



OWNER'S & INSTALLATION MANUAL VENTILATION SYSTEM

Please read this installation manual completely before installing the product.
Please retain this installation manual for future reference after reading it thoroughly.

VENTILATOR

Original instruction
For commercial use

This manual is the simplified version of original manual.
You can obtain the original manual from website.



MFL69268905
Rev.06_102425

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	SLOVENŠČINA	LIMBA ROMÂNĂ

IMPORTANT SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE USING THE APPLIANCE.

Always comply with the following precautions to avoid dangerous situations and ensure peak performance of your product

WARNING

This symbol indicates the possibility of death or serious injury.

CAUTION

This symbol indicates the possibility of injury or damage.

WARNING

Installation

- Do not use a defective or underrated circuit breaker. Use this appliance on a dedicated circuit.
 - There is risk of fire or electric shock.
- For electrical work, contact the dealer, seller, a qualified electrician, or an Authorized Service Center.
 - Do not disassemble or repair the product. There is risk of fire or electric shock.
- Always ground the product.
 - There is risk of fire or electric shock.
- Install the panel and the cover of control box securely.
 - There is risk of fire or electric shock.
- Always install a dedicated circuit and breaker.
 - Improper wiring or installation may cause fire or electric shock
- Use the correctly rated breaker or fuse.
 - There is risk of fire or electric shock.
- Do not modify or extend the power cable.
 - There is risk of fire or electric shock.
- Do not install, remove, or re-install the unit by yourself (customer).
 - There is risk of fire, electric shock, explosion, or injury.
- Be cautious when unpacking and installing the product.
 - Sharp edges could cause injury.
- For installation, always contact the dealer or an Authorized Service Center.
 - There is risk of fire, electric shock, explosion, or injury.
- Do not install the product on a defective installation stand.
 - It may cause injury, accident, or damage to the product.
- Do not let the product run for a long time when the humidity is very high and a door or a window is left open.
 - Moisture may condense and wet or damage furniture.
- For re-installation of the installed product, always contact the dealer or an Authorized Service Center.
 - There is risk of fire, electric shock, explosion or injury.

- Do not open the maintenance cover of the main body during operation.
 - Otherwise, it may cause electrical shock.
- Use the outdoor air suction hole with the net installed to ensure that birds could not come in.
 - Remove estrange things like the bird's nest. Otherwise, it may cause scarcity of indoor oxygen.
- Install the air intake where polluted air can not be directly sucked in.
 - It may cause various accidents, including suffocation, due to the suction of harmful gasses(CO, etc.)
- Do not install this product in a refrigerated warehouse, heated swimming pool or other location where the temperature and humidity are significantly different.
 - There is risk of electrical shock, malfunctioning.
- Install this product in an environment where the temperature ranges from -10 °C to +45 °C and the relative humidity is less than 80 %. It condensation is expected to form, heat up the fresh outside air using a duct heater etc.
- Install this product in and environments where the outside air intake meets the following conditions: temperature range is between -15 °C and +40 °C and the relative humidity is 80 % or less.
- Use the designated electrical wires for the terminal board connections, and connect the wires securely so that they will not become disconnected. (Failure to ensure proper connections may cause fire.)
- When passing metal ducts through wooden buildings clad with metal laths, wire laths or metal, these ducts must be installed in such a way that they will not make electrical contact with the metal laths, wire laths or metal sheets. (Power leakage can cause ignition)
- The appliance shall be installed in accordance with the national wiring regulation.
- An appliance is intended to be permanently connected to the water mains and not connected by a hose-set.

Operation

- When the product is soaked (flooded or submerged), contact an Authorized Service Center.
 - There is risk of fire or electric shock.
- Don't touch a dedicated circuit or breaker with wet hands.
 - There is risk of electric shock.
- Do not store or use flammable gas or combustibles near the product.
 - There is risk of fire or failure of product.
- When flammable gas leaks, turn off the gas and open a window for ventilation before turn the product on.
 - Do not use the telephone or turn switches on or off. There is risk of explosion or fire.

- Be cautious that water could not enter the product.
 - There is risk of fire, electric shock, or product damage.
- Turn the breaker off when cleaning or maintaining the product.
 - There is risk of electric shock.
- The outside ducts must be tilted at a gradient (1/30 or more) down toward the outdoor area from the ventilator unit, and properly insulated. (The entry of rain water may cause power leaks, fire or damage to household property.)
- Glove should be worn when doing the installation work. (There is risk of injury.)
- Ensure that the fan is switched off from the supply mains before removing the guard.

