



2012

**MULTI V**<sup>TM</sup> AIR CONDITIONING SYSTEM

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Life's Good  
When it's

# GREEN

## GREENOVATION

Reducing greenhouse gas emissions, enhancing green growth with suppliers, developing new green businesses.

### Green Vision



LG Electronics' vision is to grow into a leading environmentally conscious company by working to protect the global environment and creating products with environmentally friendly features.

### Green Goals

Our green management activities include greenhouse gas reduction across the entire production process, enhancing green and shared growth with suppliers, and developing green businesses to secure new growth opportunities.

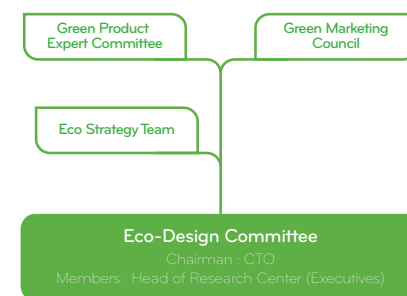
### Green Strategy



LG Electronics has established a low-carbon green management system to provide low carbon value to customers through voluntary greenhouse gas (GHG) reduction. Throughout its activities, LGE is creating value for customers and stakeholders, and protecting the natural environment.

- Productivity enhancement  
Low-Carbon Factories
- Product competitiveness  
Low-Carbon Products
- Operational efficiencies  
Low-Carbon Value Chain
- Social contribution  
Low-Carbon Culture

### Green Management



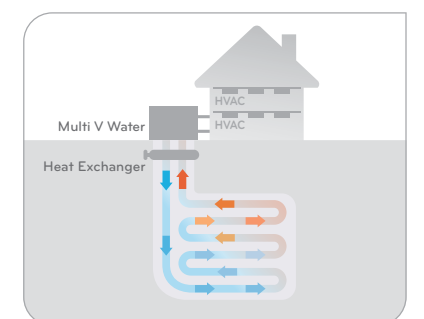
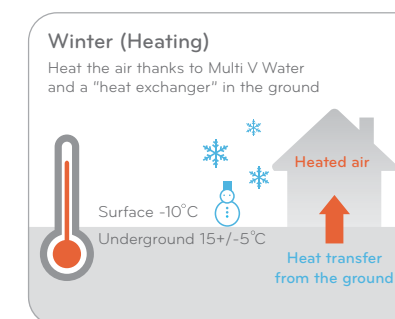
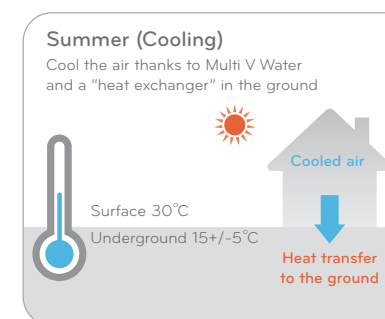
Major decisions in green management at LGE are made by the Eco-Design Committee; comprised of the heads of laboratories under the CTO, and supported by the Green Product Expert Committee, consisting of members working on R&D and management of green products, and the Green Marketing Council, in which division marketing managers set-up green marketing strategies.

### Green Businesses

Secure future green growth drivers in energy, water treatment and environmental businesses

- Solar Business
- Water Treatment Business
- Lighting Solution Business
- Smart Grids Business
- HVAC Business

We're in the business of creating comfort for any season of the year through Heating, Ventilation and Air-Conditioning solutions. LGE provides a total HVAC system with optimized heating, ventilation and air-conditioning solutions carefully adapted to the unique conditions of each site during the building's construction or renovation. The company is also engaging in the development of green buildings through its line of products using renewable energy. For example, our MULTI V Water uses geothermal energy, which is known as a constant source of heating and cooling that maintains a temperature of 15±5C regardless of the surface temperature.





# GREENER PRODUCTS

LGE's Green Product Strategy aims at minimizing the environmental load in every stage of the product lifecycle and improving energy, resources and humanity – through production of highly energy-efficient products, reduction of raw material usage, and improvement of living environments for everyone.



## Green Product Evaluation System

**The Eco Index**  
The Eco-Index is LGE's own rating system for managing environmental performance and goal setting, which quantifies the eco design level of products in terms of their eco-consciousness (Green 1-Star, 2-Star and 3-Star). The Green Index measures three areas of product footprints such as Climate impact, Chemicals used and Materials used. We will continue increasing the number of products to reach the higher Eco-Index.

**Evaluating the Carbon Footprint of the Product Process**  
Since 2002, LGE has been conducting Life Cycle Assessment (LCA) to evaluate the entire process' carbon emission and to fully utilize LCA to develop low carbon products. In 2011, LGE plans to establish an infrastructure that will enable LGE to perform LCA on entire product lines and to continuously and efficiently evaluate greenhouse gas emission from the entire product process.

## Green R&D Investment

LGE established an environmental accounting guideline in 2009 for green R&D investment. LGE invested KRW 808 billion for green R&D in 2010. The majority of the investment was used for improving product energy efficiency and improving resource efficiency.

## Green Technologies

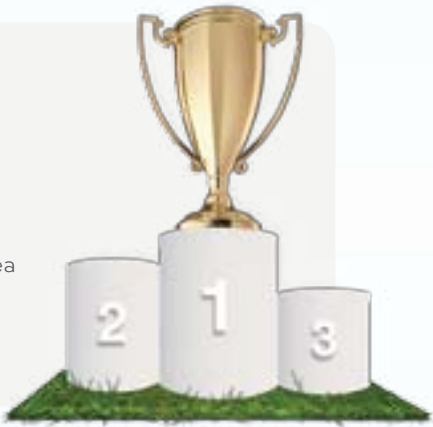
LGE has been conducting R&D to reduce the environmental impact of products, developing a range of highly efficient products, replacing hazardous substances in products, improving product design to facilitate recycling, and establishing an infrastructure to enable the development of green products and technologies.

# GREEN HEATING AND AIR CONDITIONING

LGE's heating and air conditioning products are continually being developed with energy savings, reduction of hazardous substances, and impact on the environment in mind. In particular, we have made great strides in the use of renewable energies through our cutting edge systems.

## Awards & Certifications

- 2010 Green Technology Certification (Inverter and solar technology) - Korea
- 2010 Energy Winner Award Grand Prix - Korea
- 2010 Green Growth Brand - Korea
- Carbon Footprint Label - Korea



## Prize-Winning Technologies

**Energy-saving, High-efficiency Inverter Compressor and Motion Sensor**  
This super energy-saving inverter compressor technology saves up to 72% of electricity by automatically controlling the unit according to the indoor temperature and a motion sensor.

**High-efficiency Central Air Conditioning System**  
Using eco design for every part of the product has improved the energy efficiency of this air conditioning system. It features the world's first heat exchanger, providing continuous heating, as well as Korea's first high-efficiency, high-pressure inverter compressor.

**High-performance, High-efficiency Inverter Heat Pump Air Conditioner**  
These compact outdoor units feature enhanced heating and cooling technology, low-noise indoor unit technology and a highly efficient inverter heat pump, with up to 115% improvement on cost effectiveness in comparison to constant-speed air conditioners.

**Geothermal Air Conditioner and Heater**  
Using reusable geothermal energy to reduce greenhouse gas emissions, this high-efficiency DC Inverter technology allows uninterrupted flow of the magnetic field within the motor of the compressor in the outdoor unit.

**Hybrid solar air conditioner**  
This product incorporates the energy efficiency enhancement of a power saving inverter and allows for a 100% solar powered air purifier function as well as a 15% solar powered cooling function, a "Human Care Robot," and Green-tea HEPA and Platinoid enzyme filters.



# OUR AIR-CONDITIONERS MAKE THE MOST OF THE ENERGY THEY ARE USING

## Less is More

LG Electronics has improved its products' design so that they consume less energy while satisfying all your cooling and heating needs.

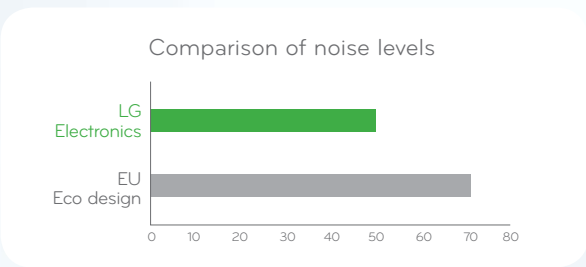
## The rule of 20

European regulations on energy-related products (ErP) require manufacturers to produce energy efficient products that consume less scarce raw materials and energy from production to final use. The 20/20/20 by 2020 policy aims to ensure 20% less primary energy consumption and 20% less greenhouse gas emissions, while the share of renewable energies increases by 20% by 2020. LG Electronics air conditioners integrate these expectations and contribute their fair share in global climate protection.

## Going beyond - ErP

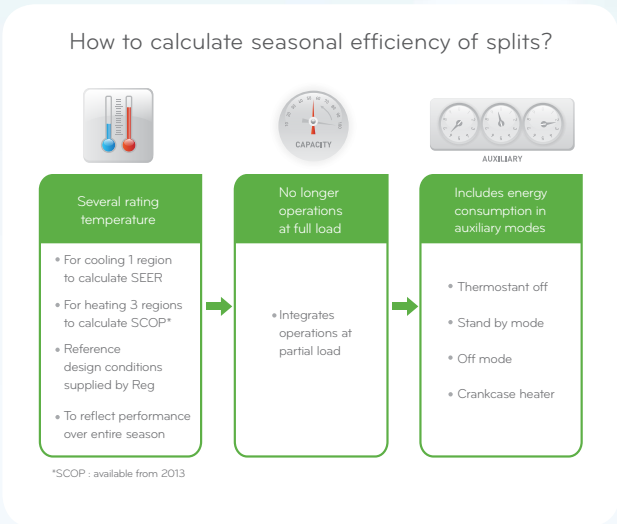
LG Electronics deploys products with environmentally-friendly features both in heating and cooling modes that go beyond the minimum requirements set by European legislation. With a rating of close to 4, LG Electronics products make the most of the energy they are using. No energy is wasted, while we help you decrease your energy bills - all year long.

## The Sound of Silence



LG Electronics supplies equipment that is being noticed for its design and performance and not for its noise. The sound power of our units in dB are displayed in the energy label for both indoor and outdoor units, in conformity with limit values that are set by European Regulations. LG Electronics is actually doing its best for reducing noise levels of its equipment. We bring to our customers products that emit 30 % less noise than required by European law.

## Seasonal Efficiency



With different cooling and heating needs throughout the year, LGE's products are designed for optimal performance according to each season and geographical area. The Seasonal Energy Efficiency Ratio and the Seasonal Coefficient of Performance illustrate best how each product will operate in heating and/or cooling mode depending on where you live and on the basis of real-life use conditions: Seasonal efficiency integrates the auxiliary modes of operation of the product, where energy use is still necessary. Calculations are simulated under different combinations of indoor and outdoor average temperatures over all seasons corresponding to one out the three Europe climate zones. LG products improve the indoor environment and save energy in a cost efficient way.

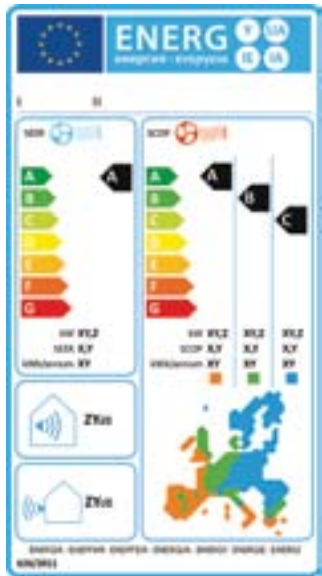
## VRF Certification

LG Electronics is involved in a cross-industry evaluation whereby the performance of the outdoor units of VRF systems is voluntarily measured and rated. Committed to producing energy efficient products, LG Electronics has supported this initiative since its start. The standard, coordinated by Eurovent, will allow the energy efficiency of the product to be displayed in heating and cooling mode and allow side-by-side comparison with competing products. In the end, the user can make the most informed choice when purchasing an LG Electronics product, from both an environmental and a pricing point of view.

