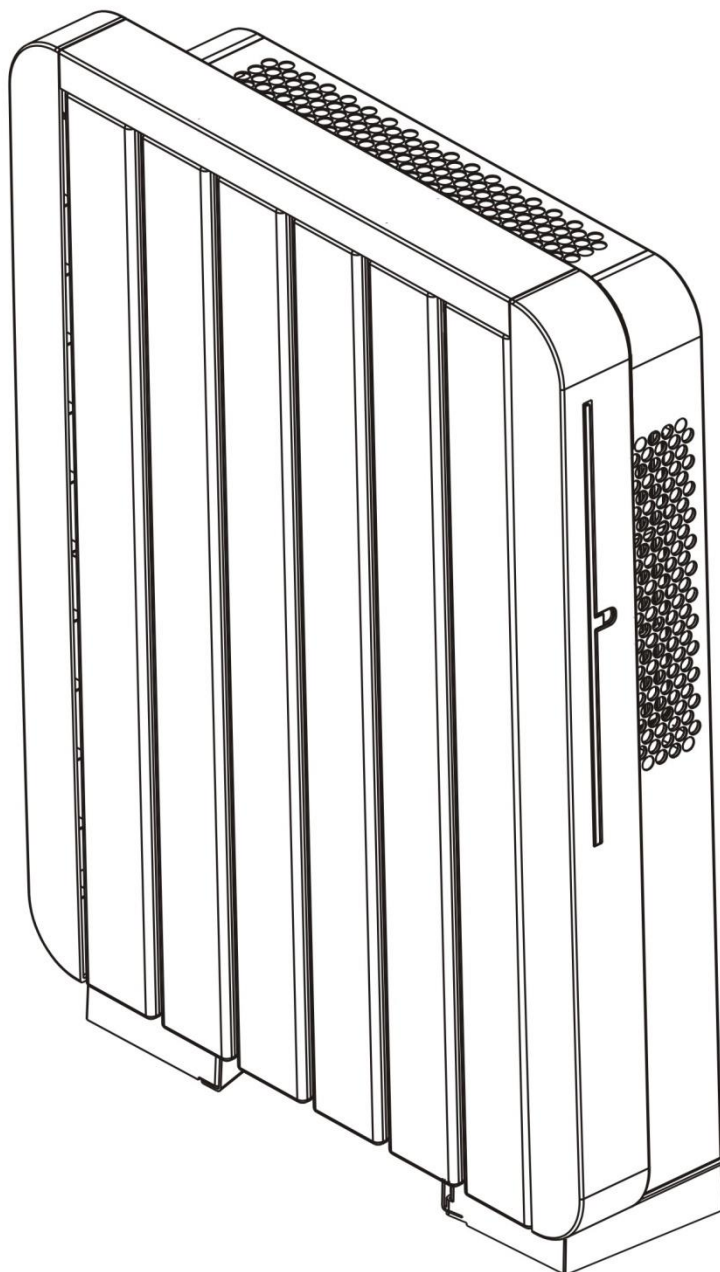

User Manual

MODEL: RX-200/ECO
RX-400/ECO



BEFORE USING THIS APPLIANCE PLEASE READ ALL INSTRUCTIONS CAREFULLY

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1. GENERAL INFORMATION

Thank you for choosing this excellent and innovative Fan coils –Radiator for controlling the climate in your home.

Please read this instruction user manual carefully before starting up the appliance. Following the indications contained in this manual will ensure that the appliance continues to function perfectly over time. In compliance with European standard 99/44/EEC the manufacturer guaranteed the machine for 24 months from the date of purchase against any defects that can be attributed to manufacturing defects. Excluded are all other problems linked to incorrect installation, extraordinary atmospheric events, non-compliant dimensioning or unauthorized interventions.

This appliance must be installed by an authorized installer who, on completion of the work, will release a declaration of conformity to the client in respect of the laws in force and the indications given by Manufacturer in the instructions leaflet supplied together with the appliance. These appliances have been designed both for conditioning and/or heating environments and must be destined for this use only and compatibly with their performance characteristics. Manufacture accepts no responsibility, either contractual or extra contractual, for any damage caused to persons, animals or property as a result of incorrect installation, adjustment or maintenance or improper use.