⚠ CAUTION

Installation

- Don't connect the ground wire to the window frame or water cock.
 - There is risk of electric shock.
- Do not install the product at a smoky and oily place like kitchen or factory.
 - Otherwise, oil may adhere to the filter or heating exchanger and cause trouble.
- Install the product in an insulated space from outdoor air.
 - In case of installing the product outside of the insulated layer, dewing occurs inside of the main body in winter. And it causes electrical shock or falling of condensed water.
- Keep level even when installing the product.
 - To avoid vibration or water leakage.
- Use two or more people to lift and transport the product.
 - Avoid personal injury.
- Do not install the product where it will be exposed to sea wind (salt spray) directly.
 - It may cause corrosion on the product. Corrosion, particularly on the condenser and evaporator fins, could cause product malfunction or inefficient operation.
- Install the product so that the noise or hot wind from the outdoor unit may not cause any damage to the neighbors.
 - Otherwise, it may cause dispute with the neighbors.
- Do not install the unit in potentially explosive atmospheres.
- (Australia only) This product must be installed by a professional installer.
- After the installation of the product in the customer premises, fully remove all product packaging (including any expanded or moulded plastic packaging materials) and recycle or dispose of such packaging responsibly. Do not dispose any expanded plastic packaging in the household bin.

Operation

- Use a soft cloth to clean. Do not use harsh detergents, wax or thinner, etc.
 - Otherwise, color or surface of the product may deteriorate.
- Clean the filter and the heat exchanger regularly and use the gloves for cleaning.
 - Adhering to a mass of dust may cause the deterioration of air volume.
- Do not use the product for special purposes, such as preserving foods, works of art, etc. It is a consumer ventilator, not a precision refrigeration system.
 - There is risk of damage or loss of property.
- Do not block the inlet or outlet of air flow.
 - It may cause product failure.
- Do not step on or put anything on the product.
 - There is risk of personal injury and failure of product.
- This appliance is not intended to be accessible to the general public.
- Do not touch refrigerant pipe and water pipe or any internal parts while the unit is operating or immediately after operation.
 - It can cause a burn or frostbite.
- Take care to ensure that nobody could step on or fall onto the unit.
 - This could result in personal injury and product damage.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- 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

Airborne Noise Emission

The A-weighted sound pressure emitted by this product is below 70 dB.

** The noise level can vary depending on the site.

The figures quoted are emission level and are not necessarily safe working levels.

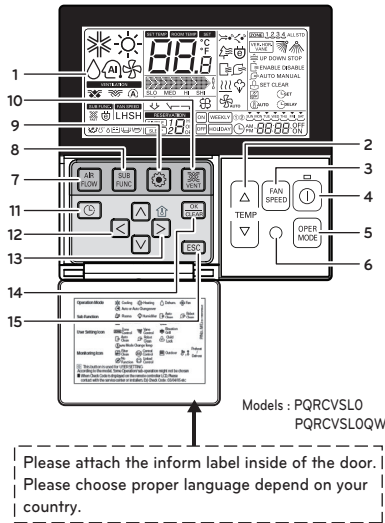
Whilst there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required.

Factor that influence the actual level of exposure of the workforce include the characteristics of the work room and the other sources of noise, i.e. the number of equipment and other adjacent processes and the length of time for which an operator exposed to the noise. Also, the permissible exposure level can vary from country to country.

This information, however, will enable the user of the equipment to make a better evaluation of the hazard and risk.