## Energy Label

LG Electronics products display their energy credentials on the standardized energy label, a transparent and easy to compare tool. An arrow indicates which energy class your product belongs in on a scale from A to G. The higher the class, the less energy-hungry your product is at delivering heating or cooling. The label will also give you an estimate of the product's annual energy consumption in kW.

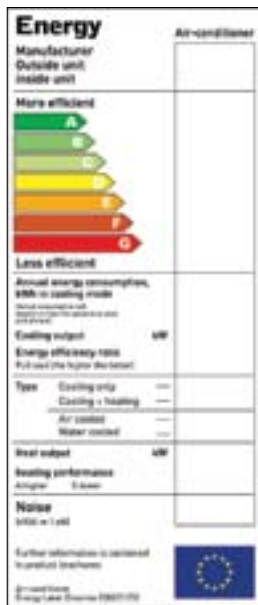
For split air conditioners below 12 kW that provide both heating and cooling, the energy label will indicate two energy classes-one for heating and one for cooling. Also displayed are capacity in kW, annual energy consumption and the seasonal performance ratio for heating and cooling.



For single ducts below 12 kW the same information is displayed, with some adjustments: Single ducts indicate the hourly energy consumption in kW whereas double ducts indicate the yearly annual consumption in kW. Finally, performances of single and double ducts in heating and/or cooling mode are still subject to nominal calculations, not seasonal.



Current energy label will remain until 2012.



|               |   |               |
|---------------|---|---------------|
| EER>3.20      | A | COP>3.60      |
| 3.20≥EER>3.00 | B | 3.60≥COP>3.40 |
| 3.00≥EER>2.80 | C | 3.40≥COP>3.20 |
| 2.80≥EER>2.60 | D | 3.20≥COP>2.80 |
| 2.60≥EER>2.40 | E | 2.80≥COP>2.60 |
| 2.40≥EER>2.20 | F | 2.60≥COP>2.40 |
| 2.20≥EER      | G | 2.40≥COP      |







# Contents

## 14 Outdoor Unit

**MULTI V™**

**MULTI V™ MINI**

**MULTI V™ SPACE**

**MULTI V™ WATER**

## 56 Indoor Unit

ARTCOOL / Standard

Wall mounted

Console

Ceiling Cassette

Ceiling Concealed Duct

Fresh Air Intake Unit

Ceiling & Floor Ceiling Suspended

Floor standing

## 86 Hydro kit

## 94 ECO V (Ventilation system)

Energy Recovery Ventilator

Energy Recovery Ventilator with DX Coil

## 106 V-net & Accessory

Remote Controller

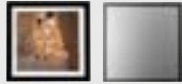
















Central Controller

Accessory

| HP   | 4   | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 |  | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 70 | 72 | 74 | 76 | 78 | 80 |
|--|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| <div>MULTI V™ III</div> <div>Heat Pump</div> | 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| kW                     |                         |   | 1.5 | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 | 8.2 | 10.6 | 12.3 | 14.1 | 15.8 | 22.4 | 28.0 |
|------------------------|-------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| Btu / h                |                         |   | 5k  | 7k  | 9k  | 12k | 15k | 18k | 24k | 28k | 36k  | 42k  | 48k  | 54k  | 76k  | 96k  |
| ART COOL Series        | Gallery                 |    |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
|                        | Mirror                  |    |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
| Standard               |                         |    |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
| Wall mounted           |                         |    |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
| Console                |                         |    |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
| Ceiling Cassette       | 4way Cassette (570x570) |    |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
|                        | 4way Cassette (840x840) |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
|                        | 2 way Cassette          |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
|                        | 1 way Cassette          |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
| Ceiling Concealed Duct | Low Static              |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
|                        | Built-in                |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
|                        | High Static             |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
| Fresh Air Intake Unit  |                         |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
| Ceiling & Floor        |                         |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
| Ceiling Suspended      |                         |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
| Floor Standing         | With Case               |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |
|                        | Without Case            |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |

# **MULTI V™ series**

## **OUTDOOR UNIT**

**MULTI V™ series** efficient system that offers outstanding energy saving, simple and easy installation, and connection to different types of indoor units, making it easy to design and install.

**36** **MULTI V™ III**    **52** **MULTI V™ MINI**    **53** **MULTI V™ SPACE**    **54** **MULTI V™ WATER**





## High cooling and heating efficiency

- High efficiency BLDC V-scroll inverter compressor
- High efficiency BLDC inverter fan motor
- High air volume fan
- Optimal heat exchanger distribution

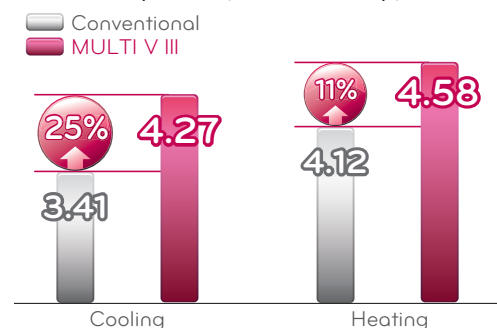
\*BLDC : The LG inverter air conditioner comes with a BLDC compressor that uses a strong neodymium magnet. Its compressor thus has improved efficiency compared with the AC inverter.

$$\text{Coefficient of Performance (COP)} = \frac{\text{Heating}}{\text{Energy consumption}}$$

$$\text{Energy Efficiency Ratio (EER)} = \frac{\text{Cooling}}{\text{Energy consumption}}$$

Therefore, higher COP and EER of a product makes its cooling and heating capability higher and energy consumption lower

### COP Comparison(based On 8Hp)



## Maximum single unit capacity of 20 HP

MULTI V III offers bigger capacity of 20 HP for a single unit. Two basic modules, One Fan (up to 12 HP) and Two Fans (up to 20 HP), can be combined freely.

Since one outdoor unit is enough to heat and cool a large area, the design of the MULTI V III is simple and installation costs are kept to a minimum.



## Technical innovation for high COP

As MULTI V III has high efficiency parts, advanced inverter control technology and optimal cycle control technology, the system's unified performance has been improved. Based on these advanced technologies, the product provides customers value through high efficiency and energy savings.

### 1 V-Scroll (LG BLDC inverter compressor)

Improved the energy efficiency by 11%, compared to the AC inverter compressor, by using the high efficiency LG BLDC inverter compressor.

### 2 Sine wave inverter control

Improved the efficiency of the compressor motor by using the sine wave DC inverter control technology.

### 3 Cyclone sub-cooling circuit

Improved the cooling capability by using a cyclone sub-cooling circuit.

### 4 Newly designed propeller fan

Achieved optimal heat exchange by using high air volume and low noise fan.

### 5 LG BLDC inverter fan motor

Improved efficiency by using high efficiency BLDC inverter motor, compared to the AC motor.

### 6 Uniform distributor for the heat exchanger

Improved heat exchange performance and efficiency by reducing greatly the heat exchanger's temperature deviation from 5°C to 1°C by applying an optimal distributor design to the heat exchanger.

### 7 Wide louver fins for the heat exchanger

Improved efficiency by using wide louver fins with an increased heating area.

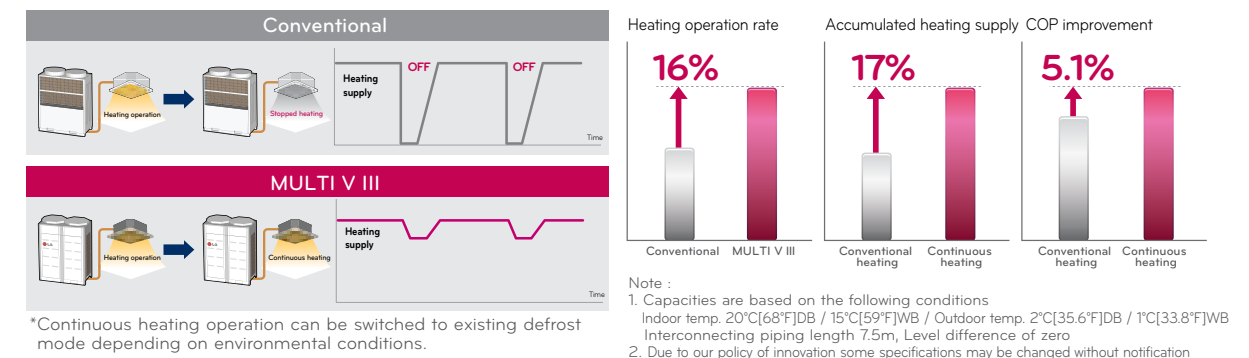
### 8 HiPOR™ (High Pressure Oil Return)

Improved the system's COP by 5%



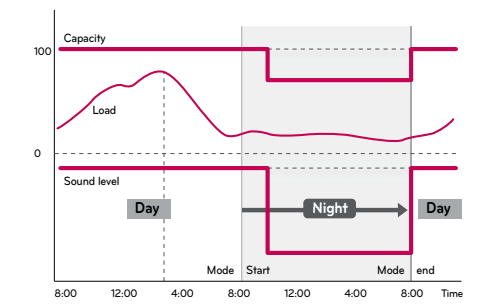
## Continuous heating operation\*

Continuous heating operation is possible with this product. Usually, when heating is being operated, freezing occurs in an outdoor unit heat exchanger. In such a situation, the usual way to solve this is to stop the indoor units and perform the defrost operation on the heat exchanger. However, since MULTI V III uses the split defrost technology it can operate heating continuously without stopping any indoor units, improving heating efficiency and always maintaining a warm indoor environment.



## Night silent operation

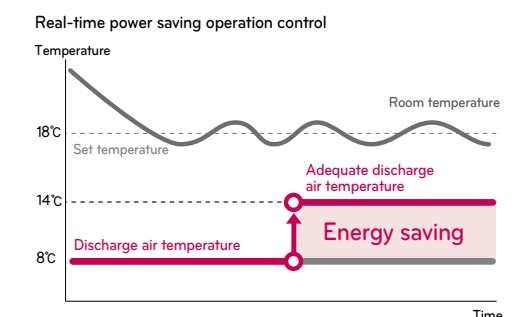
The text is wrong because the same than "Continuous heating operation". Replace by the text about Night silent operation, see catalogue 2011.



## Real-time smart operation

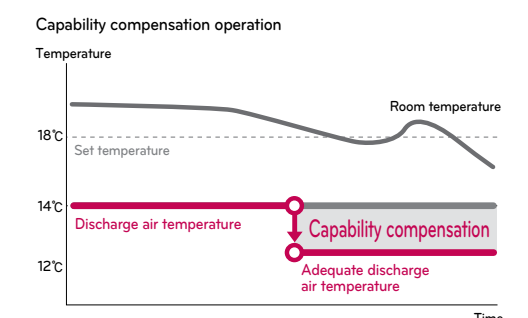
### Real-time power saving operation

The real-time power saving operation algorithm enables the product to automatically decide on the operation status for the indoor units and control them to maintain optimal operation level and reduce power consumption.



### Capability compensation operation

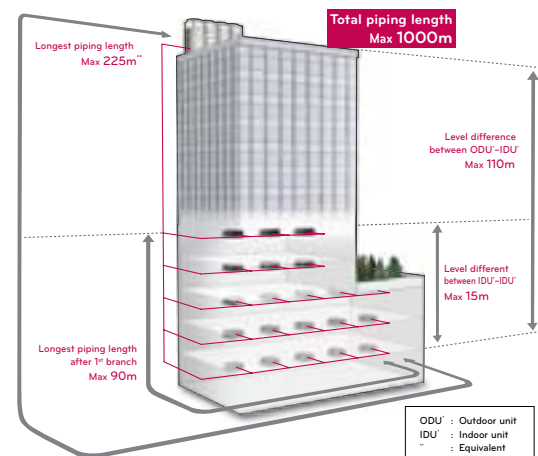
During the heating or cooling operation, the product automatically decides the operation status and performs the capability compensation operation on indoor units if required.



