

electriQ

Wall Mounted Inverter Split Air Conditioner with Heat Pump

User and Installation Manual

eIQ-9WMINV	9,000 BTU
eIQ-12WMINV	12,000 BTU
eIQ-18WMINV	18,000 BTU
eIQ-24WMINV	24,000 BTU

also quick connectors (QC) models



**Thank you for choosing ElectriQ.
Please read this user manual before using this innovative
Air Conditioner and keep it safe for future reference.
Visit our page www.electriQ.co.uk for our entire range of Intelligent Electricals**

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SAFETY INSTRUCTIONS

Important!

- Carefully read the instructions before operating the unit
- This appliance comprise of an indoor and an outdoor unit. The indoor slim evaporator is designed exclusively for indoor installations while the external condenser can be installed outside while still away from flood water or snow line.
- Rating: This unit must be only connected to a 220-240 V / 50 Hz earthed power source.
- Installation must be in accordance with regulations of the country where the unit is used.
- These air conditioners are supplied with refrigeration pipes and electrical cables, and in the case of QC model with quick connectors, which enables the installer to save time, removes the need of a vacuum pump, while preventing any leakage of refrigeration gas. However European Union regulations requires for an F-Gas trained engineer to handle any operation where non-qualified intervention could case fluorinated gas escape. A commissioning certificate must be issued with any installation.
- If you are in any doubt about the suitability of your electrical supply have it checked and, if necessary, modified by a qualified electrician.
- This air conditioner has been tested and is safe to use. However, as with any electrical appliances - use it with care.
- Disconnect the power before dismantling, assembling or cleaning.
- Avoid touching any moving parts of the appliance.
- Never insert fingers, pencils or any other objects though the guard
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities. It is also not intended for use by those with a lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Do not leave children unsupervised with this appliance.
- Do not clean the unit by spraying it or immersing it in water.
- Never connect the unit to an electrical outlet using an extension cord. Both the indoor unit and outdoor must be hardwired by a qualified electrician.
- Never operate this appliance if the cord is damaged. Ensure the power cord is not stretched or exposed to sharp object/edges.
- A damaged supply cord should be replaced by the manufacturer or a qualified electrician in order to avoid a hazard.
- Any service other than regular cleaning or filter replacement should be performed by an authorized service representative or a qualified air conditioning engineer. Failure to comply could result in a voided warranty.
- Do not use the appliance for any other purposes than its intended use.
- The outdoor part of the air conditioner unit must always be stored and transported upright, otherwise irreparable damage may be caused to the compressor; if in doubt we suggest waiting at least 24 hours before starting the unit.
- Avoid restarting the air conditioning unit unless 3 minutes have passed since being turned off. This prevents damage to the compressor.
- Never use the mains as a switch to start and turn off the air conditioning unit. Use the provided ON/OFF switch located on the remote control.
- Always place the unit on a dry and stable surface. Install the outdoor unit on wall with wall-mounted brackets or fix on floor slab with special floor mounting slab or brackets away from flood or snow line.
- The indoor unit should not be installed in laundry or wet rooms

Energy Saving and Unit Safety Protection Tips

- Do not cover or restrict the airflow from the outlet or inlet grills.
- For maximum performance the minimum distance from a wall or objects should be 50cm.
- Keep the filters clean. Under normal conditions, filters should only need cleaning once every four weeks (approximately). Since the filters remove airborne particles, more frequent cleaning may be necessary, depending on the air quality.
- For the initial startup set the fan speed to maximum and the thermostat to 4-5 degrees lower than the current temperature. After, set the fan switch to low and set the thermostat to your desired setting.
- To protect the unit we recommend not using the cooling function when the ambient indoor temperature is higher than 35°C.
- To protect the unit we recommend not using the heating function when the indoor ambient temperature is lower than 7°C.
- Note the manufacturer operating temperature ranges at the end of this user manual.

OPERATION

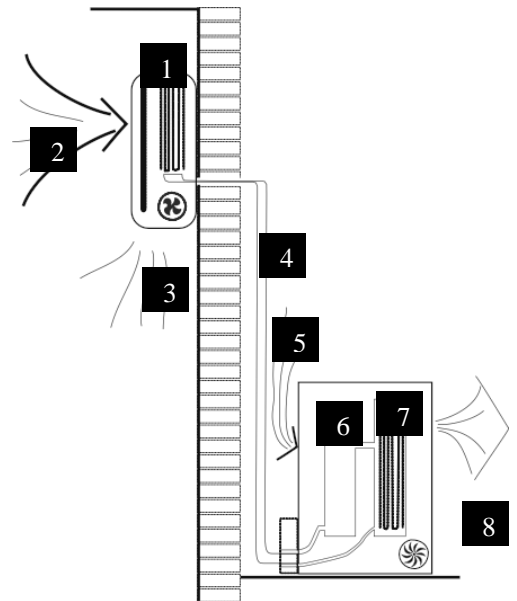
Cooling Mode

The compressor (6) in the exterior unit compresses the refrigerant into a high-temperature, high-pressure gas. When this gas flows along the cooling fins of the condenser (7), heat is exuded and the gas condenses into a liquid, which is led to the evaporator (1) in the interior unit. The liquid expands into a gas at a low temperature and low pressure is converted.

This gas absorbs the warmth of the air in the room, the cooled air is blown back into the room and the heat is moved to the compressor along with the gas.

A fan (3) draws the air over the filter and blows the cooled air back into the room. A fan (8) draws air over the condenser and blows warm air away.

1. Evaporator 2. Filter 3. Evaporator Fan 4. Gas Line 5. Liquid line
6. Compressor 7. Condenser 8. Condenser Fan



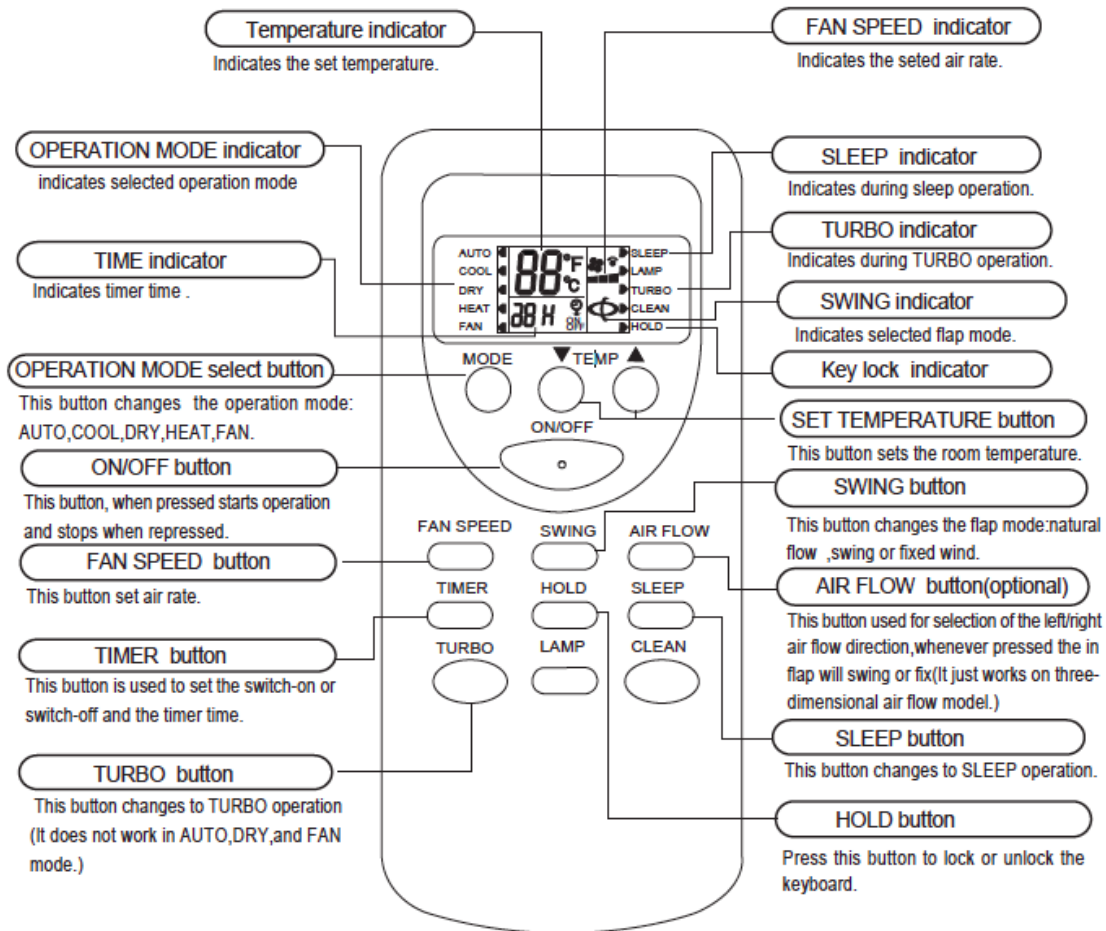
Heat Pump Mode

The system operates in reverse: the condenser works as an evaporator, the evaporator as a condenser: warm air is blown into the room. It is ideal as a maintenance heating when outside temperature is not too low and when indoor temperature is more than 7°C.

Dehumidifying

As with cooling, the moisture in the air condenses on the cold evaporator at room temperature acting as a powerful dehumidifier.

REMOTE CONTROL



The remote control has a range of up to 8m. Point the remote control at the receiver in the interior unit. A beep confirms that the remote control signal has been received.

