </ol>
E. The compressor starts but shuts down quickly.	<ol style="list-style-type: none"> <li>1. Too much or too little refrigerant.</li> <li>2. Faulty compressor.</li> <li>3. Air or incondensables in refrigerant circuit.</li> <li>4. Changeover valve damaged or blocked open (heat pump unit).</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove charge, evacuate and recharge.</li> <li>2. Determine the cause and replace compressor.</li> <li>3. Remove charge, evacuate and recharge.</li> <li>4. Replace it.</li> </ol>
F. Clicking sound is heard from the air conditioner.	In heating or cooling operation any plastic parts may expand or shrink due to a sudden temperature change in this event, a clicking sound may occur.	In heating or cooling operation any plastic parts may expand or shrink due to a sudden temperature change in this event, a clicking sound may occur.

# DECLARATION OF CONFORMITY



## DECLARATION OF CONFORMITY

Type of Equipment Air Conditioners  
Brand Name YORK  
Type Designation YUKC-YUJC 12/18/24/30/36/48/60FU

Application of Council Directive (s) EMC Directive 89/336/EEC, Low Voltage Directive 73/23/EEC and Machine Safety Directive: MSD 98/37/CE

The following harmonized standards have been applied:

Standard (s)

EN 60 335-1: 2002+A11  
EN 60 335-2-40 : 2003  
EN 50366 : 2003  
EN 55 014-1/A2 : 2002  
EN 55 104-2/A1 : 2001  
EN 61000-3-2 : 2002  
EN 61000-3-3 : 1995+A1

The product complies with the harmonized European safety standards and harmonized EMC standards listed above.

We have internal production control system that ensures compliance between the manufacturer products and the technical documentation.

The product is CE mark.

We declare under our sold responsibility that the equipment follows the provisions of the Directives stated above.

Authorized Representative:

CM Choi  
Shipping Manager

**YORK International (Northern Asia) Ltd.**  
15/F., Tower II, World Trade Square, 123 Hoi Bun Road, Kwun Tong, Kowloon, Hong Kong  
Telephone: (852) 2331 9286 Fax: (852) 2331 9840  
Technical Service Division: Telephone: (852) 2331 9286 Fax: (852) 2304 0068

## INSTALLATION, REMOVAL AND DISPOSAL

**This product contains refrigerant under pressure, rotating parts, and electrical connections which may be a danger and cause injury!  
All work must only be carried out by competent persons using suitable protective clothing and safety precautions.**



Read the Manual



Risk of electric shock



Unit is remotely controlled and may start without warning

1. Isolate all sources of electrical supply to the unit including any control system supplies switched by the unit. Ensure that all points of electrical and gas isolation are secured in the OFF position. The supply cables and gas pipework may then be disconnected and removed. For points of connection refer to unit installation instructions.
2. Remove all refrigerant from each system of the unit into a suitable container using a refrigerant reclaim or recovery unit. This refrigerant may then be reused, if appropriate, or returned to the manufacturer for disposal. **Under No circumstances should refrigerant be vented to atmosphere.** Where appropriate, drain the refrigerant oil from each system into a suitable container and dispose of according to local laws and regulations governing disposal of oily wastes.
3. Packaged unit can generally be removed in one piece after disconnection as above. Any fixing down bolts should be removed and then unit lifted from position using the points provided and equipment of adequate lifting capacity. Reference MUST be made to the unit installation instructions for unit weight and correct methods of lifting. Note that any residual or spilt refrigerant oil should be mopped up and disposed of as described above.
4. After removal from position the unit parts may be disposed of according to local laws and regulations.