## Extended piping length and elevation

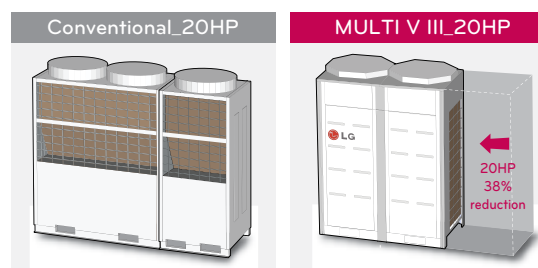
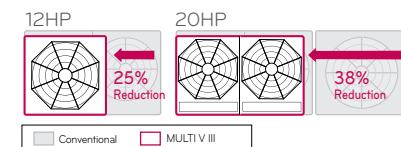
Because of the product's use of inverter control technology and sub-cooling control circuit technology, it is possible to design a system with longer piping length and world-class elevation difference. With this product, since a cooling and heating system can be designed more flexibly in a high-rise building or complex facilities building, the designer's working time is reduced, thus allowing a more efficient design.

|  |        |
|--|--------|
| Total piping length                    | 1000m  |
| Actual longest piping length           | 200m   |
| (Equivalent)                           | (225m) |
| Longest piping length after 1st branch | 40m    |
| (Conditional application)              | (90m)  |
| Level difference between ODU-IDU       | 110m   |
| Level difference between IDU-IDU       | 15m    |
| Level difference between ODU-ODU       | 5m     |



## Space utilization by smaller size

The product size is reduced by up to 38% compared to the conventional products, reducing the required installation space greatly. This gives you more free space and thus allows for easier HVAC design.

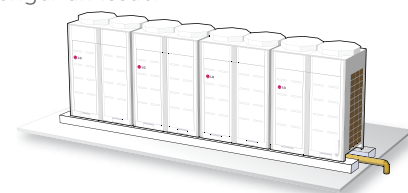


## Maximum combination capacity of 80 HP with a single pipe

A combination of up to 80 HP can be made using 20 HP units. This makes it possible to design a HVAC system that fits into an extensive space. The usual major problems in design, such as installation space for outdoor units, pipe shaft space and piping line, are no longer an issue.

### Outdoor unit combination of up to 80 HP

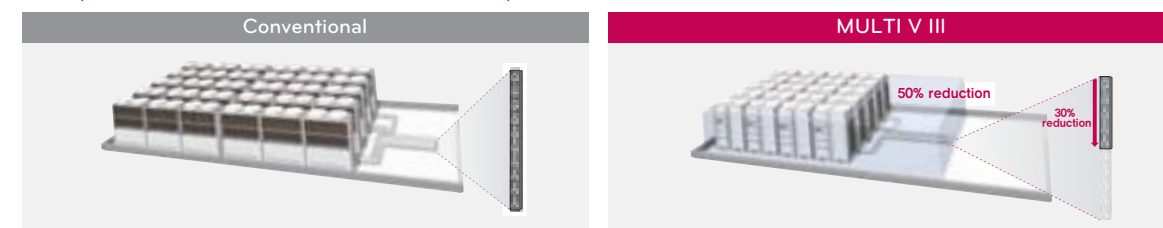
- |                                  |  |
|----------------------------------|--|
| <b>Installation space saving</b> | <b>Single pipe</b>                           |
| - Optimal space utilization      | - Easy to design                             |
|                                  | - Cooling and heating for an extensive space |
|                                  | - Installation cost savings                  |



When designing a HVAC system with a total capacity of 400 HP, our 80 HP MULTI V III combination give you the following benefits, compared with conventional 40 HP combination models

- Reduces the installation space and piping numbers by 50%
- Reduces the pipe shaft space by 30%
- A large capacity design reduces the time spent on designing the HVAC system, and also reduces the construction costs

### Comparison of outdoor unit installation space



## Eco-friendly design

We produce not only high efficiency products that have excellent energy-saving capability, but we also develop eco-friendly products with green technology that protect the earth and the environment. With these products, we are leading the world in low carbon and green development.

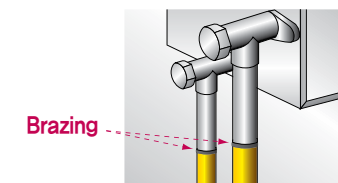
### R410A Refrigerant

R410A is an eco-friendly refrigerant, with zero Ozone Depletion Potential (ODP). Since all the products use R410A refrigerant, they exhibit higher efficiency and energy-saving capability compared to products that use the conventional R22, thus contributing to global environmental protection.



### No refrigerant leakage design and production

As the product is especially designed and produced with brazing to prevent refrigerant from leaking, no leakage will occur unless an external factor, such as an impact, occurs even when the product is used for an extended time.

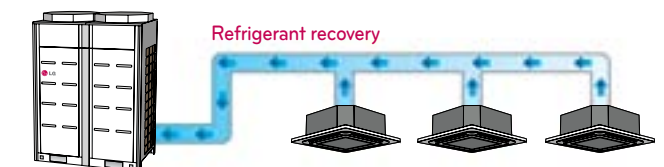


### Auto leakage detection

The product monitors the operation status data in real time and decides the appropriate amount of refrigerant and displays it. It also automatically notifies the user of any small refrigerant leakage.

### Refrigerant recovery and reuse

When performing maintenance on the product, the refrigerant is not discharged to the air but can be saved by collecting it in an outdoor unit, a refrigerant pipe or an indoor unit. This increases environmental protection and reduces costs.



## New designs for low noise operation

To provide our customers with high cooling and heating performance at a minimum size, and as well as a pleasant environment ensured by quiet operation, MULTI V III uses various low noise technologies. It has minimized operation noise by using a compressor with BLDC motors, low noise fan motors, new soundproof technology, outdoor fans, and a newly developed shroud shape.



Robust structure design



Low torque motor with ripple design  
Resonance frequency shift with optimal current angle control



Expanded bellmouth shaped shroud



Robust & S-shaped blade  
Increased pitch angle



Octangular grill air flow resistance reduction

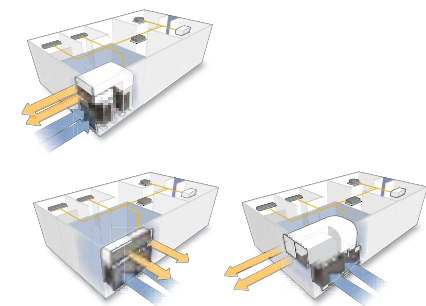


## High static pressure fan

Since the product uses a more powerful high static pressure fan, the outdoor unit can be installed not only on the roof of a building but also inside the building by using an air duct. Because of the high static pressure fans and the BLDC fan motors, a sufficient air volume can be acquired for heat exchange and no re-circulation of the discharged air currents occurs. Depending on the building structure, you can reduce the piping length by installing the outdoor unit in the machine room.

(Maximum External Static Pressure : 8mmAq)

Various design and installation methods are available that fit into different building structures

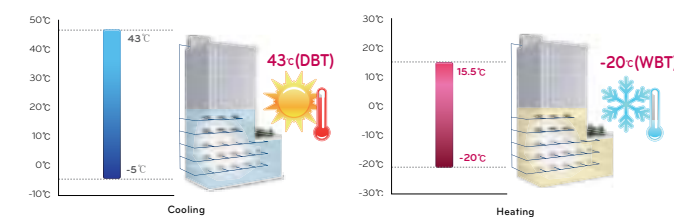


No stacking of high temperature air occurs due to powerful discharge of air currents even within a high-rise building



## Wide operating range

The product has more extended continuous cooling and heating operation range and operable range than the conventional products, enabling more extensive operation. It has extended the operation range by using more enhanced inverter compressor and control technology.



## Flexible indoor unit combination

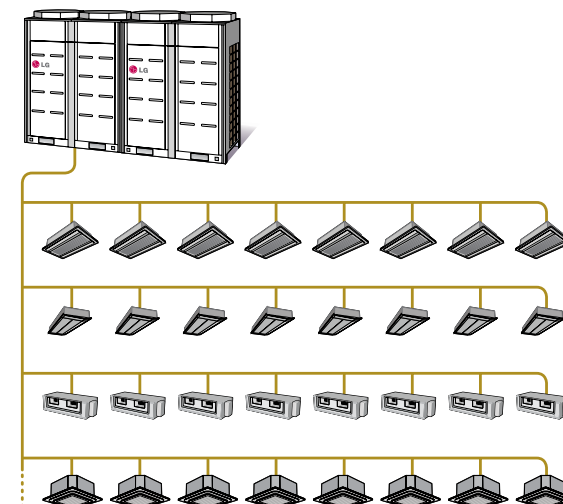
Since up to 64 indoor units can be connected and there are 13 types of 71 different indoor models that can be connected, a variety of designs tailored for individual construction usage can be made. Up to 200% efficiency can be achieved with different combinations.

|   |   |  |
|---|---|--|
| Connectable Indoor unit Capacity<br>Up to Max <b>200%</b> | Connectable Indoor unit Number<br>Up to <b>64</b> | Various Indoor units<br><b>13 types, 71 models</b> |
|---|---|--|

\* A combination with maximum 200% efficiency can be achieved only if the changes of the heating and cooling load and the product operation rate by time are considered

Combination ratio(50~200%)

| No. of outdoor unit | Connection Capacity |
|---------------------|---------------------|
| Single unit         | 200%                |
| Double unit         | 160%                |
| Triple unit         | 130%                |
| Over triple unit    | 130%                |

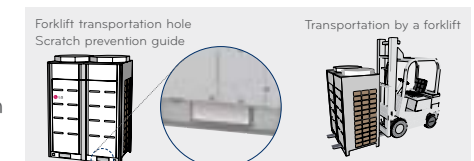


## Easy and safe transportation

With compact size and smaller weight, the product is designed to be easily transported by a regular elevator when installing it in a building where it is difficult to use a crane. The product is designed for the installers to be able to move it safely and easily. In addition, bigger capacity of 20 HP per unit makes installation work easier by reducing the load of transportation and the installation time. Because the product has wire holes which can be used when it is transported by crane, you can ensure safe transportation. The product has the design that provides reduced installation time, enables convenient transportation and, above all, considers safe installation, and thus MULTI V III provides product reliability.

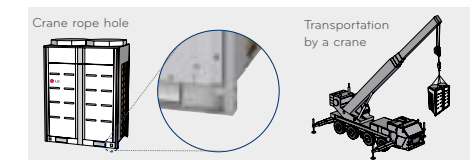
### Fast and safe transportation by a forklift

There are forklift transportation holes at the bottom of the product, designed to make it easy for a forklift to load, transport and unload the product. The product also has scratch prevention guides that prevent a forklift from scratching the product during transportation.



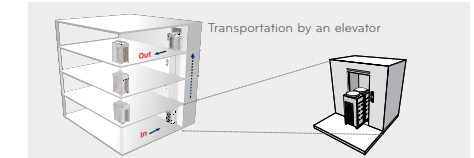
### Safety design for crane use

Provides enhanced safety during transportation by a crane due to the holes that prevent the product from falling and protect it from external impacts.



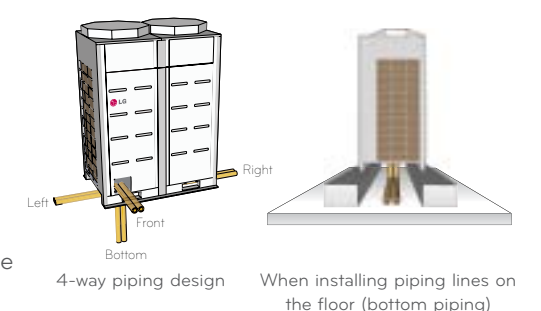
### Compact product design allowing transportation by an elevator

Since the product size is reduced, the product can be easily transported by an elevator.