NOTE: LAMP button and CLEAN button may not available in every models

REMOTE OPERATION

Turn the appliance on with the **ON/OFF** button. This activates the most recent used setting. The ON/OFF button turns the air con off.

TEMPERATURE

The desired temperature is set with the up and/or down button, within the limits of the thermostat: 16°C – 32°C.

Use the **FAN SPEED** button to set the fan speed at low, medium and high; or automatic (the symbol on the display will flash). The fan speed in the automatic setting is determined by the difference between the set temperature and the room temperature.

Cool

1. Press the **MODE** button until the **COOL** indicator appears.
2. Set the desired temperature.
3. Use the **FAN** button to set the fan speed.

Heat

1. Press the **MODE** button until the **HEAT** indicator appears
2. Set the desired temperature.
3. Use the **FAN** button to set the fan speed.

Fan mode

1. Press **MODE** button until the **FAN** indicator appears.
2. The temperature settings will not control fan operation
3. Use the **FAN** button to set the fan speed.

Dehumidify

1. Press the **MODE** button until the dehumidify indicator appears.
2. The **FAN** button does not work in dehumidify mode. The fan speed will always be low in this mode. Also temperature cannot be adjusted in dehumidifying mode

Auto mode

1. Press the **MODE** button until the **AUTO** indicator appears.
2. The difference between set temperature and room temperature determines how the air conditioner operates: cool, heat, fan or dry. The up and down buttons will not work.
3. Use the **FAN** button to set the fan speed.

Timer off function (while air conditioner is on)

1. Press the **MODE** button until the symbol appears for the operation you want.
2. Set the desired temperature.
3. Use the **FAN** button to set the fan speed.
4. Press the timer off button to set the time. Use the up and down button to choose from 1-24 hours timer setting. Once the time you have set has elapsed, the appliance will switch itself off. To cancel the timer off function before the set time has elapsed, press the timer off button again.

Timer on function (while air conditioner is in standby)

1. The appliance is switched off in standby mode
2. Press the **TIMER** button to set the time. Use the up and down button to choose from 1-24 hours timer setting. Set the desired operation, temperature, fan speed, etc. Once the set time has elapsed, the appliance will switch itself on. To turn off the timer on function before the set time has elapsed, press the timer on button again.

Sleep mode

1. Press the **SLEEP** button
2. Set the desired temperature.
3. Press the **SLEEP** button; **SLEEP** indicator will appear on the display.
Cancel the sleep mode by pressing this button again.
4. The fan speed is low in sleep mode.

Turbo

1. Press the **MODE** button until the fan symbol appears.
2. Set the desired temperature.
3. Use the **FAN** button to set the fan speed
4. Press the **TURBO** button. The fan and compressor will run at maximum speed for 15 minutes, then at previously set speeds.

IMPORTANT

Auto restart. The air conditioner will automatic restart when electricity is restored after a power cut. If in doubt, check the settings.

Range of internal thermostat the internal thermostat can be set at a desired temperature between 16 and 32°C. Note that whether the desired value is achieved depends on size, temperature and insulation of the room.

Range of heat pump function

The heat function can be used when the external ambient temperature is above 5°C or higher. The performance of the heat pump will degrade with lowering external temperatures.

Capacity

The required cooling or heating capacity depends greatly on the location and/or use of the room where the air conditioner is installed. Strong sunlight and the presence of people, lights or equipment create an additional heat load. Normal living spaces require about 100 W per square metre of floor surface. In strong sunlight or if other sources of heat are present, this may be as much as 350 W/sqm.

Tip: on warm days, let the air conditioner cool the room as much as possible during the night and set the temperature constant from night to daytime.

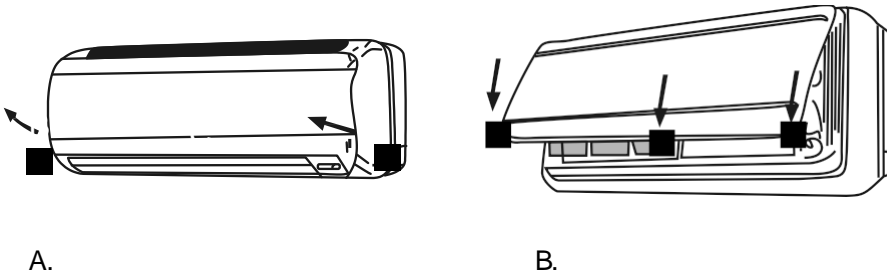
Emergency start

In the event of a problem, the air conditioner can be operated using the emergency button under the panel in the interior unit. Open the front panel and press the button, the air conditioner will:

-heat if the room temperature is 20 °C or less, cool if the room temperature is 25 °C or more and for values in between: dehumidify in a model without a heat pump and in a model with a heat pump in fan mode.

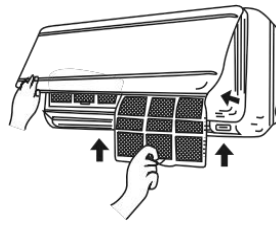
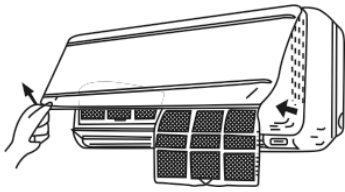
FILTERS

Turn off the appliance from the consumer unit before attempting to service the filters.



Opening the front panel: at the A recesses, pull the front part up with both hands. The front panel will stay horizontal (at around 90°).

Closing the front panel: press the front part down at the sides at B and in the middle at. Make sure it is properly closed (click).



1. Hold the front panel open (or put it in horizontal position) and remove the filter(s).
2. Use a vacuum cleaner to remove dirt. If the dust filter is very dirty, it may be washed in lukewarm water with a very small amount of neutral detergent. Rinse well and allow to dry completely (not in direct sunlight or near a source of heat).
3. Keep the grid panel open and reinstall the filter(s). Press the panel shut; a click indicates it is closed properly.
4. Restore the power from the consumer unit and turn the air conditioner on.

Indoor Unit: While the unit is disconnected from power dust regularly with a dry cloth or slightly damp paper towel. Never use chemicals or solvents. Never spray a liquid in or over the appliance.

Exterior unit: While the unit is disconnected from power. Remove dirt and keep the air intake and exhaust openings free of debris, etc. Cleaning with chemicals may cause damage.

END OF SEASON

If the air conditioner is not going to be used for an extended period:

- set in fan mode on a slightly warm day so that the inside of the appliance dries out.
- switch off the power from fuse box and remove the batteries from the remote control.
- clean filters as well

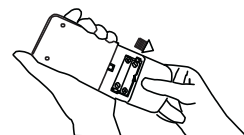
START OF SEASON

If the air conditioner is to be used again after an extended period:

- check that the air intake and exhaust openings of the interior and exterior units are not blocked. Remove all dirt and debris.
- check that filter is installed and is clean.
- check that the condensation outlet drains properly and there is no dirt or organic blockage (otherwise leakage may occur)
- install 2 AAA batteries in the remote control.
- turn the appliance on, set the time and desired setting.

REPLACING THE BATTERIES

- remove the remote cover.
- replace the AAA batteries, + to + and – to –.
- install the cover.
- press the on/off button; if no symbols appear on the display, the batteries are empty or have been incorrectly installed.



INSTALLATION GUIDE

SAFETY

Only qualified personnel should install this appliance. This install manual is intended for use by individuals possessing adequate backgrounds and qualifications in electrical, electronic, refrigerant and mechanical field. Any attempt to install or repair the appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use. The units are designed for permanent installation. The equipment is designed for domestic or office use and we are not making any endorsements for use in industrial or maritime environment. Do not place near sources of heat, vapors, industrial machine oil or other flammable gases. High-frequency waves generated by radio equipment, welders and medical equipment will interfere with the normal operation of the unit. Install this device only when it complies with local/national legislation, ordinances and standards. Check the mains voltage and frequency. This unit is only suitable for earthed electrical supply, connection voltage 230 V~ / 50 Hz.

The information, specifications and parameter are subject to change due to technical modifications or improvement without any prior notice. The accurate specifications are presented on the nameplate label.

Please read this installation manual completely before installing the product.

When the power cord is damaged, replacement work shall be performed by authorized personnel only.

Installation work must be performed in accordance with all European, national and / or local directives and standards and must be done by authorized personnel only.

Always make sure to wear the correct personal safety protections such as protective eyewear, gloves, ear protection etc.

This air conditioner contains a refrigerant and can be classified as pressurized equipment.

Therefore always contact an authorized air conditioning engineer for installation and maintenance of the air conditioner. The air conditioner must be inspected and serviced on an annual base by an authorized air conditioning engineer.

For your convenience you can download the latest version of the user / installation manual on www.electriq.co.uk

Indoor Unit Position

The air inlet and outlet vent should be far from any obstruction, ensuring that there is a good airflow through the whole air-conditioned space. Select a position where the condensing water can be easily drained out, and the indoor unit can be easily connected to outdoor unit. The wall where the unit is fixed should be strong enough to withstand the full weight and vibration of the unit. The unit should be accessible for service maintenance. The height of the installed unit should be ideally more than 200cm from floor. The air conditioner must not be installed in a wet environment as a bath, shower or swimming pool etc.

Outdoor Unit Position

A convenient position, dry and well ventilated, outside of direct sunlight or strong winds, which is not on flood line and where noise and airflow does not cause interference or inconvenience. Select a location where there should be no obstructions to the inlet and outlet vents. The location should be able to withstand the full weight and vibration of the outdoor unit and permit safe installation.