This instruction leaflet is an integral part of the appliance and consequently must be kept carefully and must ALWAYS accompany the appliance, even when it is passed to a new owner or user or transferred onto another system. If it is lost or damaged, please contact the Manufacturer customer service.

All repair or maintenance interventions must be performed by the technical service department or by professionally qualified personnel as foreseen in this booklet. Do not modify or intervene on the appliance as this could create dangerous situations and the manufacturer will not be responsible for any damage caused.

1.1 FUNDAMENTAL SAFETY RULES

Remember that some fundamental safety rules should be followed when using a product that uses electricity and water, such as:

- It is forbidden for the appliance to be used by children or unassisted disabled persons.
- It is forbidden to touch the appliance with wet hands or body when barefoot.
- It is forbidden to carry out any cleaning before having disconnected the appliance from the electricity mains supply by turning the system master switch to "OFF".
- It is forbidden to modify the safety or adjustment devices or adjust without authorization and indications of the manufacturer.
- It is forbidden to pull, cut or knot the electrical cables coming out of the appliance, even if it is disconnected from the mains supply.
- It is forbidden to poke objects or anything else through the inlet or outlet grills.
- It is forbidden to open the doors which access the internal parts of the appliance without first turning the system master switch to "OFF".
- It is forbidden to dispose of or leave in the reach of children the packaging materials which could become a source of danger.
- It is forbidden to climb onto the appliance or rest any object on it.
- The external parts of the appliance can reach temperatures of more than 70°C.

DANGER FROM BURNS - TAKE CARE WHEN TOUCHING

1.2 SAFETY PRECAUTIONS

Installing, starting up, and servicing water terminal can be hazardous due to system pressure, electrical components, and equipment location, etc.

Only trained, qualified installers and service personnel are allowed to install, start-up, and service this equipment. Untrained personnel can perform basic maintenance functions such as cleaning coils. All other operations should be performed by trained service personnel.

When handling the equipment, observe precautions in the manual and on tags, stickers, and labels attached to the equipment. Follow all safety codes. Wear safety glasses and work gloves. Keep quenching cloth and fire extinguisher nearby when brazing. Read the instructions thoroughly and follow all warnings or cautions in literature and attached to the unit. Consult local building codes and current editions of national as well as local electrical codes. Recognize the following safety information: Incorrect handling could result in personal injury or death. Incorrect handling may result in minor injury, or damage to product or property.



All electric work must be performed by a licensed technician according to local regulations and the instructions given in this manual. Before installing, modifying, or servicing system, main electrical disconnect switch must be in the OFF position. There may be more than 1 disconnect switch. Lock out and tag switch with a suitable warning label. Never supply power to the unit unless all wiring and tubing are completed, reconnected and checked. This system adopts highly dangerous electrical voltage. Incorrect connection or inadequate grounding can cause personal injury or death. Stick to the wiring diagram and all the instructions when wiring. Have the unit adequately grounded in accordance with local electrical codes. All installation or repair work shall be performed by your dealer or a specialized subcontractor as there is the risk of fire, electric shock, explosion or injury.



- Properly insulate any tubing running inside the room to prevent the water from damaging the wall. Make a proper provision against noise when the unit is installed at a telecommunication center or hospital.
- Provide an electric leak breaker when it is installed in a watery place.
- Never wash the unit with water.
- Should any emergency occur, stop the unit and disconnect the power immediately.
- Handle unit transportation with care. The unit should not be carried by only one person if it is more than 20kg.
- Never touch the heat exchanger fins with bare hands.
- Do not have the unit operate without air filter.
- 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.

1.3 SAFETY CERTIFICATION

These Fan Coils-Radiator are tested in accordance with the most stringent safety and quality standard . They are guaranteed by the C.E. mark and certified by the top German and International standard organization .



Low tension directive 2006/95/EC

Electro –magnetic compatibility 2004/108/EC

1.4 PERFORMANCE CERTIFICATION

These Fan Coils-Radiator are tested in accordance with the most stringent quality standard and certified by the top standard organization .

EN 1397:1998

WEEE for CE and GS

Correct disposal of this product:

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return our used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.