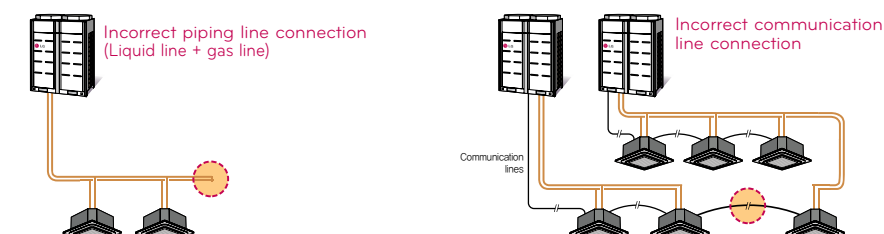
## Free 4-way piping connection

The piping lines for the outdoor unit can be connected in 4 ways (front/left/right/bottom piping), allowing various custom construction depending on the individual site. If the piping lines are installed on the floor (bottom piping), the product looks neat as they are hidden from view and, in addition, the piping lines also do not interfere with gas/liquid lines, making the installation work safe and convenient. Piping line tray work is not necessary depending on the individual site, which reduces additional working hours, and also makes maintenance easier when the product is installed in the machine room.



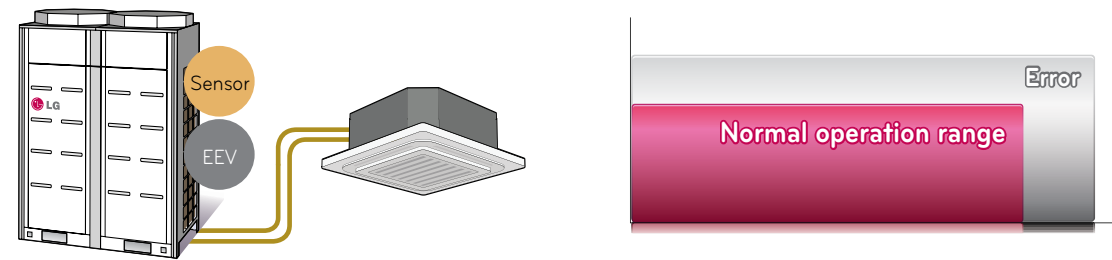
## Automatic detection for incorrect connections

In the conventional products, if an installation engineer has connected a liquid line to a gas line by mistake, you have to take the trouble to check the piping line connections for the indoor units installed over the ceiling. However, MULTI V III automatically checks the connections of piping lines and communication lines with its FDD (Fault Detection & Diagnosis) function and notifies the user if there is any problem. Usually, installation becomes more and more complex as the number of connected indoor units increases. But, with the automatic detection function of this product, installation is made easier and, when an indoor unit has a connection problem, you can take action quickly because the automatic detection function will inform you about that indoor unit.



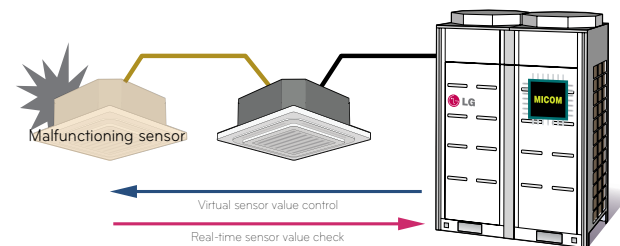
## Real-time fault prediction function

With the conventional products, their performance and reliability would be degraded due to a slight fault with a sensor or the EEV. However, this product allows you to check the current status for the sensors and the EEV, which are the major components for system control, through a auto test run. Since the auto test run inspects the current status of the sensors and the EEV with of many operation conditions and alerts you of which one of them has a problem, you can take action quickly even if a problem occurs within the normal operation range.



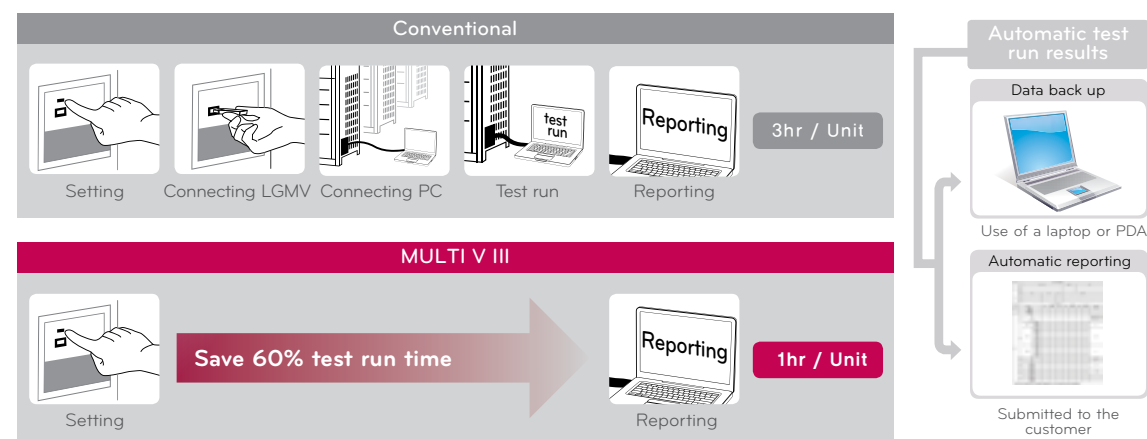
## New virtual sensor back-up function

When an indoor unit sensor malfunctions with an abnormal value although it is detected as a faulty part, an outdoor unit can estimate what should be a normal sensor value and control the unit, which improves system performance and reliability.



## Intelligent simple test run

With the conventional products, a test run performed after installation had been finished requires a lot of time and labor force because the installation engineer has to manually perform each step of the test run. However, the development of the automatic test run mode allows this product to automatically perform a test run and automatically create a test run report, reducing the installation engineers' effort and time greatly. In addition, the product checks and immediately notifies the user of various installation and operation problems, such as a piping line/communication line problem and refrigerant shortage, securing product stability and reliability and allowing users to perform test runs easier and quicker.



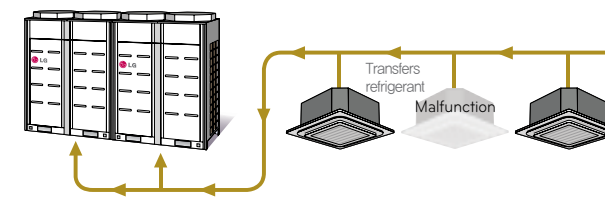
Automatic test run reduce test run time by more than 60% compared to the test run in an conventional product, and provides safe, reliable and convenient test run with various data backup functions. Since any general installation worker, not just a highly trained engineer, can perform a test run, the product also increases your installation competitiveness.

## Pump down and pump out function

When an outdoor or indoor unit malfunctions, it needs to be replaced served before servicing this function automatically collects its refrigerant in another outdoor or indoor unit running normally, making servicing very convenient and easy.

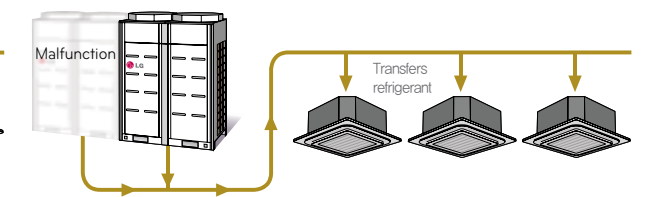
### PUMP DOWN

When an indoor unit malfunctions, this function enables the pump to collect the refrigerant remaining in the piping line or that unit to an outdoor unit.



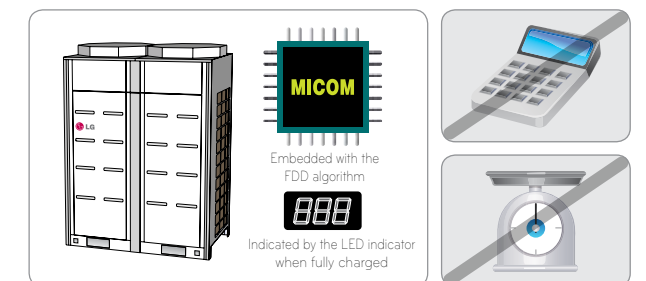
### PUMP OUT

When an outdoor unit malfunctions, this function enables the pump to collect its refrigerant in another indoor unit or a piping line.



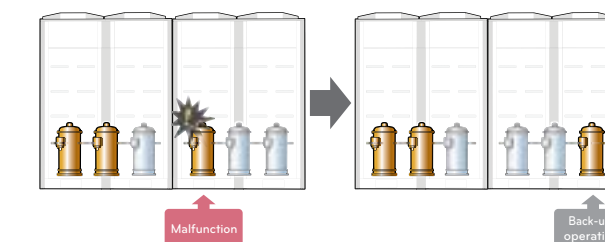
## Automatic refrigerant charging function

Calculates and automatically injects the optimal amount of refrigerant. Since the FDD algorithm calculates and automatically charges the correct amount of refrigerant without using an electronic scale, installation reliability is increased and product performance is guaranteed.

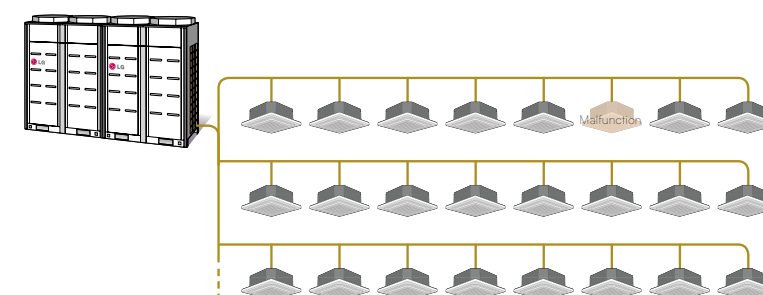


## Automatic emergency back-up function

When a compressor malfunctions, the other compressor that is operating normally in an outdoor unit can run automatically as a substitute, minimizing any inconvenience that may occur in an emergency situation.



Even though an indoor unit malfunctions, the other indoor units operate normally because each indoor unit is operated individually by the Micom embedded in it.



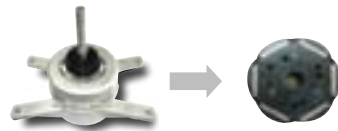


## New & core technologies

### 1 New BLDC Inverter fan Motor

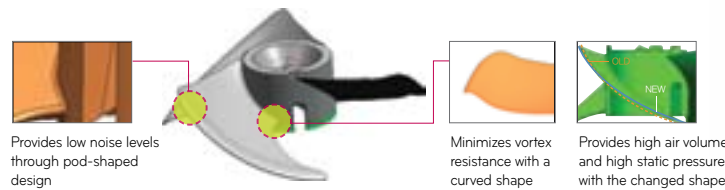
The product is equipped with highly efficient BLDC motor. The BLDC motor power consumption has been reduced and output has been improved, compared to the normal induction motor.

With strong torque and powerful Neodymium magnet inside the rotor, the BLDC motor provides large air volume and high static pressure.



### 2 New designed propeller fan (Super Aero fan)

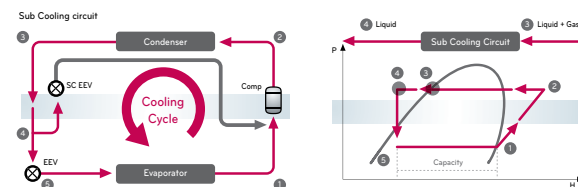
The Super Aero fan is a large air volume and high static pressure fan, and at the same time it produces low levels of noise.



### 3 Cyclone Sub-Cooling Circuit

The sub-cooling circuit control acquires sub-cooled liquid refrigerant and thus improves the symptoms of oil recovery degradation and performance degradation that occur because a loss of system capability occurs throughout the piping lines. The sub-cooling circuit control is a core technology that enables the product to implement the world's longest piping length and elevation difference technology.

※ Sub-cooling circuit control: Extracts part of the refrigerant of the SC circuit equipped in the liquid line exit of an outdoor unit and expands that extracted refrigerant using the SC EEV to make low temperature refrigerant, and then performs heat exchange in the system using that low temperature to increase the sub-cooling rate of the system.