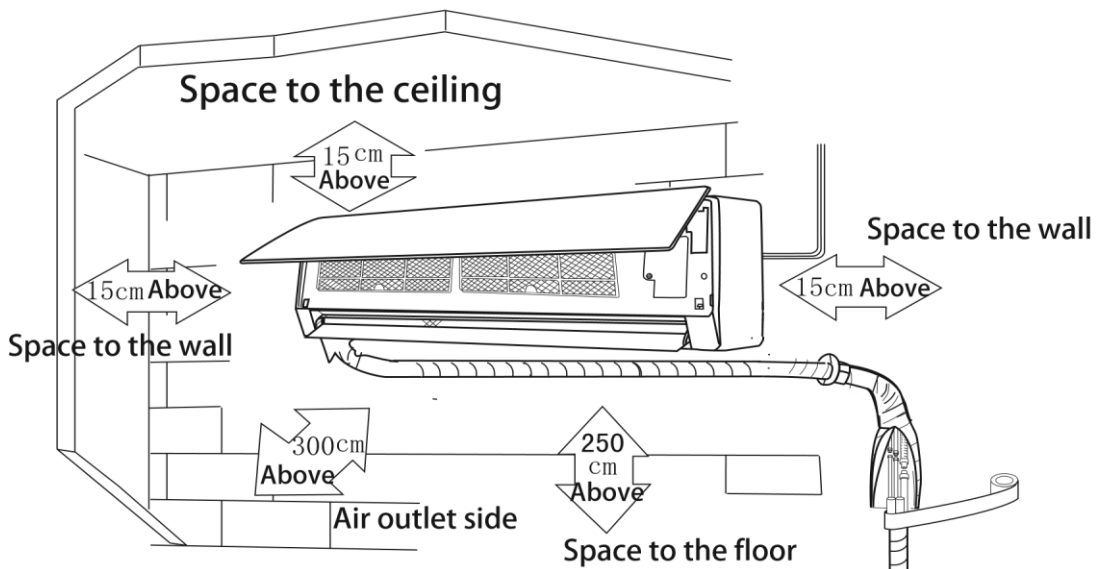
Make sure that the outdoor unit installation is made in respect to installation dimension diagram with easy maintenance access. Select a place where it is out of children reach for the children. Do not block utilities access or fire escapes.

The external unit must be lifted and put in place by two people.

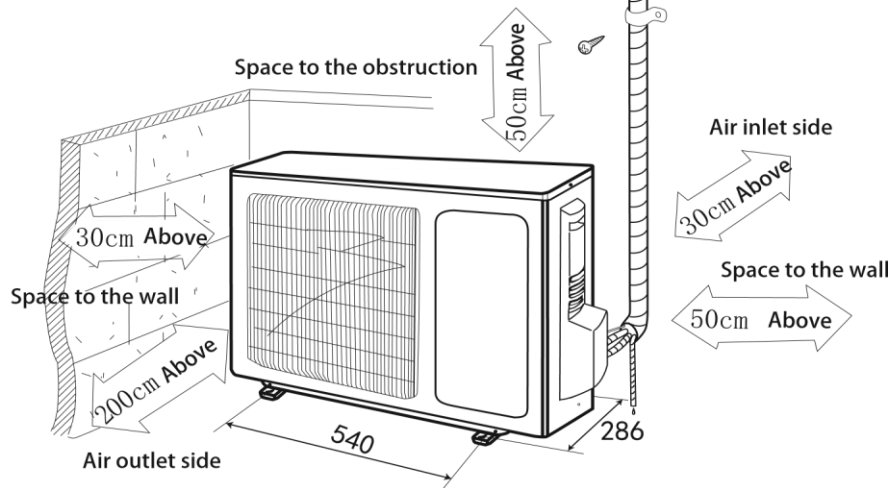
NOTES:

1. Only use correct power voltage making sure the correct sized power cables are used
2. The appliance shall be installed in accordance with standard wiring regulations by qualified personnel
3. Only replace fuses according to their printed rating or corresponding pcb boards.

RECOMMENDED INSTALLATION SPACING DIAGRAM



- The dimensions of the space necessary for correct installation of the appliance including the minimum permissible distances to adjacent structures



TOOLS RECOMMENDED FOR INSTALLATION



Electric drill



Hammer



Screwdrivers



Tape measure



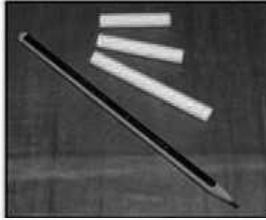
Core hole cutter



Spirit



Number 14 (7mm) masonry drill



Pencil and chalk



1.5 inch number 10 screws roundhead slotted



Small stepladder



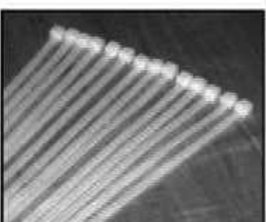
7mm wallplugs



Protective glasses and mask



Pipe&cable detector



4 inch plastic ties

Also the following



2 inch Pipe clips



Circuit breaker when drilling inside and out



Garden gloves when lifting the outdoor unit



Dustsheets



Foam Filler



Silicone sealer and gun



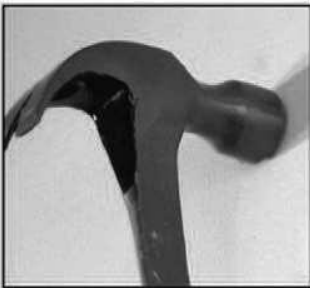
1. Check the area for any hidden wires or pipes.



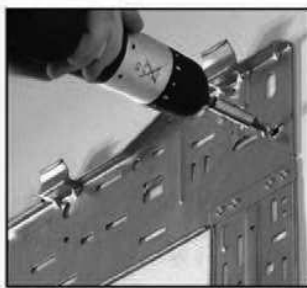
2. Mark the righthand backplate screw position.



3. Remove the backplate and drill a 7mm hole.



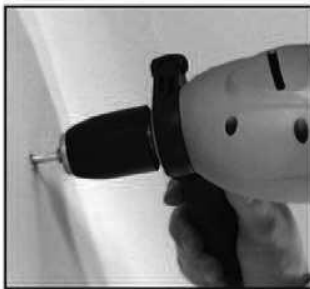
4. Tap home a 7mm wallplug.



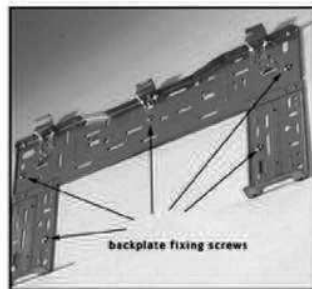
5. Screw the backplate to the wall using 1.5 inch number 10 screws.



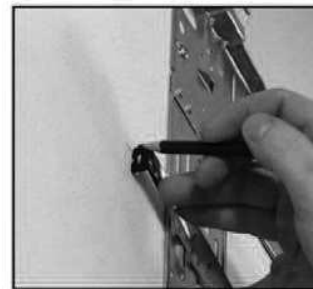
6. Check level, mark the other holes and swing the backplate away.



7. Drill the rest of the holes and tap in wallplugs



8. Fix the backplate to the wall.



9. Mark the hole centre make sure the 3.5 inch cutter will clear the backplate.



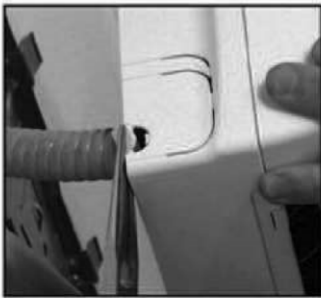
10. Drill the hole at a slight downward angle. When you feel the pilot drill exit the outside wall stop



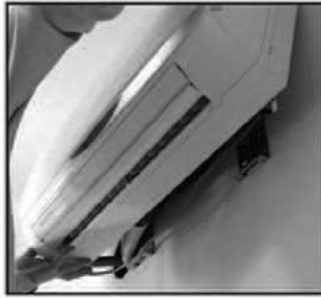
11. Finish the hole from the outside to keep it clean



12. Feed the cord and drain hose carefully through the wall



13. Undo the power lead and break out the plastic lead tab.



14. Hook the indoor unit onto the top of the backplate.

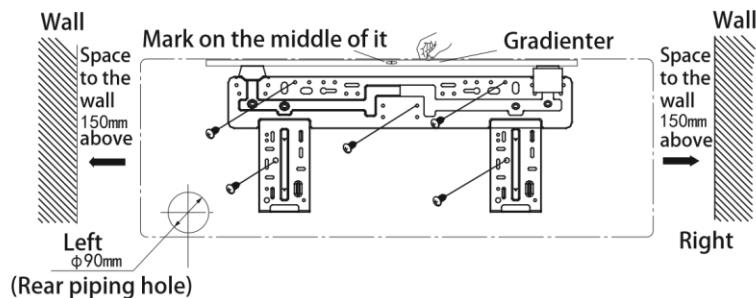


15. Lock the bottom of the unit onto the base of the backplate.

Notes:

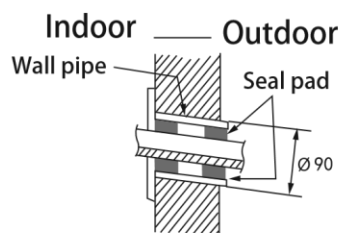
Install the rear panel

1. Always mount the rear panel horizontally. Due to the water tray of indoor unit has been adopted the both-way drainage design, the outlet of water tray should be adjusted slightly down when installing, that is taking the outlet of the water tray as the center of a circle, the included angle between the evaporator and level should be 0 or more, that is good for condensing water drainage.
2. Fix the rear panel on the wall with screws. (Where is pre-covered with plastic granula)
3. Be sure that the rear panel has been fixed firmly enough to withstand the weight of an adult of 60kg, further more, the weight should be evenly shared by each screw.