OPERATING INSTRUCTIONS (ACCESSORY)

Name and Function of Remote Controller



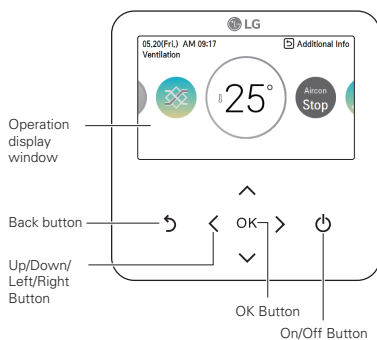
- | | |
|---|-------------------------------|
| 1 OPERATION INDICATION screen | 7 AIR FLOW button(*) |
| 2 SET TEMPERATURE button | 8 SUB FUNCTION button |
| 3 FAN SPEED button | 9 FUNCTION SETTING button |
| 4 ON/OFF button | 10 VENTILATION button |
| 5 OPERATION MODE SELECTION button | 11 RESERVATION |
| 6 WIRELESS REMOTE(*) CONTROLLER RECEIVER
- Some products don't receive the wireless signals. | 12 UP,DOWN,LEFT,RIGHT button |
| | 13 ROOM TEMPERATURE button(*) |
| | 14 SETTING/CANCEL button |
| | 15 EXIT button |

※ Some functions may not be operated and displayed depending on the product type.
Refer to remote controller in order to know detail functions.

※ (*) : Functions for air conditioner.

Available accessories

Remote controller (PQRCSLO/PQRCSLQW/PREMTB100)
CO₂ sensor (AHCS100H0)

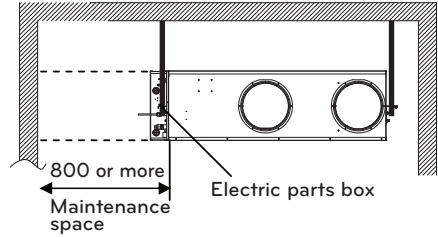


Model: PREMTB100

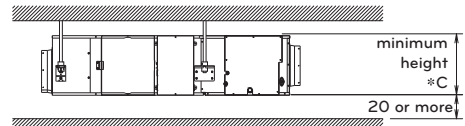
Operation display window	Operation and Settings status display
Back button	When you move to the previous stage from the menu's setting stage
Up/down/left/right button	When you change the menu's setting value
OK button	When you save the menu's setting value
On/Off button	When you turn ON/OFF the air conditioner

INSTALLATION

Front view
(unit : mm)



Side view
(unit : mm)



Ceiling dimension and hanging bolt location

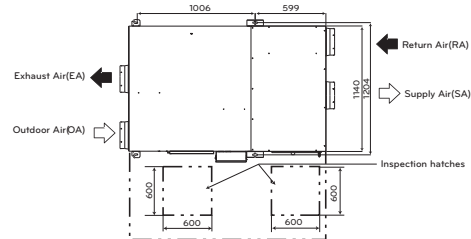
Installation of Unit

Install the unit above the ceiling correctly.

POSITION OF SUSPENSION BOLT

Apply a Flexible duct between the unit and duct to absorb unnecessary vibration.

Case 1

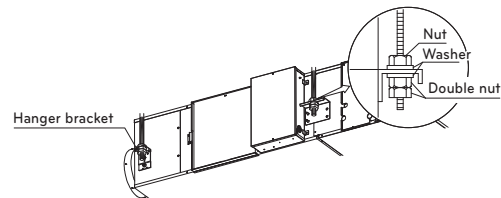


Install the unit leaning to a drainage hole side as a figure for easy water drainage.

POSITION OF CONSOLE BOLT

- A place where the unit will be leveled and that can support the weight of the unit.
- A place where the unit can withstand its vibration.
- A place where service can be easily performed.

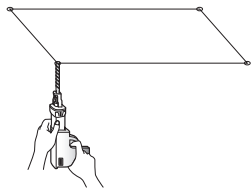
Case 2



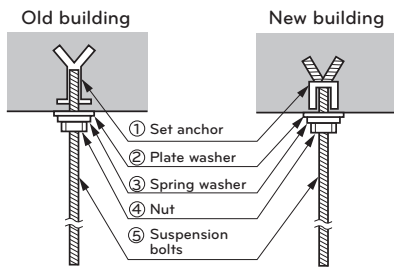
- Avoid installing air conditioner in such circumstances where cutting oil mist or iron powder is in suspension in factories, etc.
- Avoid places where inflammable gas is generated, flows in, is stored or vented.
- Avoid places where sulfurous acid gas or corrosive gas is generated.
- Avoid places near high frequency generators.

Indoor Unit Installation

- Select and mark the position for fixing bolts.
- Drill the hole for set anchor on the face of ceiling.