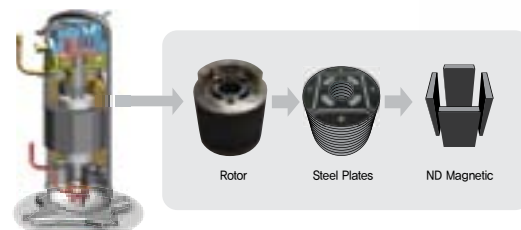


### 4 V-scroll (LG BLDC inverter compressor)

We have developed a new compressor with better performance, higher efficiency, and a more enhanced reliability than the conventional compressors.

For the motor, which is the core of the compressor, the product uses a BLDC motor. The BLDC motor is a highly efficient motor, where strong neodymium magnetism inside the rotor produces magnetic torque and the metal part of the rotor produces reluctance torque to generate strong rotational force. Efficiency is improved because it has no slip loss, which always occurs in the normal induction motor, and noise is also reduced due to its low torque ripple design.

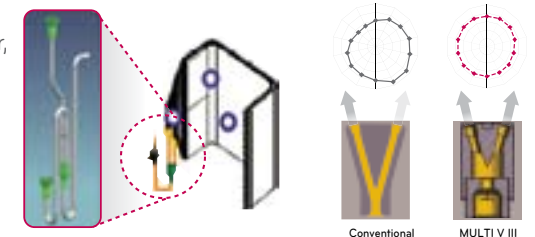
In addition, because the LG BLDC inverter compressor has the back pressure structure in which the interior of the compressor is maintained at a high pressure, the compression efficiency is improved. The compressor is also a high pressure type that makes oil lubrication smoother. Compared to the conventional models, the LG BLDC inverter compressor has more improved performance and reliability.



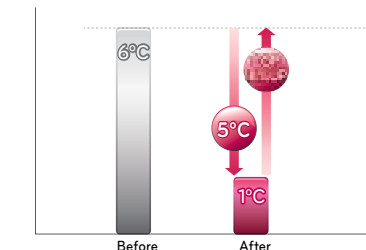
It is the most suitable scroll inverter compressor for the VRF system and acts as the core to MULTI V III its outstanding performance and high reliability.

### 5 New optimized refrigerant distributor

With the new optimal distributor design applied to the heat exchanger, the product distributes refrigerant to the heat exchanger uniformly so that its entire area can be used efficiently. As a result, both of heat exchange efficiency and system performance are improved.



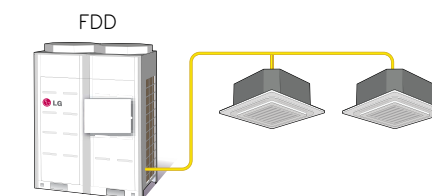
Standard Deviation of T<sub>out</sub>



Note :  
1. Capacities are based on the following conditions  
Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m, Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

### 6 FDD (Fault Detection & Diagnosis)

Just like a comprehensive automotive diagnostic system, the MULTI V III is also equipped with a comprehensive diagnostic system that carries out automatic test run, refrigerant amount check, and real-time inspection and back-up operation for parts and sensors, maximizing reliability of the product.



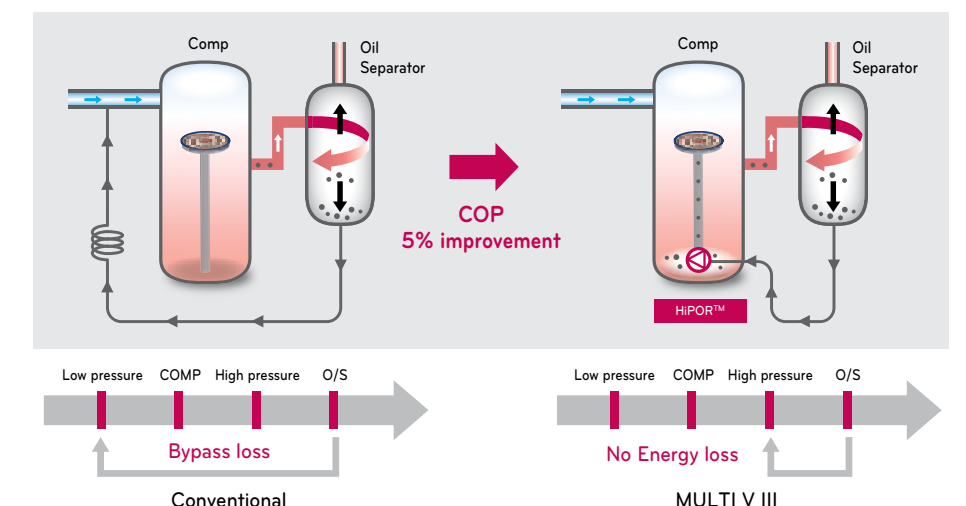
※ New & Improved function

1. Automatic test run
2. Refrigerant amount check
3. Real-time diagnosis (refrigerant and parts)
4. Real-time back-up (compressor and sensors)



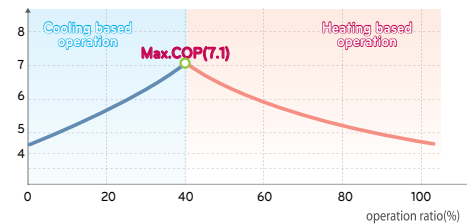
### 7 New oil management technology (HiPOR™)

HiPORTM is a new technology that maximizes the reliability and efficiency of compressor by reducing pressure loss through direct forwarding of refrigerant and oil to a higher pressure side using the pump installed inside the compressor.

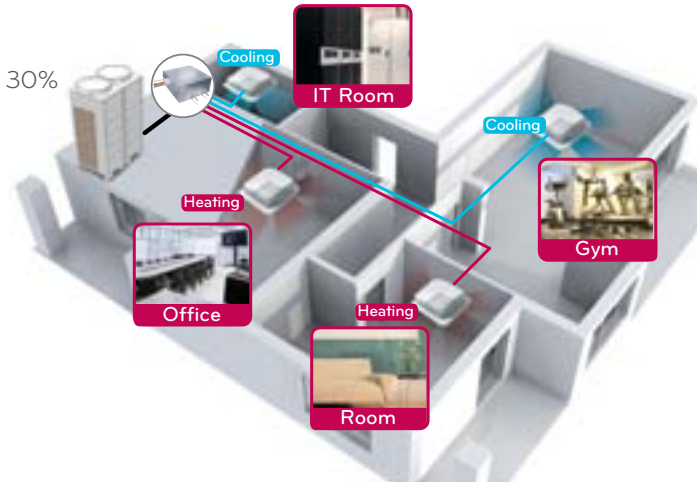


## Heating & Cooling Synchronous Operation

- High COP up to 7.1
- When, cooling(40%) + heating(60%)
- Energy consumption can be decreased by 30%



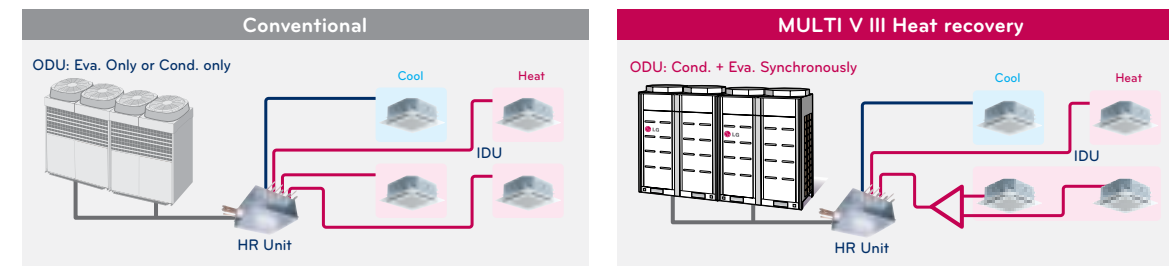
\* Outdoor temperature : 7°C DB / 6°C WB  
\* Indoor temperature : 20°C DB / 15°C WB



## Simultaneous Operations of Outdoor Units

Outdoor units' Heat exchanger operated for cooling and Heating synchronously.

- Linear Loading Response
- Increased Efficiency with Simultaneous Operations
- Minimized Switch Mode(continuous cooling and heating)

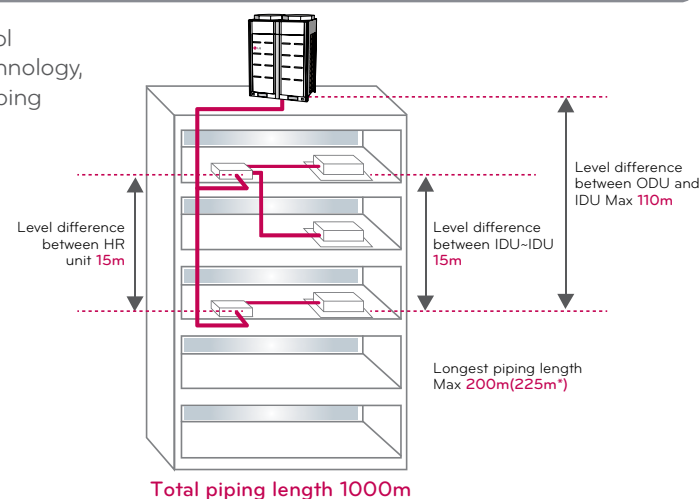


## Long Piping Length

Because of the product's use of inverter control technology and sub-cooling control circuit technology, it is possible to design a system with longer piping length and world-class elevation difference.

|  |             |
|--|-------------|
| Total piping length                    | 1000m       |
| Actual longest pipe length             | 200m(225m*) |
| Longest piping length after 1st branch | 40m[90m**]  |
| Level difference between ODU-IDU       | 110m        |
| Level difference between IDU-IDU       | 15m         |
| Level difference between ODU-ODU       | 5m          |
| HR Unit - Neighboring HR Unit          | 10m         |
| Level difference between HR unit       | 15m         |

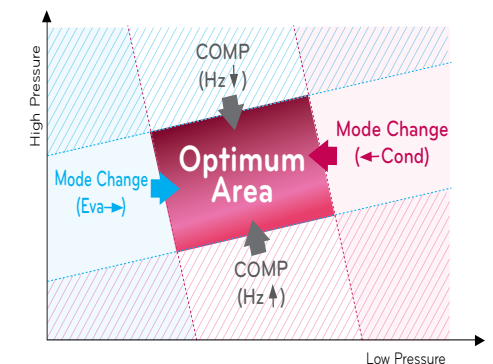
\* Equivalent  
\*\* Conditional application



## AMC (Advanced Mode Change)

AMC control provides an optimal cycle operation under any conditions. Through this mode, System Cycles can be more stable and maintain comfort for the customers

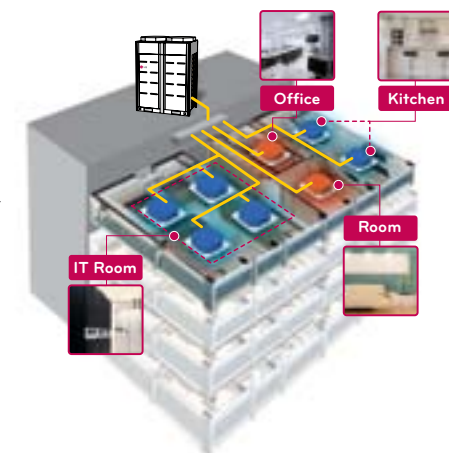
- Real time pressure control
- Optimal cycle in optimum area
- Minimize settling time after switching mode : MAX 5 min.