Install the piping hole

1. Make the piping hole ($\phi 90$) in the wall at a slight downward slant to the outdoor side.
2. Insert the piping-hole sleeve into the hole to prevent the connecting piping and wiring from being damaged when passing through the hole.



The piping can be lead out both on the right or the left of the indoor unit as seen in fig. 1. Please cut off the pipe hole guards if you are changing the pipe position. The unit also features alternatives guards for more pipe positioning.

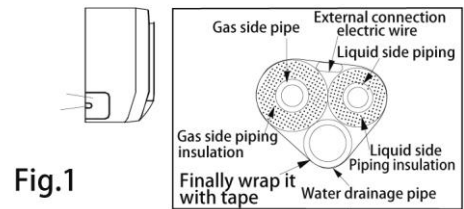


Fig.1

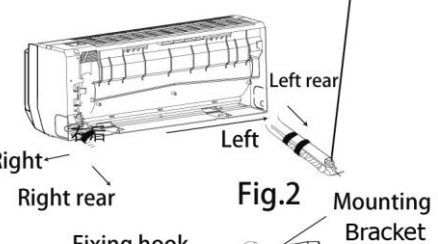


Fig.2

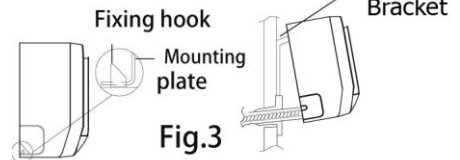


Fig.3

Make sure that the drain pipe is underneath the pipelines. (Fig.3) (When the drain pipe passes the room interior, some condensed water might occur to its surfaces if the humidity is very high).

Tidy up the copper pipes, electrical cables and water drains and pass them through the piping wall hole drilled before (fig.2).

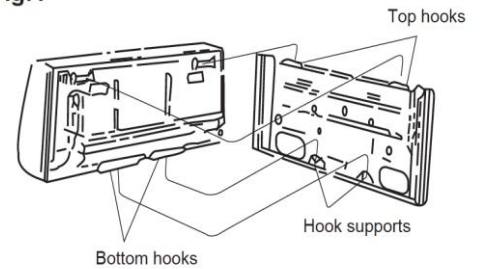
Hang the mounting slots of the indoor unit on the wall mounting bracket making sure is tight in place (fig.3) so that the hooks at the bottom of the indoor unit match the hooks of the wall mounting bracket (fig.4)

Notes:

1. The height of the installed unit is recommended to > 200 cm.
2. Either the indoor unit or the outdoor unit can be higher, but the height difference must comply with a max. 5 metres level difference.
3. Try to reduce the bending of the pipes as much as possible so as to avoid possible negative impacts upon the performances of the unit.

For the quick connectors model the pipes and electrical cables will be encased in a plastic “umbilical cord” but there will still be need for careful handling of the piping to avoid bends.

Fig.4



INSTALLATION OF THE OUTDOOR UNIT

Try to move the product to the installation location in its original packaging

As the gravity center of the unit is not at the installation center, special caution should be taken when using hoisting cables to lift it up

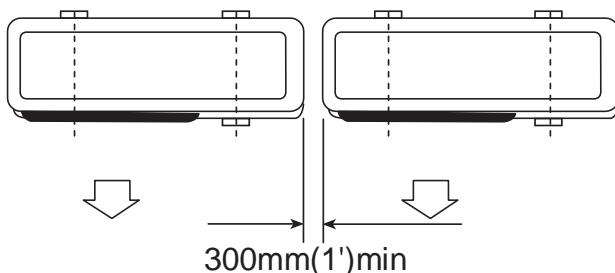
During transport, the outdoor unit must not be tilted to over 45 degrees (also do not store the unit horizontally).

Use expansion bolts to fix the mounting supports on the wall;

Use bolts and nuts to fix the outdoor unit firmly on the supports and keep on the same level;

If the unit is installed on the wall or at the rooftop, the supports have to be firmly fixed so as to resist earthquake or strong wind.

Dimensions for parallel units installations



STANDARD PIPELINES CONNECTION & AIR PURGING

(Only for non-quick connector models (eIQ-9WMINV / eIQ-12WMINV / eIQ-18WMINV eIQ-24WMINV).

No dust or any other particles, air or moisture should be allowed to enter the air conditioning system. Careful attention should be paid when pipeline connection for outdoor unit is made. Try to avoid repeated curves as much as possible; otherwise damage to the copper pipes may occur. Suitable wrenches should be used when the pipeline connection is done so as to ensure appropriate torque (refer to following torque table). Excessive torque action might damage the joints while too little torque might lead to leakage.

Torque based upon the wrench to be used

Copper pipe diam.	Tightening torque	strengthened tightening torque
6.35(1/4")	160kgf.cm(63kgf.inch)	200kgf.cm(79kgf.inch)
9.52(3/8")	300kgf.cm(118kgf.inch)	350kgf.cm(138kgf.inch)
12.7(1/2")	500kgf.cm(197kgf.inch)	550kgf.cm(216kgf.inch)
15.88(5/8")	750kgf.cm(295kgf.inch)	800kgf.cm(315kgf.inch)
19.05(3/4")	200kgf.cm(472kgf.inch)	1400kgf.cm(551kgf.inch)

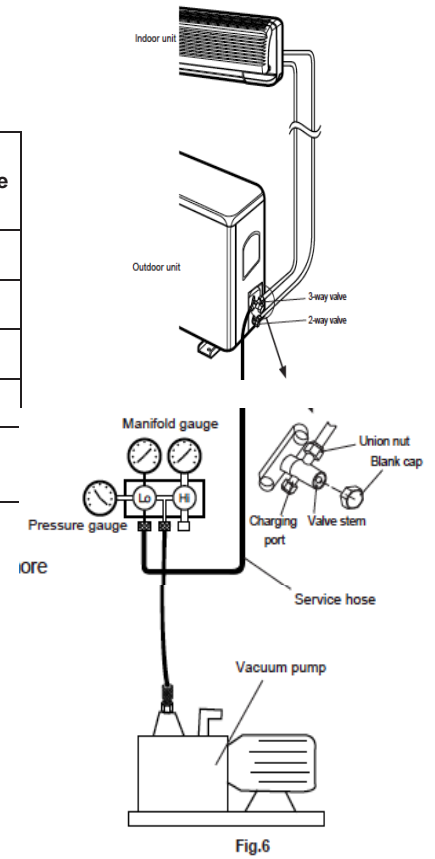


Fig.6

Air purging with vacuum pump

1. Check that pipelines connection have been properly connected, remove the charging port cap, and connect the manifold gauge and the vacuum pump to the charging valve by service hoses as shown
2. Open the valve of the low-pressure side of manifold gauge, then run the vacuum pump. Vacuum the indoor unit and the connecting pipes until the pressure in them lowers to below 1.5mmHG (The operation time for vacuuming is about 10 minutes). When the desired vacuum is reached, close the valve of the low pressure of the manifold and stop the vacuum pump.
3. Disconnect the service hoses and fit the cap to the charging valve.
4. Remove the blank caps, and fully opens the spindles of the 2-way and 3-ways valves with a service valve wrench.
5. Tighten the blank caps of the 2-way and 3-ways valves, applying the above torque Table

Adding refrigerant

Refrigerant must be added if the piping measures more than 5 metres (16'5") in length. This operation can only be performed by a professional F-Gas engineer, for the additional gas amount, see the below

Additional refrigerant amount

Liquid pipe diameter 6.35(1/4") Liquid pipe diameter: 9.52(3/8")
 (piping length-5)m x 30g (piping length-5)m x 65g
 or (piping length-16)ft x 0.3oz or (piping length-16)ft x 0.7oz

Gas leakage inspection

After the pipeline connection is done, use a leakage inspection device to carefully check if there is any leakage at

the joints. This is an important step to ensure the quality of installation. Once a leakage is detected, proper action should be taken immediately.

QUICK CONNECTORS OUTDOOR UNIT INSTALLATION eIQ-12WMINVQC

Installation of the eIQ-12WMINVQC is faster and required less tools. There is no need to use a vacuum pump.



1. Gently bend the pipe at right angles to the wall.



2. Mark a vertical chalk line on the wall using a spirit level.



3. Mark a chalk line on the floor to line up the outside unit with the connecting cord



4. Mark the four unit fixing holes on the floor.

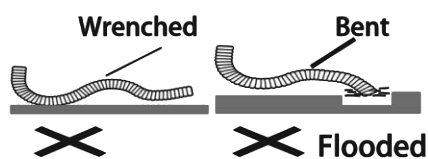


5. Remove the unit. Drill the 7mm holes and tap in the wallplugs.

Notes:

Install the water drainage pipe

1. For well draining, the drain hose should be placed at a downward slant
2. Do not wrench or bend the drain hose or flood its end by water.
3. When the long drainage hose passing through indoor, should wrap the insulation materials.