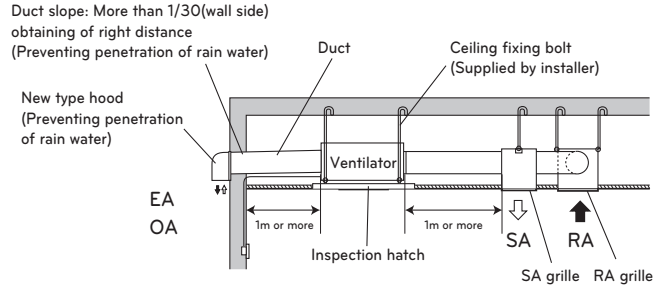
- Insert the set anchor and washer onto the suspension bolts for locking the suspension bolts on the ceiling.
- Mount the suspension bolts to the set anchor firmly.
- Secure the installation plates onto the suspension bolts (adjust level roughly) using nuts, washers and spring washers.



CAUTION

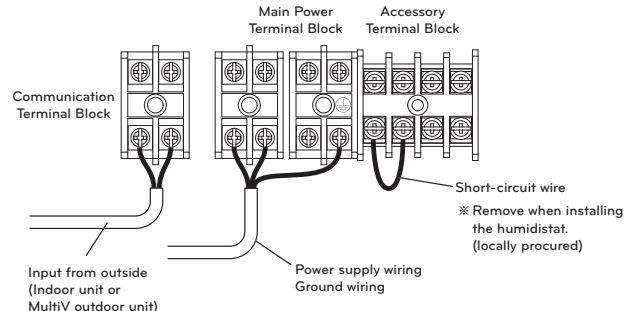
Use a level instrument to make sure that the unit is level and that the tilt (down slope) to the drain piping connection is within 1 degree. (Refer to above figures.) If there is no slope in the direction toward the drain piping, it may cause water leakage.

Duct Connection



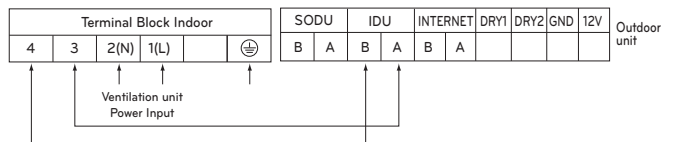
Method to Connect Wiring

- Pass the power supply wiring and the ground wiring through the wiring through-hole into the electrical parts box and secure with the included clamping material after connecting the wires to terminal blocks.



Connect the wires to the terminals on the control board individually according to the outdoor unit connection.

- Ensure that the color of the wires of outdoor unit and the terminal No. are the same as those of indoor unit respectively.



CAUTION

The Power cord connected to the unit should be selected according to the following specifications.

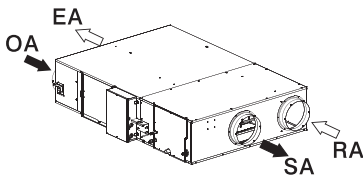
WARNING

Make sure that the screws of the terminal are free from looseness.

CAUTION

Tighten the nut and bolt to prevent unit falling.

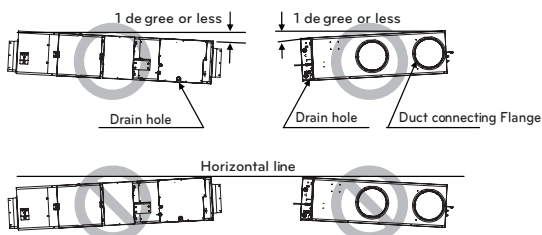
- Attach the hanger bracket to the suspension bolt. Be sure to fix it securely by using nuts and washers (locally procured) from the upper and lower sides of the hanger bracket.
- Install the unit after checking the indoor (SA/RA) and outdoor (EA/OA) in accordance with the figure duct direction label.



- Adjust the height of the unit. (Tighten the double nuts securely.)
- Check the unit is horizontally level.

CAUTION

- Install declination of the ventilation unit with DX coil is very important for the drain
- Minimum thickness of the insulation for the connecting pipe shall be 10 mm.



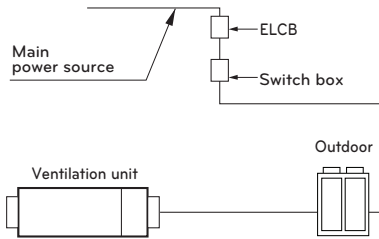
- Tighten the upper nut.

WIRING CONNECTION

Electrical Wiring

Perform the electrical wiring work according to the electrical wiring connection.