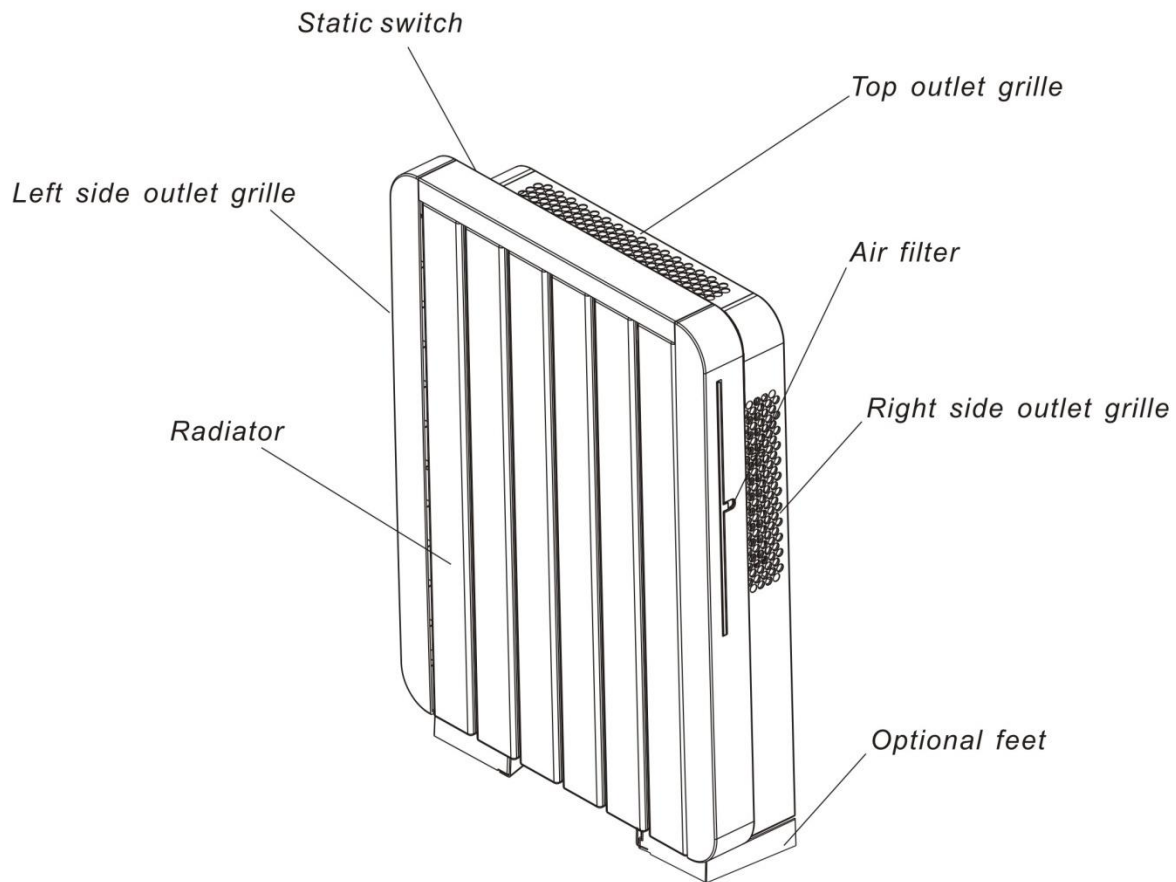
1.5 OPERATING LIMITS

For correct use, the fan coil must run solely within the temperature indicated in the table. If the unit is made to run outside the limits indicate below, malfunctions , water leakage or unsightly formation of condensation may occur .