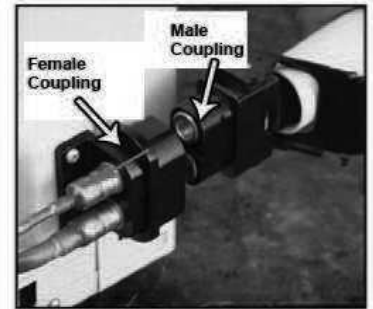




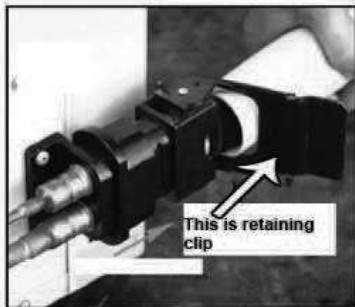
1. Push the drain hose onto the indoor unit outlet.



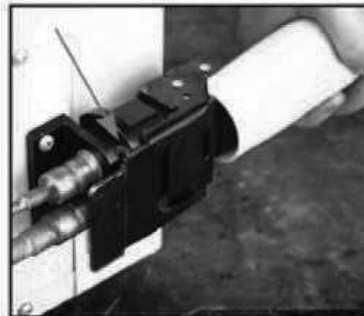
2 Remove the raincover from the side (Indoor Unit).



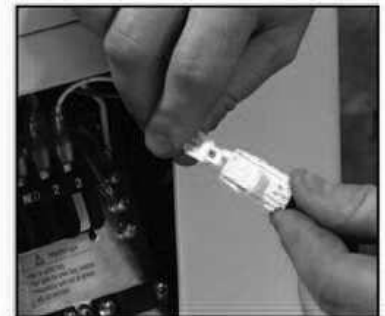
3. Slide the lug towards left side (1) from female coupling.



4. Push the male coupling connector (2) right inside female coupling.



5. Close the retaining clip (4), make sure the fingers of the clip are engaged on the back of the lug



6. Push the electrical snap connector together.



7. Connect the 3 wires to the terminal board.



8. Clip on the raincover and fasten the retaining screw.



9. Fold the excess cord back on itself and clip it with plastic ties.



10. Screw down the unit. You will need four washers (not supplied).



11. Fix the cord and drain hose to the wall.

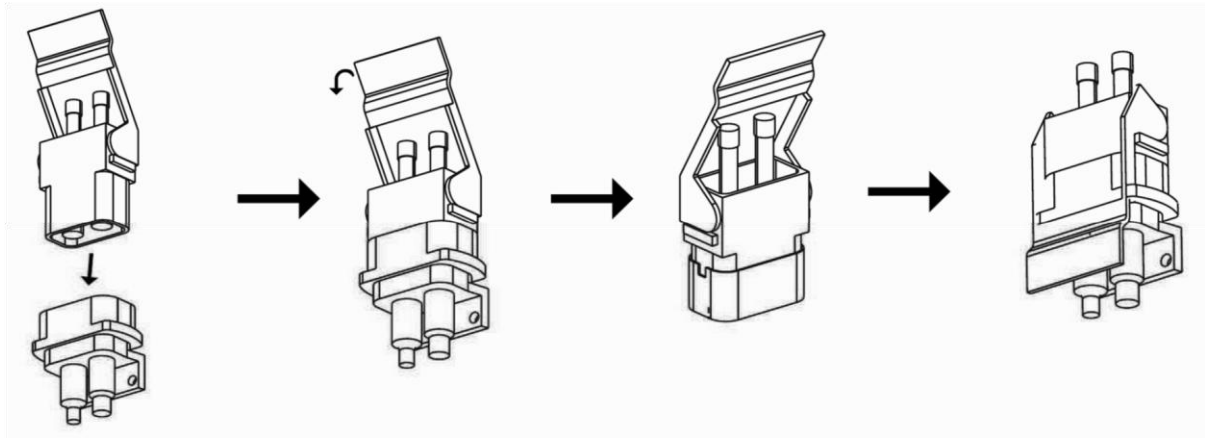


12 Switch on at the mains, run test and check for any coolant or water leakage.

eIQ-XXWMINVQC Quick Connectors

Notes:

To connect the couplings







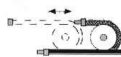
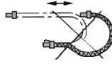




- Step 1: Ensure that the handle on the male coupling is in a reclined position away from the mating male coupling.
- Step 2: Retract the Release Sleeve on female coupling, insert the male coupling located on the indoor unit into the female coupling.
- Step 3: Release the "Release Sleeve" to lock the male coupling into place.
- Step 4: Fold the male coupling handle towards the female coupling half and push until the handle seals behind the "Release Sleeve" and is flat against the entire coupling assembly.

To disconnect the couplings

- Step 1: Shut down the A/C unit and unplug the electrical power cord from the wall outlet.
- Step 2: Wait five minutes for the line pressure between the indoor compressor unit and outdoor condensing unit to equalize.
- Step 3: Pull the male coupling handle up and toward the male coupling to the full back position.
- Step 4: Retract the Release Sleeve on the female coupling to release the male coupling half from the female half.
- Step 5: To seal and protect from dust, reinstall the protective cap and plug.

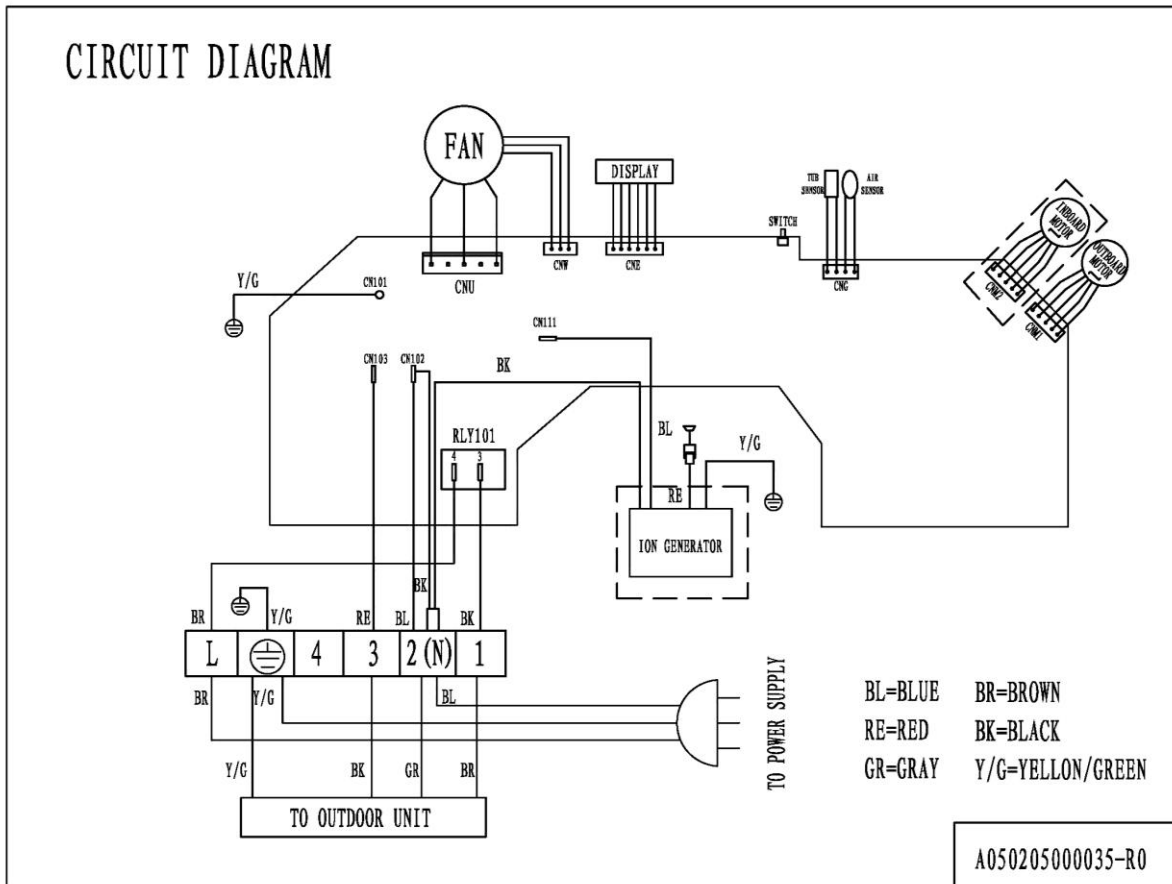
NOTES:

The copper pipe use in the “umbilical cord” of the quick connectors model pipelines and the standard copper refrigeration lines is very soft high pressure copper and prone to get damaged if not handled correctly. Try to avoid getting it bended or stretched.