- All wiring must comply with local requirements.
- Select a power source that is capable of supplying the current required by the ventilator.
- Use a recognized ELCB(Electric Leakage Circuit Breaker) between the power source and the unit. A disconnection device to adequately disconnect all supply lines must be fitted.
- Model of circuit breaker recommended by authorized personnel only



Ventilation unit				Power supply		Fan motor	
Model	Hz	Volts	Voltage range	MCA	MOP	kW	FLA
LZ-H050GXN4 / LZ-H050GXH4	50	220 - 240 V	Max. 264 V Min. 198 V	2.8	8	0.2x2	1.25x2
LZ-H080GXN4 / LZ-H080GXH4				2.8	8	0.2x2	1.25x2
LZ-H100GXN4 / LZ-H100GXH4				2.8	8	0.2x2	1.25x2

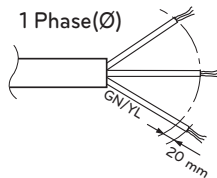
MCA : Min. Circuit Amps (A) ;
MOP : Maximum Over current Protection
kW : Fan Motor Rated Output (kW) ;
FLA : Full Load Amps (A)

⚠ WARNING

The installation of a residual current device(RCD) having a rated residual operating current not exceeding 30 mA is advisable.

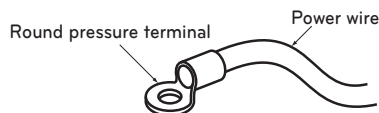
Wire Specification

Power Cable Specification : The power cord connected to the outdoor unit should be complied with IEC 60245 or HD 22.4 S4(Rubber insulated cord, type 60245 IEC 66 or H07RN-F)



Precautions when laying power wiring

Use round pressure terminals for connections to the power terminal block.



Minimum cross-sectional area of conductors

Rated current of appliance A	Nominal cross-sectional area mm ²
≤ 0,2	Tinsel cord ^a
>0,2 and ≤ 3	0,5 ^a
>3 and ≤ 6	0,75
>6 and ≤ 10	1,0 (0,75) ^b
>10 and ≤ 16	1,5 (1,0) ^b
>16 and ≤ 25	2,5
>25 and ≤ 32	4
>32 and ≤ 40	6
>40 and ≤ 63	10

* ^a These cords may only be used if their length does not exceed 2 m between the point where the cord or cord guard enters the appliance and the entry to the plug.

^b Cords having the cross-sectional areas indicated in the parentheses may be used for portable appliances if their length does not exceed 2 m.

NOTE: For supply cords supplied with multi-phase appliances, the nominal cross-sectional area of the conductors is based on the maximum cross-sectional area of the conductors per phase at the supply cord connection to the appliance terminals.

Wiring for the Humidity Regulator (Locally Procured)

LZ-H***GXH series only

- Pass into the electric parts box together with the power wire through the power wiring through-hole.
- Remove the short-circuit wires on the accessory terminal block and connect the wiring for the humidity regulator.
- Secure with cramping material together with the power wire.

Wiring specifications	Sheathed wire (should be complied with IEC60245 standard)
Size	0.75 - 1.25 mm ²
Legth	MAX. 100 m
External contact specifications	Normally closed contact (Currenttolerance 10 mA - 0.5 A)

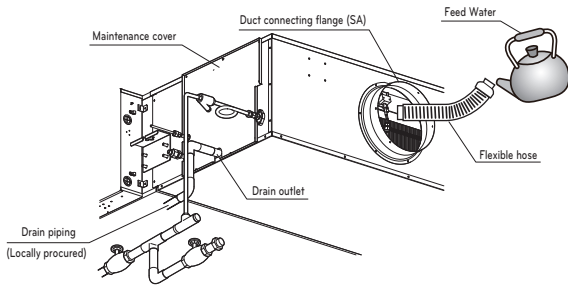
⚠ CAUTION

If using humidistat, install one per ventilation unit. Controlling more than one ventilation unit with a single humidity controller may prevent normal humidity operation and cause water leakage, etc.