Operating Mode	Min Room air temperature	Max Room air temperature	MinInlet water temperature	MaxInlet water temperature
Cooling / heating	5 °C	32 C- 60 % R.H.	7°C	74°C

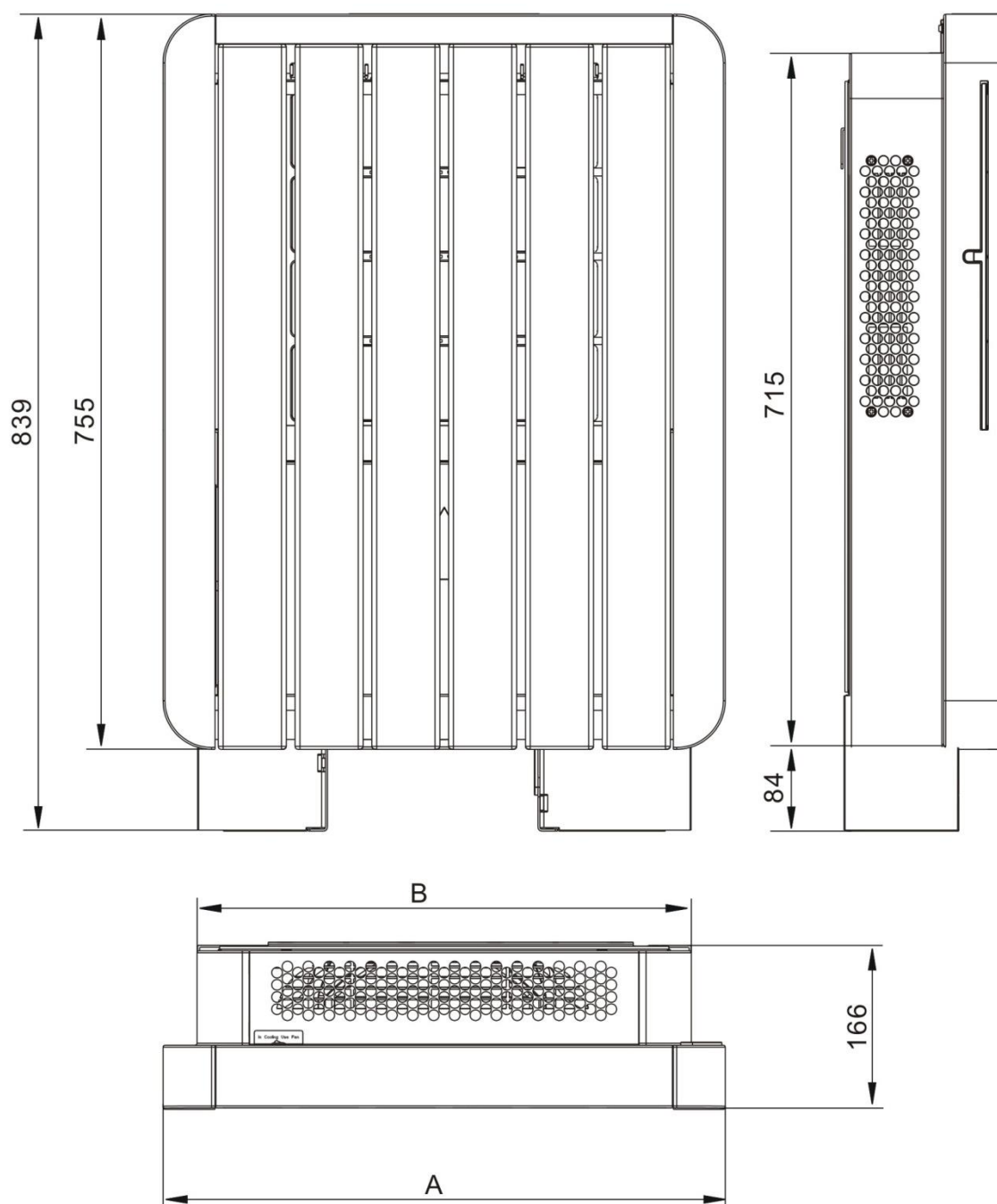
2. SUMMARY AND FEATURES

2.1 PARTICULAR DESCRIPTION



Supporting structure in high resistance galvanized and epoxy polyester painted steel sheet.	Heat exchange battery made in copper pipes and aluminum fins with high efficiency turbulence and oxidation treatment .
Frontal Radiator ; made in steel or aluminum epoxy polyester painted , the particular shape supply high efficiency and high thermal inertia in heating mode .	Ventilating unit consisting of a radial fan with special patent blade in ABS glass fiber reinforced (extremely quiet) mounted on anti-vibration supports in EPDM, balanced statically and dynamically, and splined directly onto the motor shaft .
Low consumption Electric motor , single phase with resin-coated coil mounted on anti-vibration supports in EPDM.	3way air outlet grill in extruded aluminum painted with epoxy powder paint (metallic silver color) and oven-dried.
Static switch , 0 dB(A) in heating mode	Primary and catalytic filter , big filter surface low air speed to obtain maximum filter efficiency