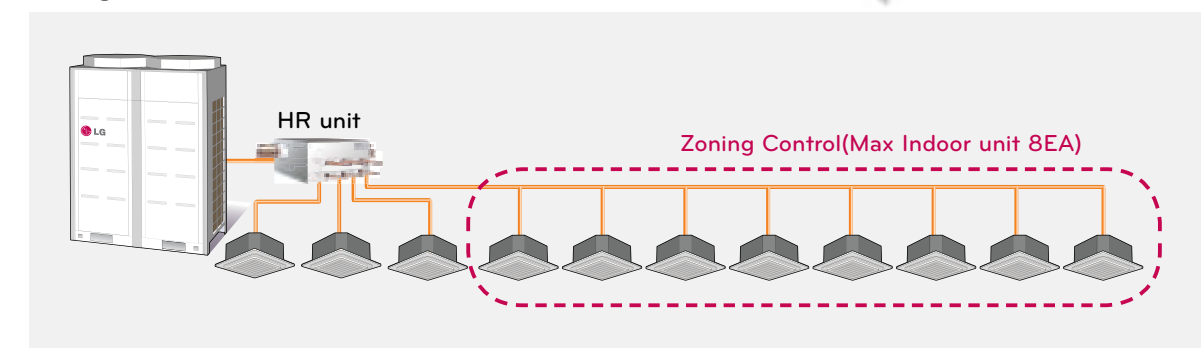
## Convenient Free Zoning

MULTI V III Heat recovery provides flexible control over individual zones for the user's convenience

- Individual Control
- Perfect individual control over spaces ventilation needed
- Zone Control
- Max. of 8 indoor units can be connected for one branch
- Max. of 32 indoor units can be connected for one HR unit
- Same operational model can be operated by indoor units with zone control function installed
- Combination of Individual and Zoning Installations
- Flexible Piping Design

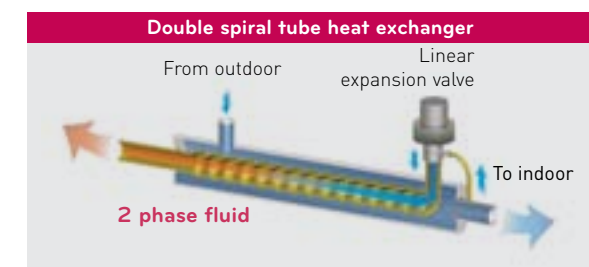


[Zoning control]



## High Efficiency Heat Recovery Unit

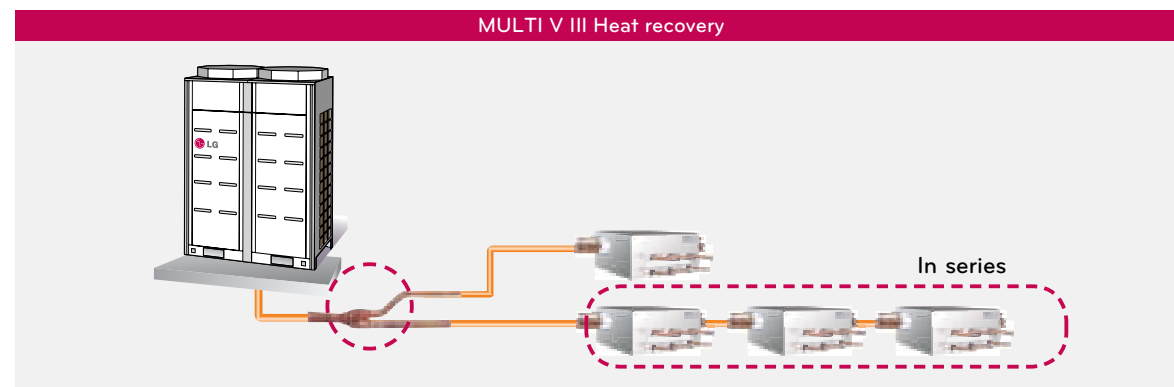
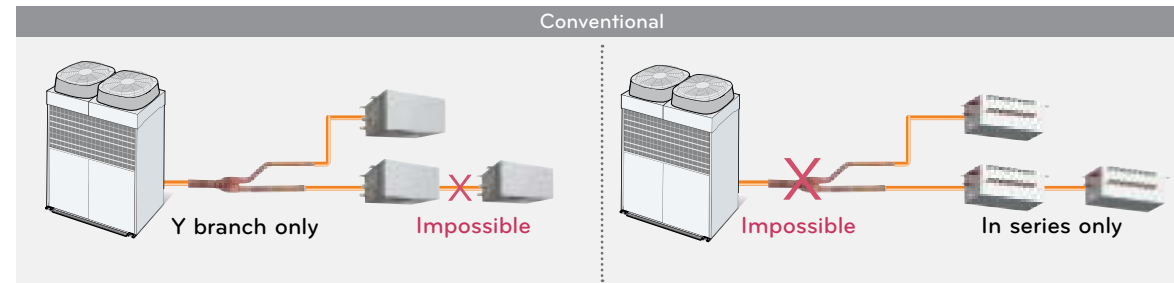
- High efficient double spiral tube type SCI circuit
- Maximum 8 indoor units connectable per a branch
- Easy installation with auto piping detect function
- Access allowed to internal parts for SVC





## Flexible Connection of HR Unit

LG's heat recovery unit allows flexible connection both in series and in a row.

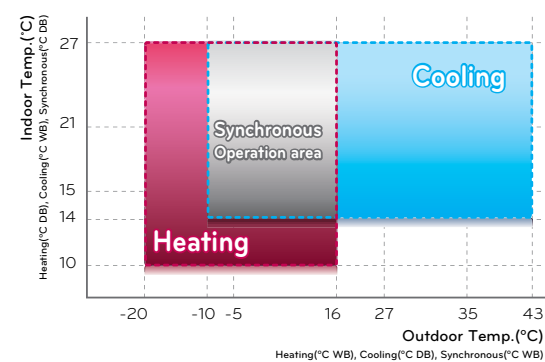


## Wide Operation Range

Expanded Low Temperature Operation area through Condenser with Various Control

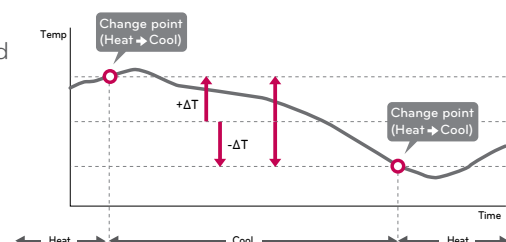
- Heating mode : - 20°C WB ~ 16°C WB
- Cooling mode : - 10°C DB ~ 43°C DB
- Synchronous mode : -10°C WB ~ 16°C WB

note : when hydrokit is used, maximum outdoor temperature for heating operation is 32°C WB (instead of 16°C WB).



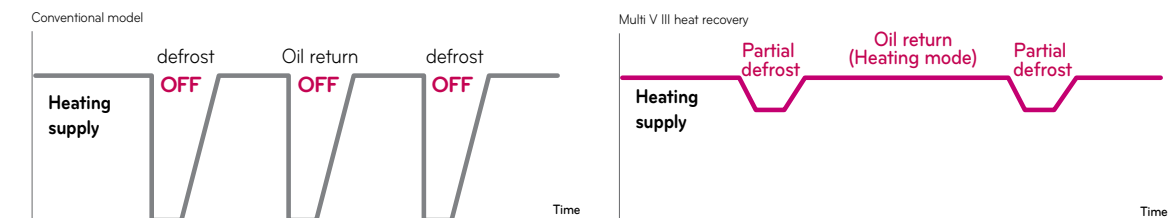
## Auto Changeover

Auto changeover automatically change operating mode cool and heat, to maintain optimum room temperature, so no need of changing the mode during the change of season.



## Non-stop heating operation

- Improved continuous heating operation (In case of series Unit, alternative defrost per unit)
- Integrated heating capacity : 17% up
- Heating mode oil return
- Continuous heating and oil return during heating mode

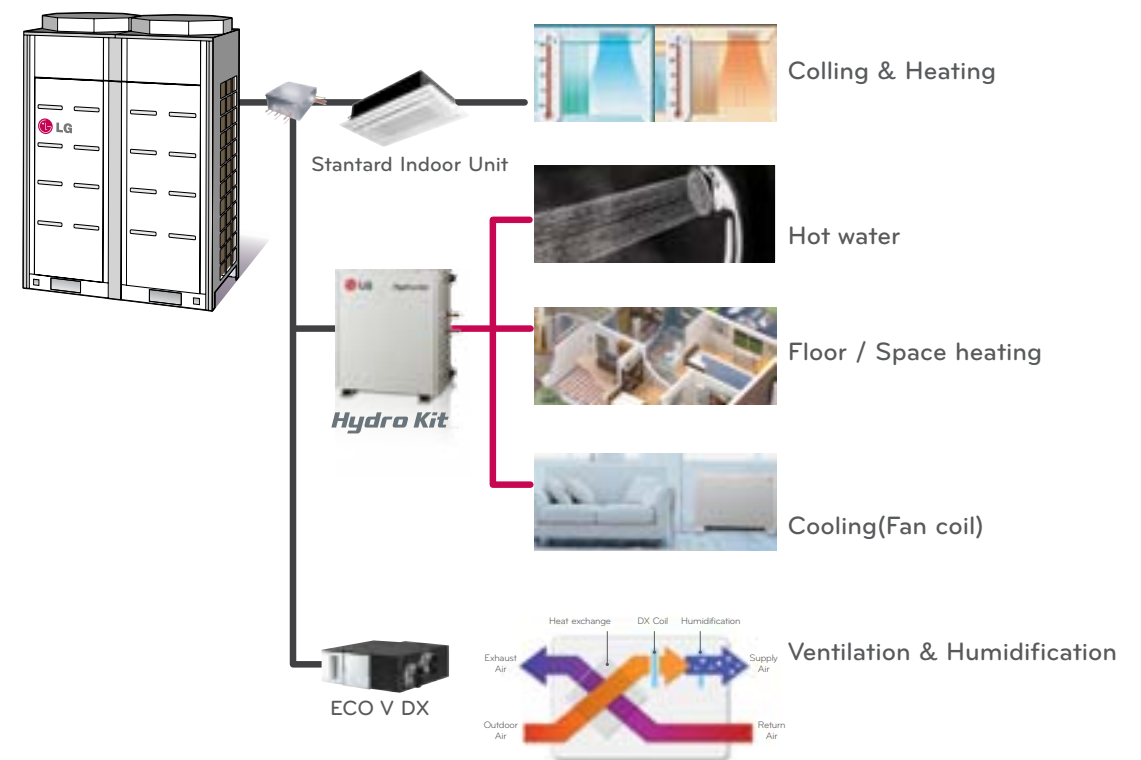


\*Existing mode can be operated automatically, depending on the condition of application.

## Providing Various Applications

Experiencing different operations simultaneously to provide optimal comfort with LG Air Conditioning system

- Cooling/Heating
- Fast Water Heating/Floor Heating
- Ventilation/Humidification

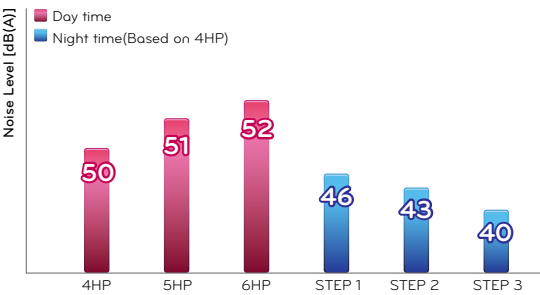


Enhanced Comfort

- Night silent operation
- High COP

|      | 1Ø, 220V |         | 3Ø, 380V |         |
|------|----------|---------|----------|---------|
| Mini | Cooling  | Heating | Cooling  | Heating |
| 4HP  | 3.7      | 3.9     | 4.3      | 4.3     |
| 5HP  | 4.0      | 4.1     | 4.0      | 4.1     |
| 6HP  | 3.7      | 3.9     | 3.7      | 3.9     |

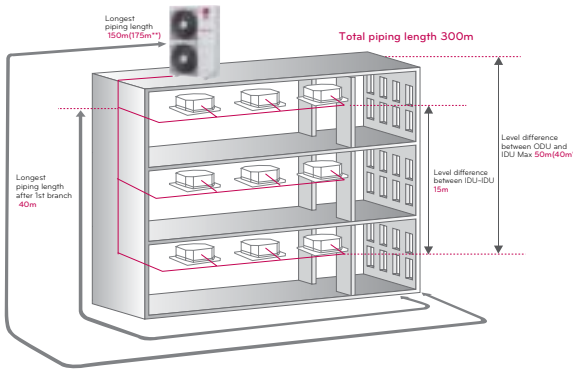
Noise level (dBA)



Longest Piping Length

|  |            |
|--|------------|
| Total piping length                    | 300m       |
| Longest piping length (Equivalent)     | 150m(175m) |
| Longest piping length after 1st branch | 40m        |
| Level difference between ODU~IDU       | 50m(40m*)  |
| Level difference between IDU~IDU       | 15m        |

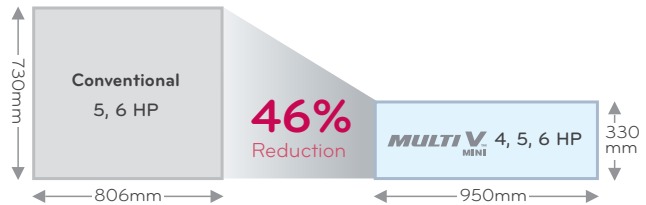
\*Outdoor unit is lower than indoor unit.