Insulation material of supply line shall be at least those of ordinary tough rubber sheathed. (code designation 60245 IEC 53)

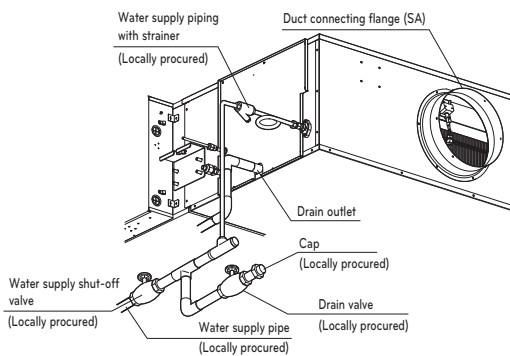
Check the drainage

- Test the drainage by pouring 1000cc of water into the drain pan through the inspection hole by removing the maintenance cover (8 screws) or through the outlet duct joint of supply air to room (SA).
- Make sure that heat insulation work is executed on the Indoor drain piping and Drain outlet to prevent any possibility water leakage due to dew condensation.



Install the water supply piping

Connect the water supply with strainer, other pipes and valves (locally procured) to the indoor unit as shown in the figure at below. A water purifier (local procurement) should be installed in the water supply pipe to provide clean water.

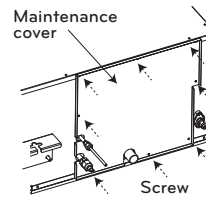


⚠ CAUTION

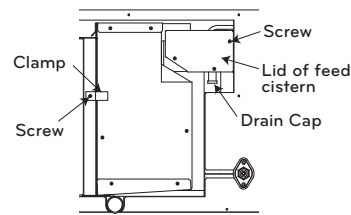
When installing the water supply piping, wash the pipes with tap water so that all dirt is removed from them or install a drain valve somewhere along the piping and drain the pipes thoroughly until the water flowing through them is clear. Make sure no cutting oils or detergents get into the pipes. If the water purifier is not installed, foreign object may occur and can affect the lifespan of the humidifier and cause odor.

Replacement of the Humidifier

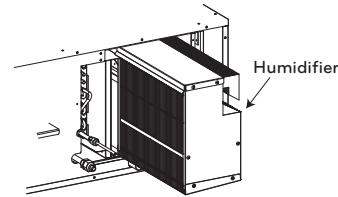
- 1 Remove the maintenance cover.
 - Loosen the screw (8EA) and detach the maintenance cover.



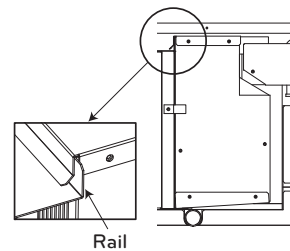
- 2 Prepare to replace the Humidifier.
 - Uncork the Drain Cap to drain the remaining water in the feed cistern.
 - Loosen the screw (3EA) and detach the lid of feed cistern.
 - Loosen the screw (1EA) and Detach the clamp.



- 3 Pull out the Humidifier (2EA)
 - Uncork the Drain Cap to drain the remaining water in the feed cistern.
 - Loosen the screw (3EA) and detach the lid of feed cistern.
 - Loosen the screw (1EA) and Detach the clamp.



- 4 Insert the new Humidifier (2EA)
 - Confirm that the edge of top panel of humidifier element has been hooked securely on the rail.
 - Assemble the water tank and drain cap, while they are not separated from each other, with a clamp.



⚠ WARNING

Turn the breaker off when cleaning the product.

⚠ CAUTION

Gloves should be worn when doing the maintenance work.

HUMIDIFIER MAINTENANCE

Inspection and Maintenance of the Humidifier

- Have your dealer do the following inspections in order to get the longest use.
- In order to prevent harmful bacteria from generating, ask your dealer to do maintenance on humidifying unit portion at the beginning or the end of the heating season.

Inspected Part	Content of maintenance		Problems if maintenance is not carried out
	Items to be inspected	Solution	
Feed water tank	Check for operation of float switch	Clean if it does not work properly due to build-up.	Insufficient humidifying. Overflowed feed water tank.
	Check for dirt	Clean if very dirty.	Weak fan strength. Reduced humidifying capacity.
Solenoid valve	Check for shutting and opening. Check in a similar fashion when checking the float switch operation.	Replace if it doesn't work.	Insufficient humidifying. Overflowed feed water tank. (Increased tap water consumption.)

Replacing the Humidifier element

- The humidifier element should in general be replaced once every three years when supply water is soft water, but outside factors (water quality, operating times) may shorten its productive life.
- Contact your dealer if you have any questions.