2.2 DIMENSION (2 AND 4 PIPES VERSION)



Model	A (mm)	B (mm)
RX-200/ECO	578	508
RX-400/ECO	894	824

2.3 SPECIFICATION

Model			RX-200/ECO	RX-400/ECO
Number of fan blowers			Single	Dual
Cooling capacity(max)	7-12°C	w	2169	3585
	16-22°C		554	707
Heating capacity(max)	50°C	w	2498	3763
	70-60°C		4237	6528
	75-65°C		4765	7357
	45-40°C		2023	3136
	35-30°C		915	1418
Air flow	Min	m3/h	150	250
	Max		400	750
Sound power	Min	dB(A)	0	0
	Max		44	49
Power supply		(V/Ph/Hz)	230/1/50	230/1/50
Fan motor power		w	45	98
Cooling water flow rate		L/h	376	616
Cooling water pressure drop		kPa	16.8	32.3
Cond. Drain connection O.D.		mm	16.5	16.5
Unit dimension	WxDxH	mm	578x166x755	894x166x755
Net weight		kg	35	45
Connection method			Screw	Screw
Water connection	IN/OUT	in	3/4"	3/4"

1. Eurovent Certified Specification.
2. Standard Cooling Capacity is tested under the condition 27 °C Dry Bulb /19.5 °C Wet Bulb entering air temperature, 7 °C entering water and 12 °C leaving water temperature with water flow rates specified.
3. Standard Heating Capacity is tested under the condition 20 °C Dry Bulb entering air temperature, 50 °C entering water temperature with water flow rates same as for the cooling test +radiator.
4. Air flow measured with clean filter
5. Sound power measured according to ISO 3741:1998

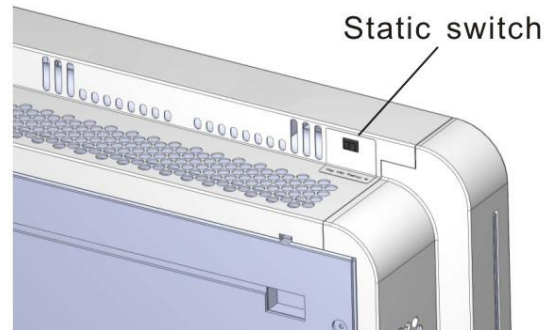
3. ECO OPERATION

3.1 STATIC SWITCH

For the Eco unit, there is only one Static switch on the rear side of the unit. With this switch, we could control the static function during heating mode.

Important note:

Do not use this switch during cooling mode.



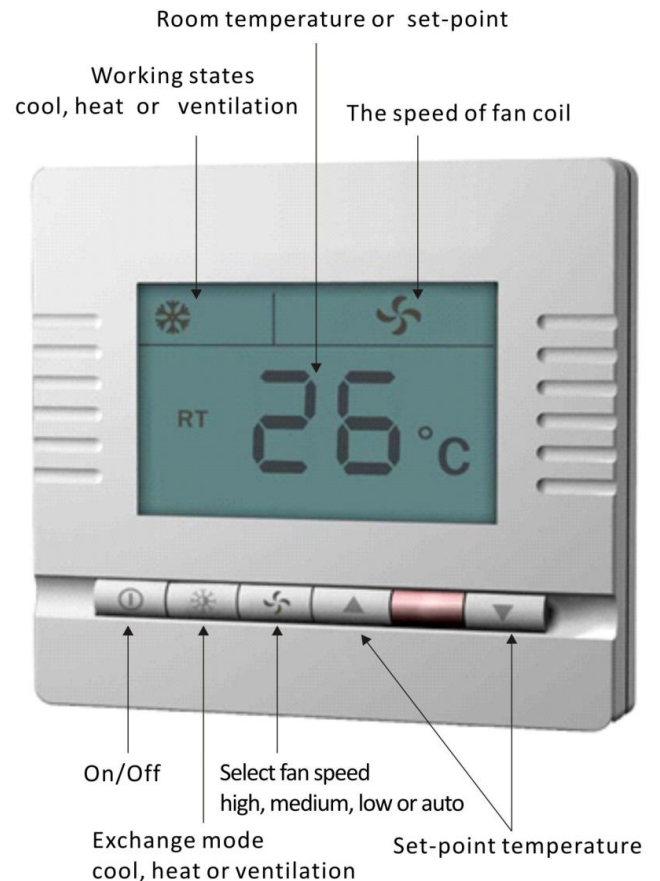
3.2 ECO WALL PAD (HL2003)