Slim & Compact Size

Easy & efficient installation of MULTI V MINI will provide the best solution for small offices and shops.

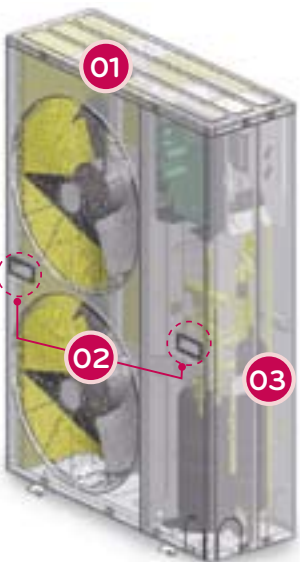
Foot print area



Volume



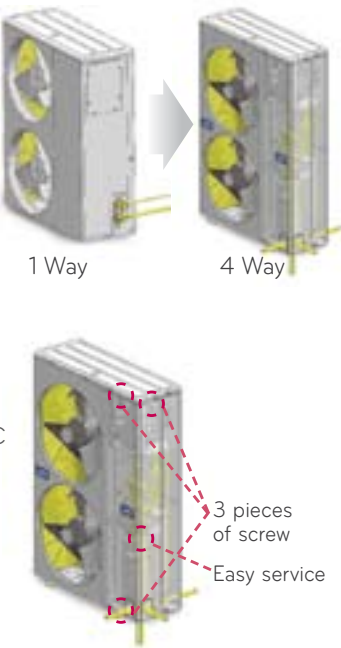
Easy to Service



- 01 Inner SVC valve
- 4 Way piping is possible (Front, Rear, Right, Down)
  - Excellent exterior

- 02 Convenient moving handle

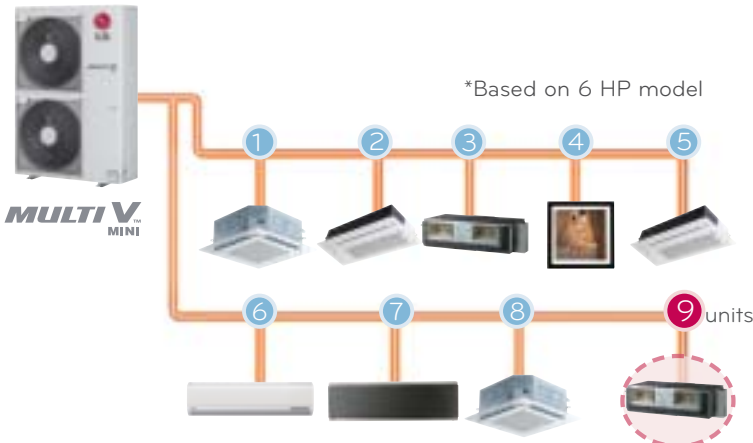
- 03 Compact design & Easy service
- Remove 3 pieces of screw for SVC
  - Front panel removal system



Max. 9 Indoor Units Connectable

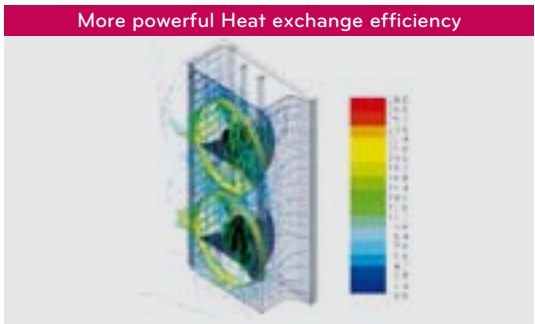
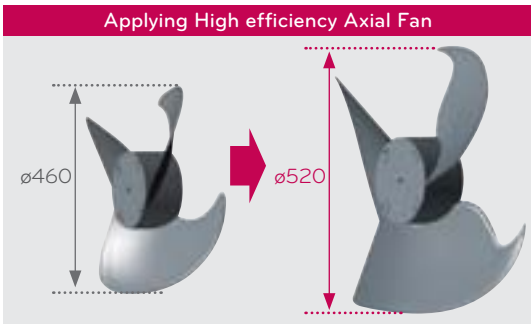
Maximum 9 indoor units can be connected to one single outdoor unit with 130% indoor unit combination.

- 9 indoor units for 6HP
- 8 indoor units for 5HP
- 6 indoor units for 4HP



High efficiency Outdoor Axial Fan

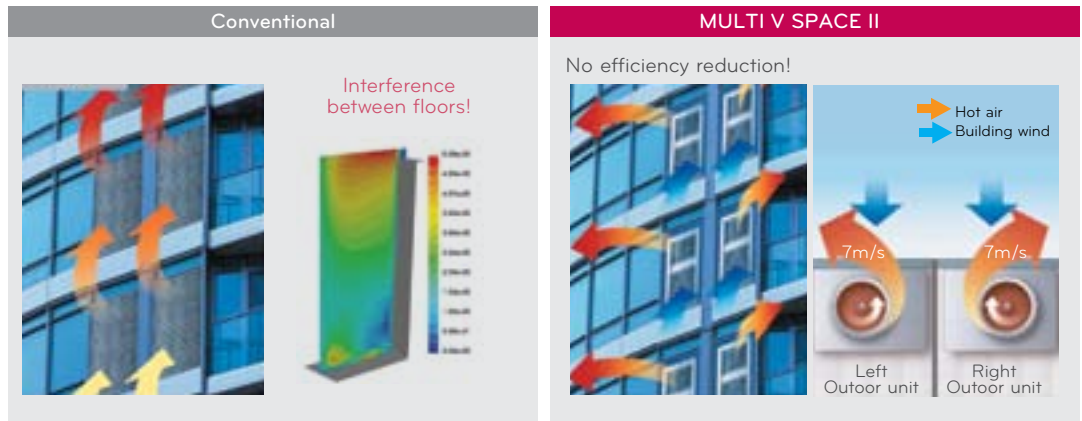
Improving outdoor heat exchange efficiency through high air flow, provided by high efficiency axial fan.





Front Suction & Front Discharge

- Right and left side air flow system
- High speed air discharging (7~8m/sec)
- No interference between each floors (Efficiency reduction due to hot air back flow)



Quiet Operation

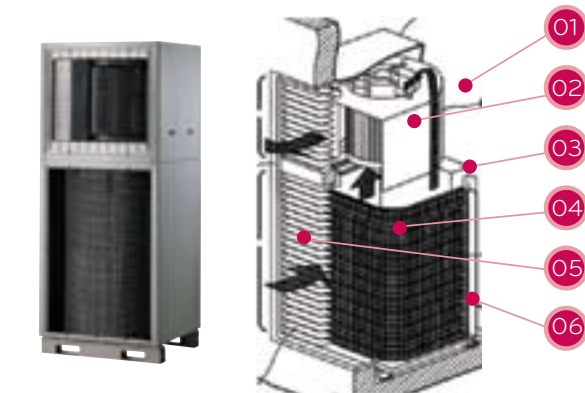
- The noise and vibration are reduced by
- Front discharge
  - Sealed structure of outdoor unit
- The indoor noise level is maintained at 30~40dBA, as quiet as being in the library



LG Patent For MULTI V SPACE II

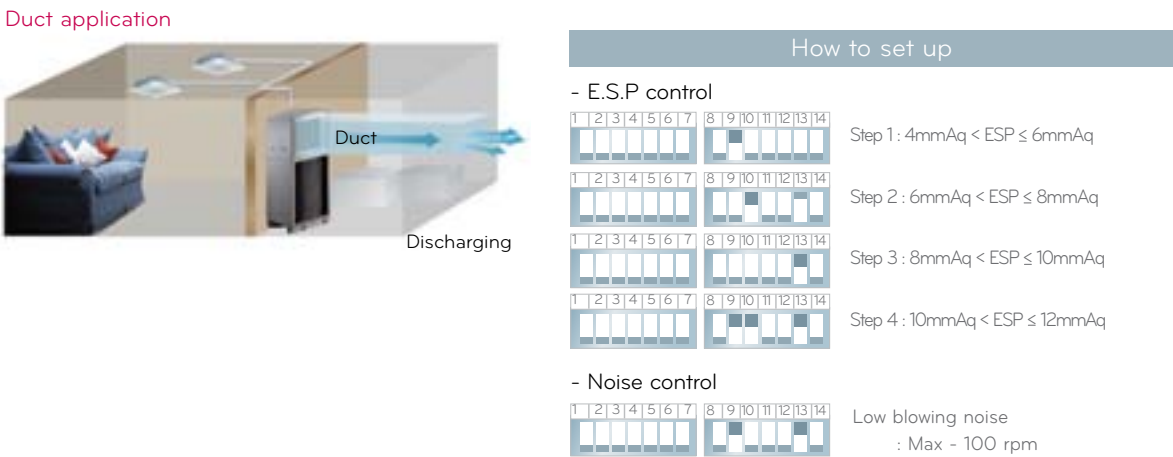
All technologies in the MULTI V SPACE II which make it a distinctive, unique unit have been applied for patents domestically and internationally. and, some of them have already been registered.

- 01 Whole structure (8 items)
- 02 Air handler structrue (18 items)
- 03 Separation of suction & discharge (6 items)
- 04 3-side heat exchange structure (3 items)
- 05 Louver structure /control (20 items)
- 06 Electrical part(2 items)



Fan RPM Control (E.S.P & Noise Control)

- Enhanced installation flexibility (Duct application)
- No need of high static pressure exhaust fan and air guide
- Keeping capacity and noise level as desired



4-Step Modularized Design

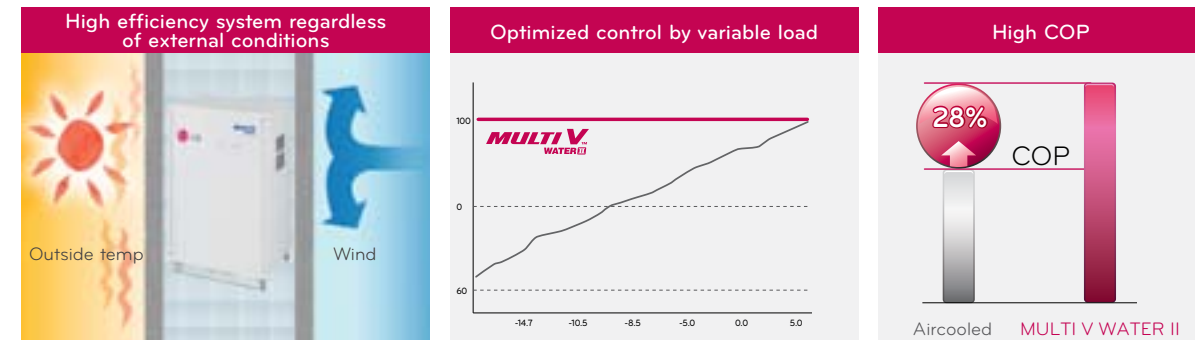
- Modularized design of the outdoor unit provides simpler installation and maintenance.
- Outdoor unit can be installed according to overall building construction schedule.
- Louver is provided locally



\*6HP (ARUN60LR2, ARUN60LL2)  
\*8HP (ARUN80LR2, ARUN80LL2)

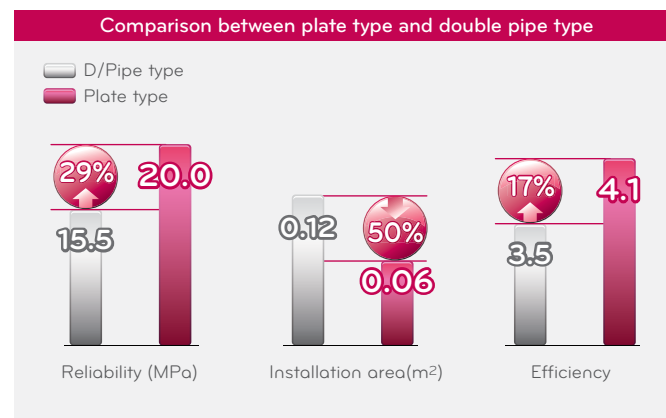
## Economic Water System

There is no efficiency reduction from environmental condition such as a contrary wind, building wind, harsh outside temperature. This is a good solution for high-rise building.