NOTE

This note is only applied to model that there is humidity function.

When humidifying fails, the remote controller does not display any error code.

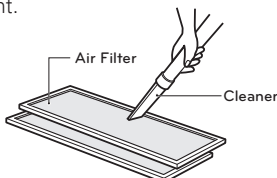
(Just twinkle the icon of Humidification "💧" for 30 minutes and disappeared or display warning icon ⚠️ on the side of Humidification icon.) Usage under that status will lead to insufficient humidification and increased tap water consumption.

The solenoid valve and float switch should be checked at the beginning of heating season. If the water purifier is not installed, foreign object may occur and can affect the lifespan of the humidifier and cause odor.

Method to Clean and Replace Each Part

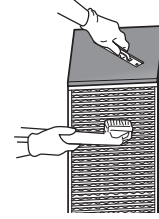
1 Cleaning of Air Filter

- Clean dirt from the air filter using a vacuum cleaner or wash with water. (if dirt is conspicuous, wash with a neutral detergent in lukewarm water)
- After washing with water, dry well in the shade. (Do not expose the air filter to direct sunlight or heat from a fire when drying it)
- If the air filter is damaged, purchase it from the service center or professional agent.

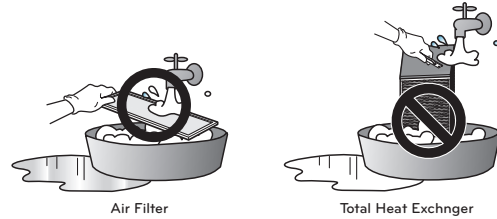


2 Cleaning of Total Heat Exchanger

- Suck dusts adhered to the surface of the Total heat exchanger with a cleaner.
- Use the cleaner that attached to brush at its nozzle, and use a soft brush.



- Do not use a hard nozzle on the cleaner. (Otherwise, surface of the Total heat exchanger may be damaged.)



- Never wash the Total heat exchanger with water.
- Consider replacing after two years from the date of purchase.
- Please inquire to the Service Center about replacement costs within two years from the date of purchase.
- For service, always contact the dealer or an Authorized Service Center.

The amount of Refrigerant

The calculation of the additional charge should take into account the length of pipe and CF(correction Factor) value of indoor unit.

Additional charge(kg)	=	Total liquid pipe : Ø 25.4 mm (1.0 inch)	× 0.480 kg/m (0.323 lbs/ft)
	+	Total liquid pipe : Ø 22.2 mm (7/8 inch)	× 0.354 kg/m (0.238 lbs/ft)
	+	Total liquid pipe : Ø 19.05 mm (3/4 inch)	× 0.266 kg/m (0.179 lbs/ft)
	+	Total liquid pipe : Ø 15.88 mm (5/8 inch)	× 0.173 kg/m (0.116 lbs/ft)
	+	Total liquid pipe : Ø 12.7 mm (1/2 inch)	× 0.118 kg/m (0.079 lbs/ft)
	+	Total liquid pipe : Ø 9.52 mm (3/8 inch)	× 0.061 kg/m (0.041 lbs/ft)
	+	Total liquid pipe : Ø 6.35 mm (1/4 inch)	× 0.022 kg/m (0.015 lbs/ft)
Include only for Heat Recovery system	+	Number of installed HR units	× 0.5 kg/EA (1.1 lbs/EA)
	+	CF value of indoor unit (kg)	

Amount refrigerant of Indoor units

Example) 4 Way Ceiling Cassette 14.5 kW - 1ea,
Ceiling concealed Duct 7.3 kW - 2 ea,
Wall Mounted 2.3 kW - 4ea
CF = [0.64 kg (1.411 lbs)×1 EA] + [0.26 kg (0.573 lbs)×2 EA] + [0.26 kg (0.529 lbs)×4 EA]
= 2.12 kg (4.67 lbs)

Attach the additional refrigerant table of IDU.



Manufacturer :

LG Electronics Inc.

84, Wanam-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, KOREA

UK Importer :

LG Electronics U.K. Ltd

Velocity 2, Brooklands Drive, Weybridge, KT13 0SL

Eco design requirement

- The information for Eco design is available on the following free access website.
<https://www.lg.com/global/support/cedoc/cedoc>