3.2.1 Status Display



















- Working status: Cool ❄️, Heat 🔥, Ventilation 🌀
- Fan speeds: Low 🌀, Medium 🌀, High 🌀
- Room temperature display
- Temperature setting display

3.2.2 Specification

- Sensing element: NTC
- Accuracy: $\pm 1^{\circ}\text{C}$
- Set-point range: 5°C to 35°C
- Display range: $0\sim 50^{\circ}\text{C}$
- Operation environment: $0\sim 45^{\circ}\text{C}$
- Operation humidity: 5-90%RH(non-condensing)
- Power supply: AC 85~260V, 50/60Hz
- Switch current rating: Resistive:2A, Inductive:1A
- Rated power: $\leq 2\text{w}$
- Wiring: Screw-in terminals, each terminal
- Capable of accepting $2\times 1.5\text{mm}^2$ or $1\times 2.5\text{mm}^2$ wires
- Housing: ABS+PC Flame retardant
- Dimensions: $86\times 86\times 13\text{mm}$ (WxHxD)
- Hole pitch: 60mm(standard)
- Protection class: IP30
- Display: LCD



3.2.3 Operation

- On/Off: Press “” to turn on, press “” again to turn off thermostat and its output.
- Setting temperature: Press “” to reduce set-point, press “” to raise set-point, and 1°C changed once.
- Mode Selection: Press “” to change system working in cooling “”, heating “” or ventilation “” mode, the related icon will flash, and it will be confirmed automatically after 5 seconds. The ventilation function is invalid for HL2003Y.
- Fan Speed Selection (HL2003DA/DB/DA2/DB2/FCV2): Press “” to change fan speed among “” (Hi)”, “” (Med)”, “” (Low)” or “” (Auto)”.
 - Under auto fan speed “”, the fan-speed will be changed automatically. Auto LOW-speed When the difference between room temperature and set-point exceed 1°C , Auto MED-speed When exceed 2°C , Auto HI-speed When exceed 3°C .
 - Under manual fan speed: Press “” button can select the fan speed as your required. And “” (Hi)”, “” (Med)”, “” (Low)” symbols will be displayed.

3.2.4 Defrost (Low Temperature Protection)

☞ Description: when the thermostat turns off and the room temperature is lower than 5℃, it will be turned on automatically in heating mode with “❄” showing, under HL2003DA/DB/DA2/DB2/FCV2 models, the system will be in heat mode and fan runs in high speed. Under HL2003Y model, the motorized damper will be open. The thermostat will turn off when room temperature is higher than 7℃

☞ Set low temperature protection: Turn off the thermostat, press “❄” and “▲” buttons simultaneously and hold for 3 seconds, it will display “00” or “01”, press “▲” or “▼” key to adjust. “00” indicates low temperature protection invalid, “01” indicates low temperature protection function valid. The default is “00”.

4. MAINTENANCE

4.1 CLEANING

4.1.1 Cleaning the air filter



Disconnect the power supply before cleaning and maintenance.

The filters should be regularly cleaned to keep the air conditioner running efficiently. Clean the filters every two weeks.