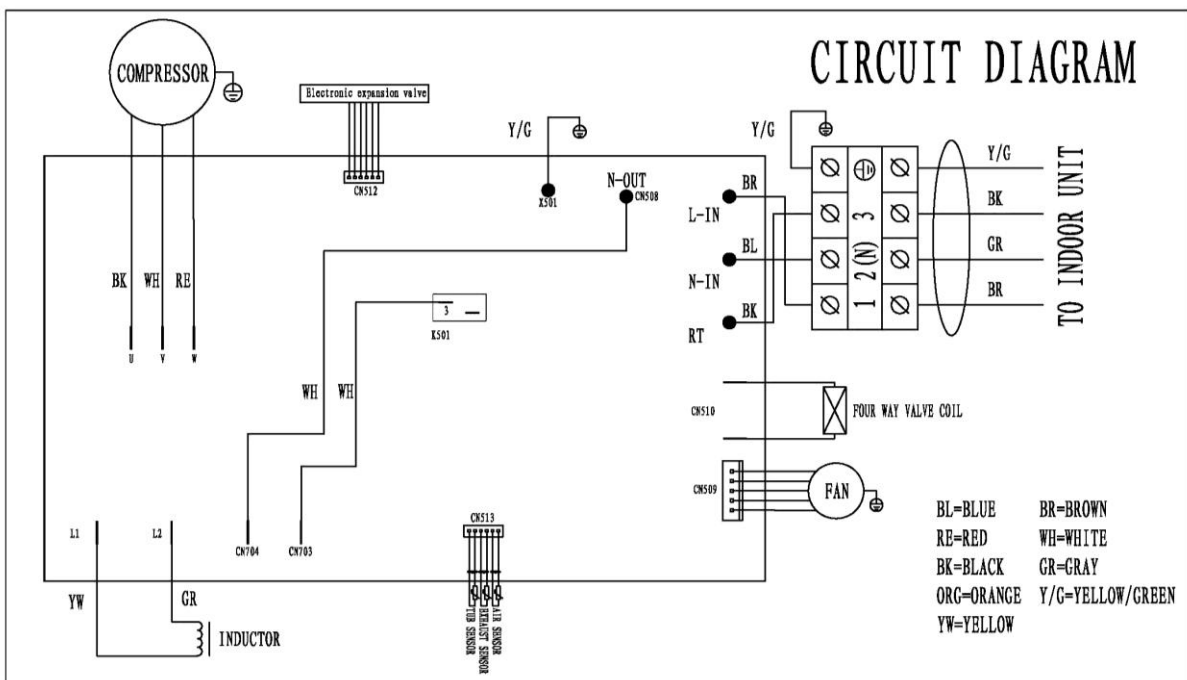
<p>To keep the allowed bending radius please make the packed soft pipes vertical before extending</p>			<p>Please do not extend only one side of the packed soft pipes.</p>
<p>Please make use of semicircle pulley to keep the allowed bending angle</p>			<p>Extremely bending could damage the pipes</p>
<p>Please use a twisting wheel to avoid improper bending.</p>			<p>Over bent soft pipes will lead to irregular bending</p>
<p>Please use rigid elbow to keep the bending angle while soft pipes operating.</p>			<p>Undersize bending will damage the soft pipe.</p>
<p>Please keep the minimum bending angle while installing</p>			<p>Short soft pipes will bent aside admitted angle</p>

ELECTRICAL WIRING DIAGRAMS- eIQ-9WMINV(QC)

Indoor Unit

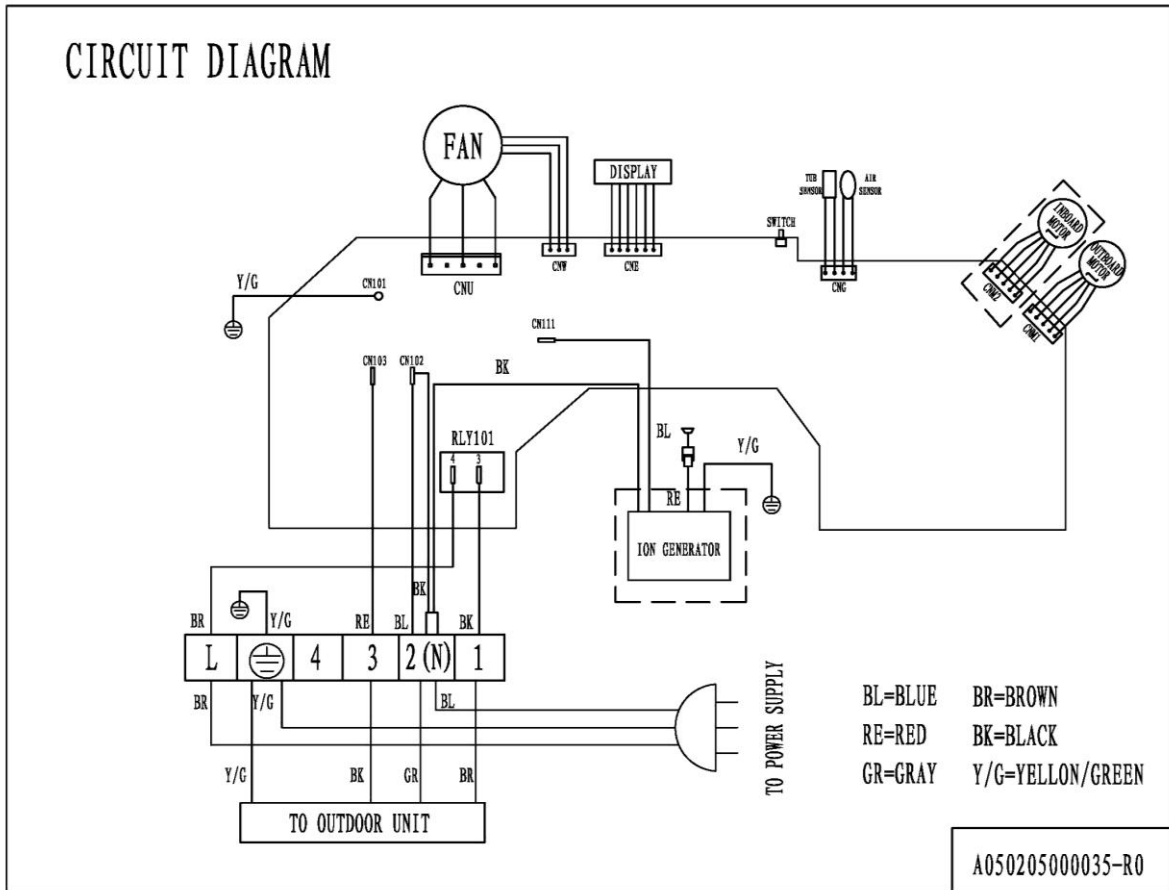


Outdoor Unit

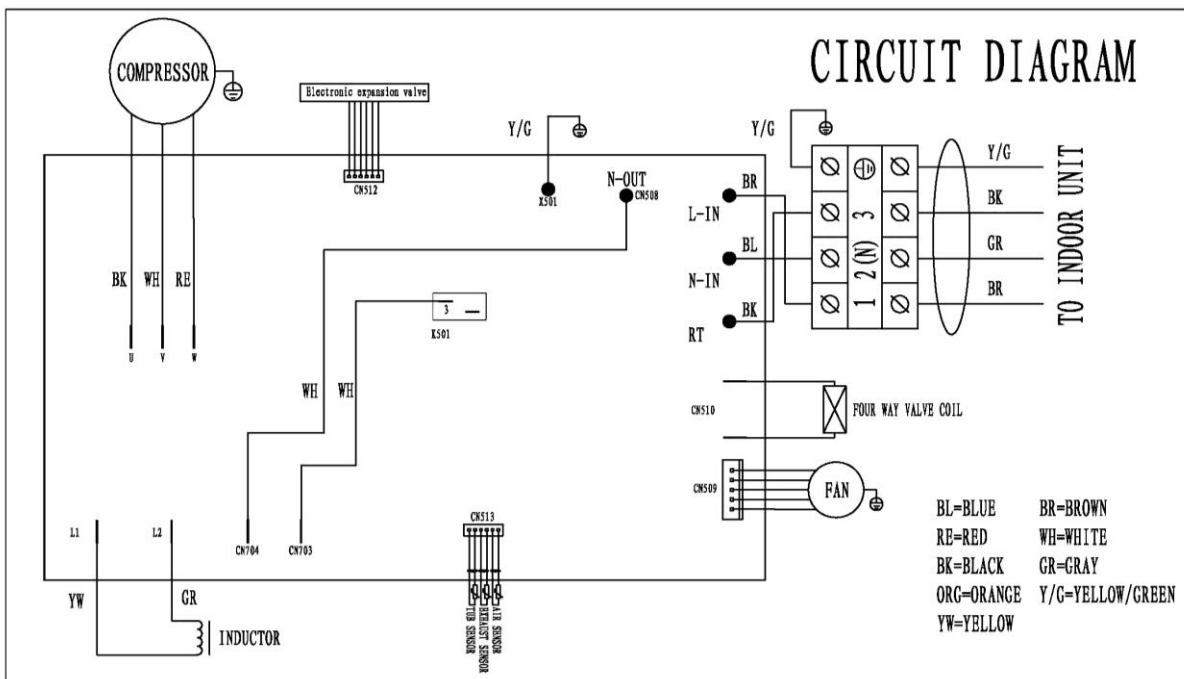


ELECTRICAL WIRING DIAGRAMS- eIQ-12WMINV(QC)