How to Proceed:

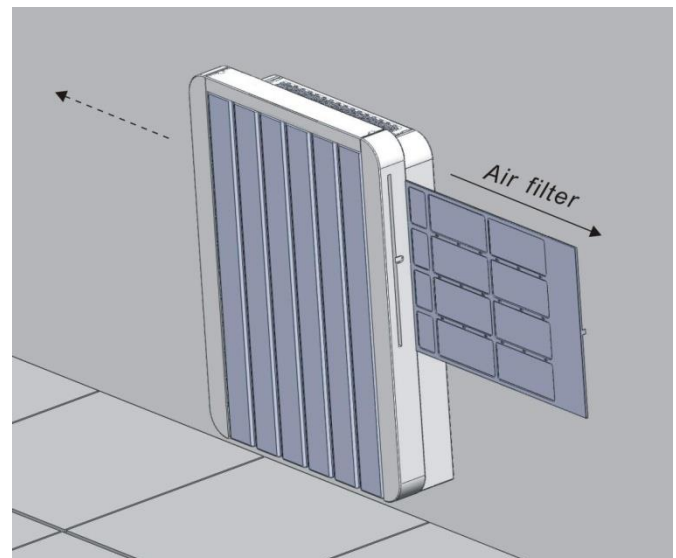
--Disconnect the air conditioner from the electrical supply.

--The air filter is behind the radiator. Extract the filter grating, both sides should be available, just depend on the installation position.

--Proceed to wash and dry all the filters, and replace them in the same way.

Attention:

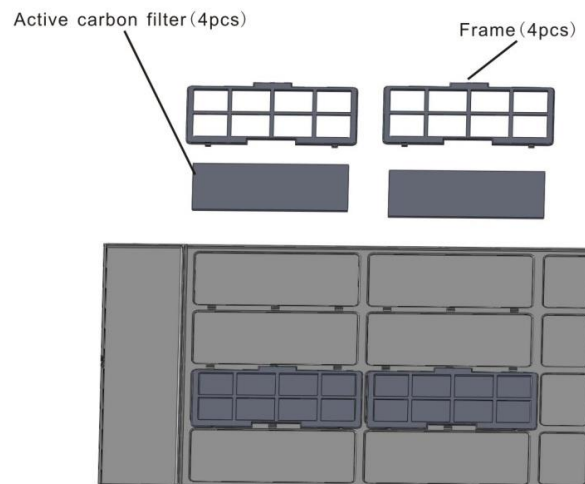
Do not use the air conditioner without filters as it could be seriously damage the air conditioner.



4.1.2 Active carbon filter(optional)

The unit maybe includes active carbon filter, which not only has the function of eliminating suspended matters that a common mechanical filter has, but also can eliminate foreign matters such as free chlorine, odors, colors and toxic matters that are difficult to filter out by using conventional approaches. With active carbon filter, the room air would be fresh and good for the body health.

Is advisable to change them every three months, because it's no possible to wash or clean them.



4.1.3 External cleaning

- Disconnect the air conditioner from the electrical supply.
- Wipe external surfaces clean with a damp cloth only.
- Do not use an abrasive cloth and/or solvents as this may damage the surfaces.
- Do not use excessively wet cloth or sponge, as water stagnation could damage the air conditioner and compromise safety.

4.2 PROBLEM SOLVING

4.2.1 Table of Anomalies and Remedies

The assistance must be supplied by a qualified installer or by a specialized service center.

Effect	Cause	Remedy
The unit does not turn on	No power supply	Check that main power is present (red LED is on)
		Check if the master switch is closed, or if a fuse is burnt
The appliance does not activate the ventilation	Not hot or cold water in the system	Check the water boiler or cooler are functioning correctly
	Static mode is activated	Check if static function is activated on command on board
The radiator does not reach a uniform heating temperature	Air present in the inner circuit of the appliance	Release the air several times
The ventilation speed increase or decreases automatically	The electronic control adjusts the comfort level regularly in Auto mode	Select Cooling or heating mode and desired fan speed
The unit does not cool or heat adequately	The temperature set on the LCD board or wall pad is either too high or too low	Check the temperature setting on the LCD board or wall pad, and correct it if needed
	The air filter is blocked	Check and clean it if needed
	Indoor air flow obstacles are present	Remove anything that might clog the air flow

The max operation temperature for the air conditioner (max cooling: outdoor DB43°C/WB26°C, indoor DB32°C/WB23°C. Min heating: outdoor DB-5°C/WB-6°C, indoor DB20°C).