Indoor Unit

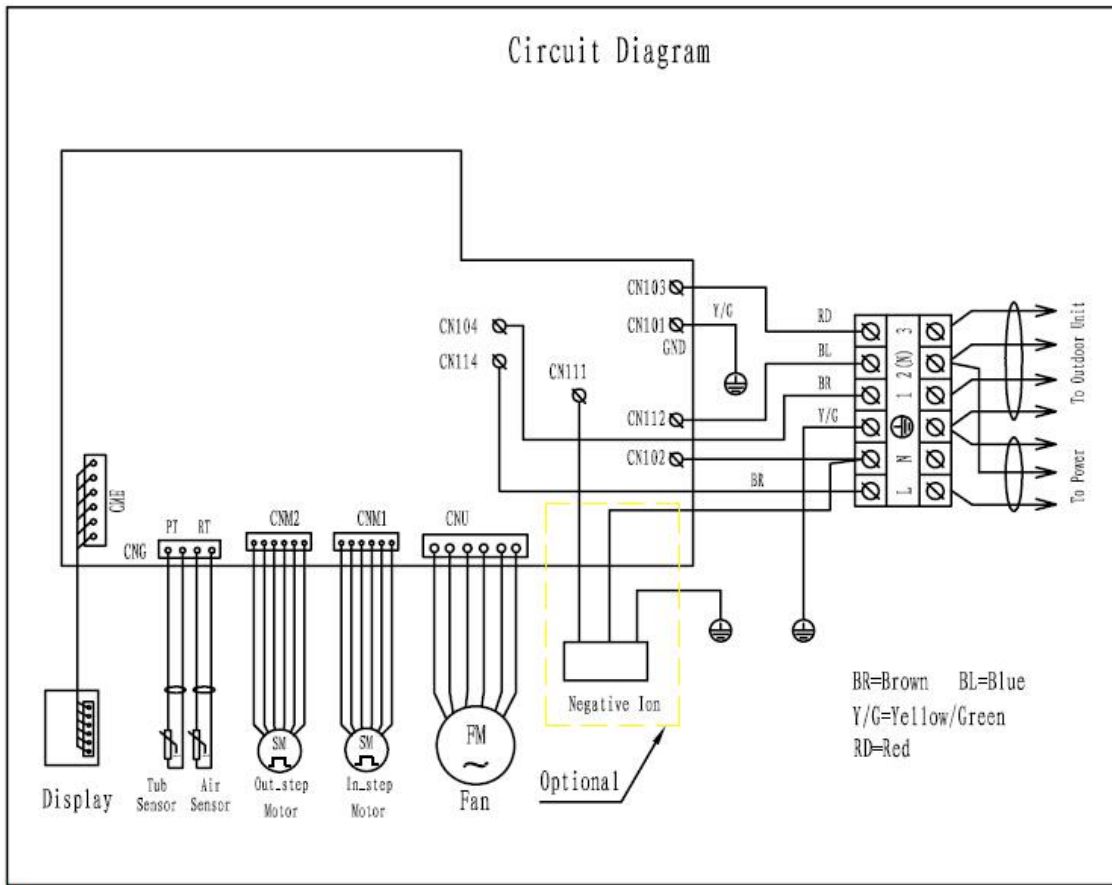


Outdoor Unit

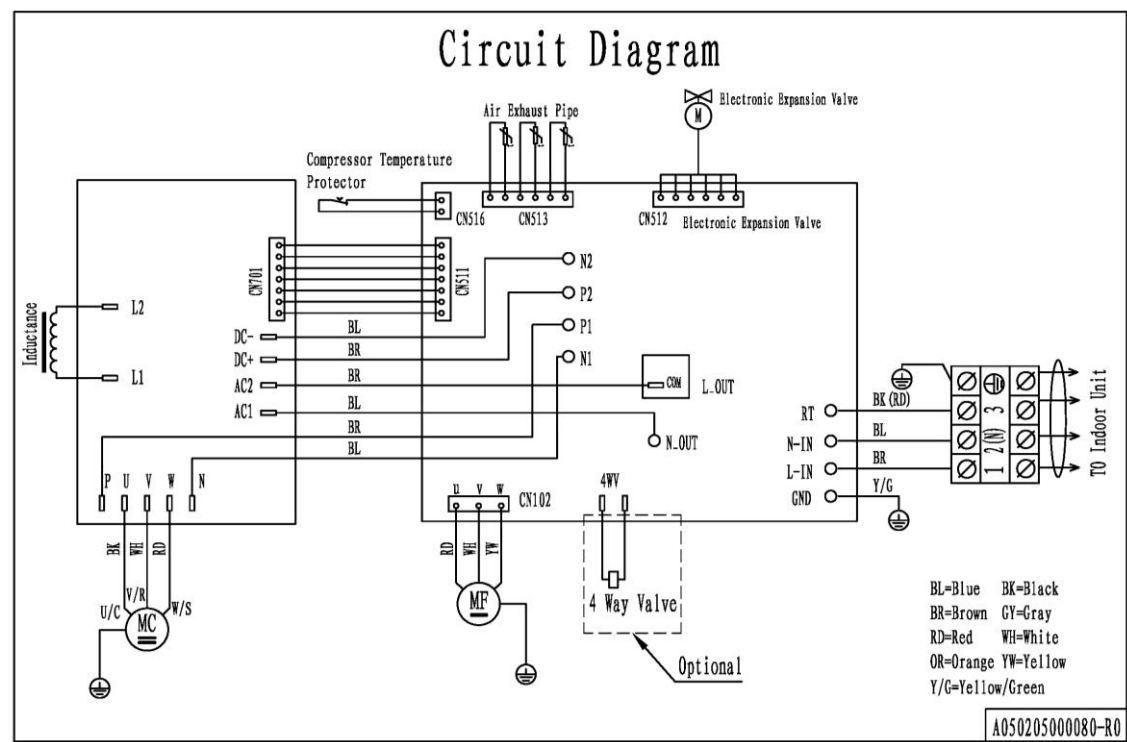


ELECTRICAL WIRING DIAGRAMS- eIQ-18WMINV (QC)

Indoor Unit

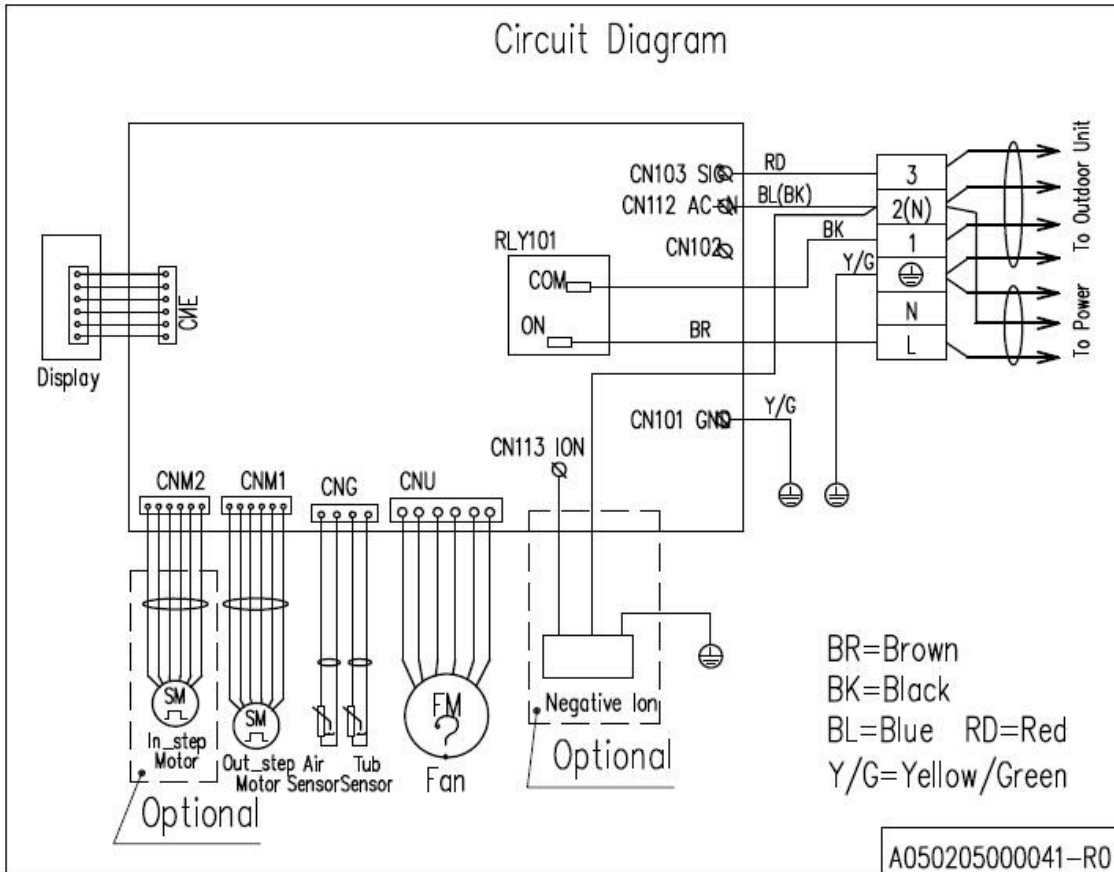


Outdoor Unit

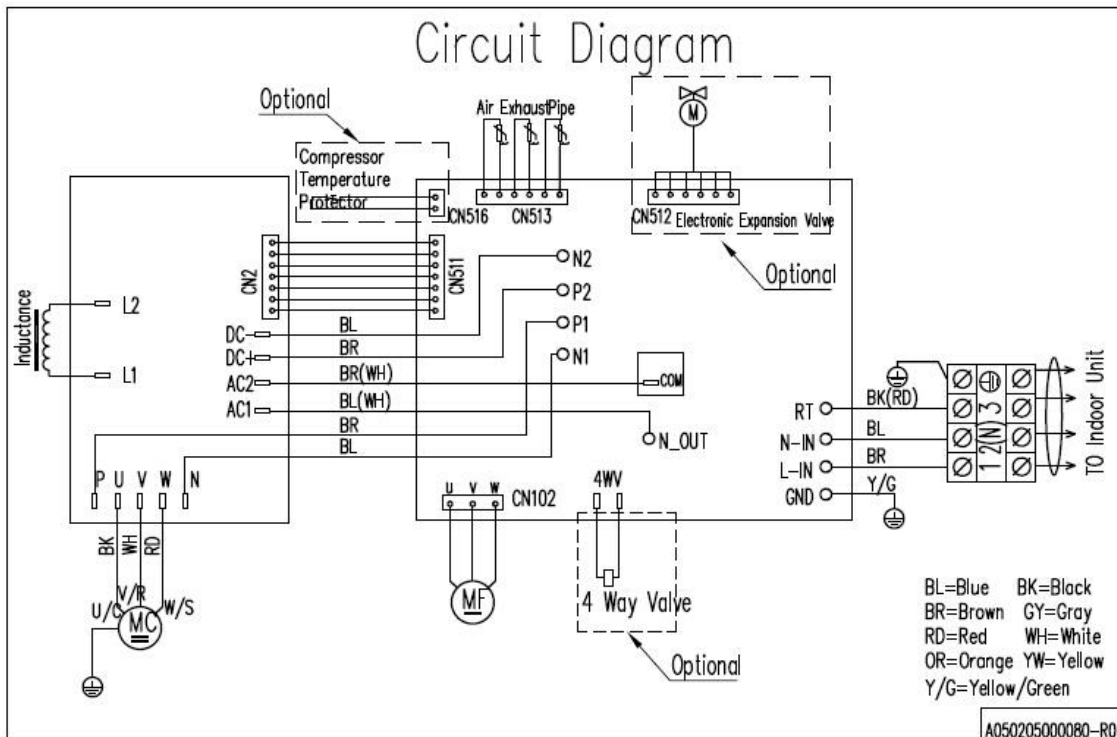


ELECTRICAL WIRING DIAGRAMS- eIQ-24WMINV

Indoor Unit



Outdoor Unit



TROUBLESHOOTING AND SELF DIAGNOSIS

ElectrIQ air conditioners have an advanced self-diagnosis system allowing them to display the service information

Check	No	Malfunction	Indoor unit display status		
			Code	LED	
				Running lamp flashing frequency n	Timing lamp flashing frequency n
Indoor parts	1	The communication faults in the indoor and outdoor units	F1	1	lighten
	2	Indoor ambient temp. sensor fault	F2	2	Lighten
	3	Indoor coil temperature sensor fault (Include: Inlet, middle of pipe, outlet.)	F3	3	Lighten
	4	Indoor fan fault	F4	4	Lighten
Outdoor parts	1	Outdoor module fault	F5	5	Lighten
	2	Outdoor ambient temp. sensor fault	F6	6	Lighten
	3	Outdoor coil temp. sensor fault	F7	7	Lighten
	4	Compressor suction temp. sensor fault	F8	8	Lighten
	5	Compressor discharge temp. sensor fault	F9	9	Lighten
	6	Inductor of current or voltage fault	FA	10	Lighten
	7	Compressor drive abnormal fault	FC	11	Lighten
	8	Power supply phase lacking or phase sequence fault	FD	12	Lighten
	9	Return-air sensor abnormal (Include these roads A,B,C,D)	FE	13	Lighten
	10	Other fault	FF	14	Lighten

Note A: The meaning of timing and running lamp flashing frequency n: When the unit is faulty, while the timing lamp lightens, the running lamp will flash at 1 time/second. Then both lamps will be off for 2 seconds and repeat this cycle again and again.

Note B: although the above diagnostic information is commonly applicable in most of air conditioners, there may be exceptions, please contact the manufacturer for help.

TECHNICAL SPECIFICATIONS

Model	eIQ-9WMINV (QC)		eIQ12WMINV (QC)		eIQ-18WMINV (QC)		eIQ-24WMINV	
Rated voltage and frequency (Ph-V-Hz)	1-220-240/50		1-220-240/50		1-220-240/50		1-220-240/50	
Mode	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Rated capacity (W)	2500 (1500~3300)	2600 (1300~3400)	3500 (1600~3800)	3600 (2000~4200)	5100 (1900~5500)	5200 (2000~5700)	7000 (4000~8400)	7600 (4000~9000)
Cooling power input (W)	780 (380~1200)	720 (390~1200)	1090 (340~1400)	990 (420~1350)	1580 (660~1880)	1440 (670~1920)	2180 (900~3360)	2100 (900~3360)
Heating current input (A)	3.5 (1.6~5.4)	3.3 (1.7~5.5)	5.2;4.9(QC) (1.6~6.4)	4.3;4.5(QC) (1.9~7.0)	7.2 (2.8~8.5)	6.6 (2.9~8.7)	10.0 (4.2~15.4)	9.6 (4.2~15.4)
SEER/SCOP(W/W)	6.1/A++ ;5.6/A+ (QC)	4.0/A+; 3.8/A (QC)	6.1/A++; 5.6/A+(QC)	3.8/A; 4.0/A+(QC)	5.6/A+	3.8/A	5.6/A+	4.0/A+
Nominal load (kW)	2.6; 2.5(QC)	2.6; 2.4(QC)	3.5	2.9; 3.0(QC)	5.1	5.1	7.0	7.0
Balance point temperature Heating (°C)	/	-7	/	-7	/	-7	/	-7
Min. outdoor operating temperature (°C)	/	-10	/	-10	/	-10	/	-10
Thermostat-off mode (W)	29		29		66		80	
Standby mode (W)	0.5		0.5		0.5		0.5	
Off mode (W)	0		0		0		0	
Annual consumption(kW)	143;156(QC)	910;884(QC)	204; 219(QC)	1096; 1050(QC)	293	1879	438	2450
Copper Pipe Type length	5 meters; 4 meters (QC)		5 meters; 4 meters (QC)		5 meters; 4 meters (QC)		5 meters	
Liquid side/ Gas side mm/inch)	6.00(1/4)+ 9.52(3/8); 5.00(1/5)+ 17.30(2/3)(QC)		6.00(1/4)+ 9.52(3/8); 5.00(1/5)+ 17.30(2/3)(QC)		6.00(1/4) + 12.00(1/2); 5.00(1/5)+ 20.00(4/5)(QC)		9.52(3/8) + 15.88(5/8)	
Max. refrigerant pipe length	15m		15m		15m		15m	
Max. Elevation	5m		5m		5m		5m	
Interconnecting Cable	3C+E		3C+E		3C+E		3C+E	
Fuse Rating	13A		13 A		24A		24A	
Moisture Removal (L/h)	0.95		1.3		1.86		2.56	
Indoor	Air Flow (m3/h)		500		550		850	
							1050	

	Dimension (L*W*H) (mm)	800x280x190	800x280x190	900x292x215	1080x302x220
	Packing (L*W*H) (mm)	865x358x275 ; 875x410x352 (QC)	865x358x275 ; 875x410x352 (QC)	990x377x318; 985x450x370 (QC)	1275x392x318
	Net / Gross weight (Kgs)	10/12; 14/16 (QC)	10/12; 14/16 (QC)	14 / 17; 17/19 (QC)	16/20
	Noise - Sound pressure level (dB/A)	30~40	30~40	42~46	42~48
	Noise - Sound power level (dB/A)	40~50	40~50	52~56	52~58
Outdoor	Dimension (L*W*H) (mm)	715x235x540	715x235x540	850x295x605	900x330x835
	Packing (L*W*H) (mm)	851x335x600	851x335x600	995x415x690	1030x440x960
	Net / Gross Weight (Kgs)	28/33; 27/29(QC)	30/32	45 / 51; 42/45 (QC)	65/70
	Noise- Sound pressure level (dB/A)	53	53	55	58
	Noise- Sound power level (dB/A)	63	63	65	68
	Refrigerant type/weight	R410A/820g; R410A/770g(QC)	R410A/1000g	R410A/1700g	R410A/2400g
	Defrost mode	Automatic defrosting	Automatic defrosting	Automatic defrosting	Automatic defrosting
	Applicable climate types	T1 (typical -7°C-43°C)	T1 (typical -7°C-43°C)	T1(typical -7°C -43°C)	T1(typical -7°C -43°C)

Due to continuous product development process specification may change.

These units contain a gas governed by F-Gas regulations. The gas must be handled by qualified F-Gas engineers.

APPENDIX



Disposal: Do not dispose this product as unsorted municipal waste. Collection of such waste must be handled separately as special treatment is necessary.

Recycling facilities are now available for all customers at which you can deposit your old electrical products. Customers will be able to take any old electrical equipment to participating sites run by their local councils. Please remember that this equipment will be further handled during the recycling process, so please be considerate when depositing your equipment. Please contact the local council for details of your local household waste recycling centres.

WARRANTY INFORMATION

ElectrIQ guarantee provides cover against material or manufacturing faults. This means that if your air conditioner develops a fault during the guarantee period, we will arrange for it to be repaired or replaced.

Faults arising from a faulty installation are specifically excluded.

The system must be serviced annually by qualified personnel.

This unit must be operated under conditions as recommended in this user manual, at voltages indicated on the unit. Any attempts made to service or modify the unit by unqualified person, will render this **WARRANTY VOID**.

This warranty is in addition to, and does not affect, your statutory rights.

Our warranty is RTB warranty and cover parts and our labour only.

We recommend that you note the details of your purchase below and retain your original proof of purchase receipt with this manual. Keep these documents safe in the event of a warranty claim.

Purchase Date: _____

Retailer name: _____

Model number: _____

Serial number: _____

Installation Date: _____

Installer name: _____

Service Date: _____

Engineer/ Company name: _____

ElectrIQ UK SUPPORT

www.ElectrIQ.co.uk/support

Please, for your own convenience, make check the troubleshooting guide before calling the service line.

If the unit still fails to operate call: 0871 620 1057 or complete the online form

Office hours: 9AM - 5PM Monday to Friday

**www.ElectrIQ.co.uk
Unit 2, The Nursery
Berristow Lane
South Normanton
Derbyshire, DE55 2FX**