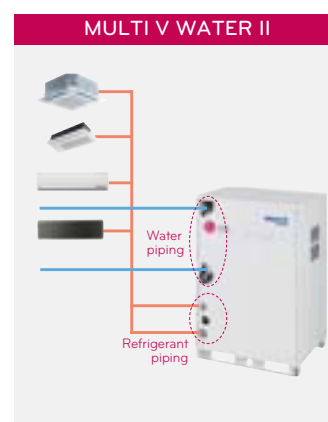
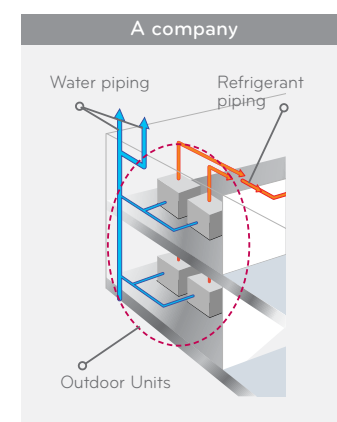
## High Efficiency & Reliability

- Compressor back up operation
1. One compressor failure
  2. Error code is displayed
  3. Back-up by field setting (Dip S/W)
  4. Continuous operation

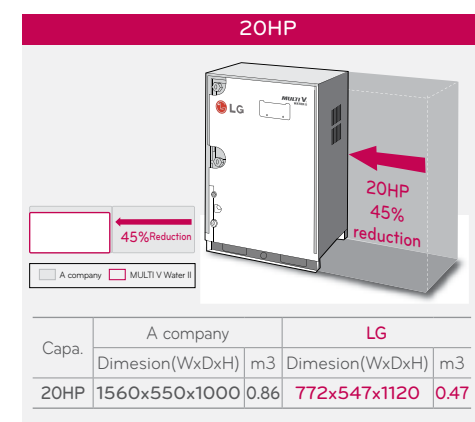


## Easy Installation & Compact Size

- Easy piping work
- Refrigerant & water pipe connection at front side



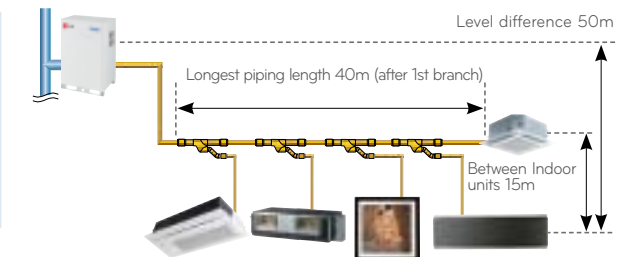
- Light weight & compact size
- Installation space is reduced up to 60%
  - Foot print is less than competitor.



## Longest Piping Length

|   |            |
|---|------------|
| Total piping length                       | 300m       |
| Longest piping length (Equivalent)        | 150m(175m) |
| Longest piping length after 1st branching | 40m        |
| Level difference between ODU-IDU          | 50m(40m*)  |
| Level difference between IDU-IDU          | 15m        |

\* Outdoor unit is lower than indoor unit.



## MULTI V Water II System for Geothermal application

It uses under ground heat source as renewable energy for cooling and heating of building. Heat source can be like a soil, ground water, lake, river, etc. Water or antifreeze solution is circulated through closed loop HDPE (High Density Poly-Ethylene) pipes buried beneath the earth's surface. It is a high efficient eco-friendly MULTI-V system providing green energy solution.

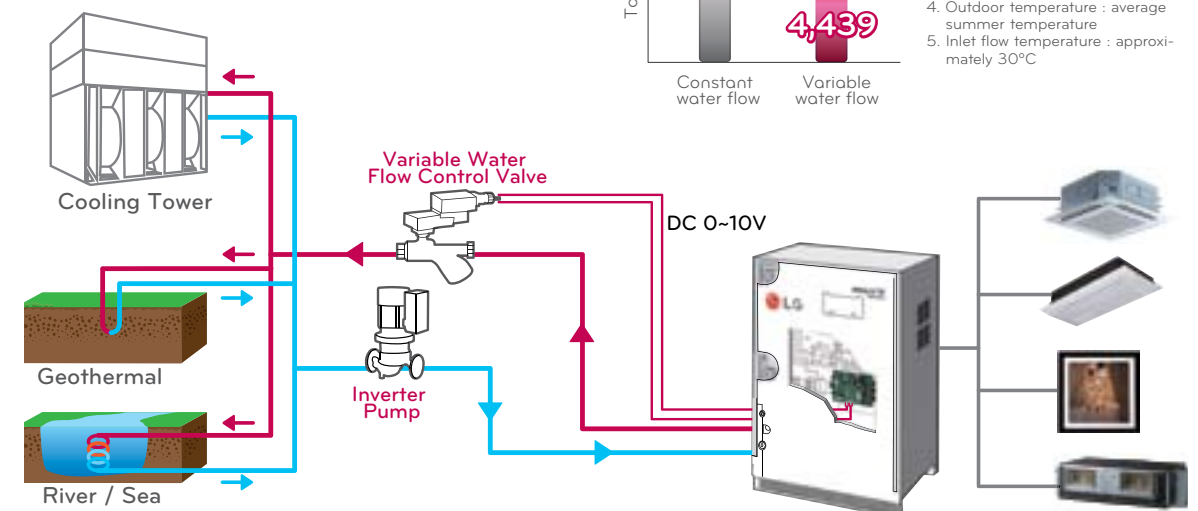
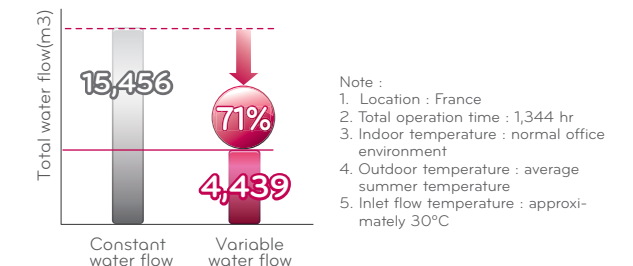
- The working water temperature range is between -5°C~45°C
- Antifreeze should be applied for according to each application.

\*\*This application should be consulted with local LG office



## Variable water flow control kit (Optional)

- Reducing water consumption by using Variable water flow control solution.
- Adjusting water flow value by pressure control after connecting PCB in existing MULIT V Water Outdoor unit.







Specifications

| HP  |                      |           |        | 8  | 10         | 12            | 14                        | 16          | 18         | 20         |
|---|----------------------|-----------|--------|--|------------|---------------|---------------------------|-------------|------------|------------|
| Model   | Combination unit     |           |        | ARUN80LT3  | ARUN100LT3 | ARUN120LT3    | ARUN140LT3                | ARUN160LT3  | ARUN180LT3 | ARUN200LT3 |
|   | Independent unit     |           |        | ARUN80LT3  | ARUN100LT3 | ARUN120LT3    | ARUN140LT3                | ARUN160LT3  | ARUN180LT3 | ARUN200LT3 |
|   |                      |           |        |  |            |               |                           |             |            |            |
|   |                      |           |        |  |            |               |                           |             |            |            |
| Capacity  | Cooling              | Nom       | kW     | 22.4   | 28.0       | 33.6          | 39.2                      | 44.8        | 50.4       | 56.0       |
|   | Heating +7°C         | Nom       | kW     | 25.2   | 31.5       | 37.8          | 44.1                      | 50.4        | 56.7       | 63.0       |
|   | Heating -7°C         | Nom       | kW     | 24.3   | 30.3       | 36.4          | 42.5                      | 44.1        | 54.6       | 60.7       |
| Power Input   | Cooling              | Nom       | kW     | 5.3  | 7.0        | 8.9           | 9.5                       | 11.0        | 12.8       | 15.0       |
|   | Heating +7°C         | Nom       | kW     | 5.5  | 7.3        | 9.0           | 9.7                       | 11.5        | 13.5       | 15.5       |
|   | Heating -7°C         | Nom       | kW     | 6.4  | 8.4        | 10.4          | 11.2                      | 13.3        | 15.6       | 17.9       |
| COP   | Cooling              |           |        | 4.27   | 4.00       | 3.78          | 4.13                      | 4.07        | 3.94       | 3.73       |
|   | Heating              |           |        | 4.58   | 4.34       | 4.20          | 4.55                      | 4.38        | 4.20       | 4.06       |
| Operation Range                                       | Cooling              | Min~Max   | °C(DB) | -5°C ~ 43°C  |            |               |                           |             |            |            |
|   | Heating              | Min~Max   | °C(WB) | -20°C ~ 16°C                                       |            |               |                           |             |            |            |
| Compressor  | Type                 |           |        | HSS(High Pressure Side Shell) BLDC Inverter Scroll |            |               |                           |             |            |            |
|   | Number of Compressor |           |        | 1  | 2          |               |                           |             | 3          |            |
| Fan   | Type                 |           |        | Propeller fan                                      |            |               |                           |             |            |            |
|   | Motor Type           |           |        | BLDC motor   |            |               |                           |             |            |            |
| Airflow Rate  | Cooling              | High      | m³/min | 180  | 190        |               | 210                       |             | 240        | 250        |
| Sound Pressure  |                      | High      | dBA    | 57   | 58         |               |                           | 61          | 62         |            |
| Dimension   |                      | WxHxD     | mm     | (920 x 1,680 x 760) x 1                            |            |               | (1,240 x 1,680 x 760) x 1 |             |            |            |
| Net weight  |                      |           | kg     | 190 x 1  | 240 x 1    |               | 260 x 1                   |             | 315 x 1    | 325 x 1    |
| Refrigerant   | Type                 |           |        | R410A  |            |               |                           |             |            |            |
|   | Charge               |           | kg     | 5.0  | 6.4        |               | 7.0                       |             | 7.5        | 9.0        |
|   | Control              |           |        | EEV  |            |               |                           |             |            |            |
| Refrigerant Oil                                       | Type                 |           |        | FVC68D(PVE)  |            |               |                           |             |            |            |
|   | Charge               |           | cc     | 3,500  | 5,200      |               | 5,500                     |             | 7,200      |            |
| Power Supply  |                      | Ø / V /Hz |        | 3 / 380 ~ 415 / 50                                 |            |               |                           |             |            |            |
| Transmission cable (VCTF-SB)                          |                      | N x mm²   |        | 2C x 1.0 ~ 1.5                                     |            |               |                           |             |            |            |
| Total Piping Length                                   |                      | Max       | m      | 1,000  |            |               |                           |             |            |            |
| Actual longest piping Length *                        |                      |           | m      | 200(225)   |            |               |                           |             |            |            |
| Longest piping length after 1 <sup>st</sup> branch ** |                      |           | m      | 40(90)   |            |               |                           |             |            |            |
| Piping level difference                               |                      | IDU-ODU   | m      | 110  |            |               |                           |             |            |            |
| Piping Connection                                     | Liquid               | mm(inch)  |        | Ø9.52(3/8)   |            | Ø12.7(1/2)    |                           | Ø15.88(5/8) |            |            |
|   | Gas                  | mm(inch)  |        | Ø19.05(3/4)  | Ø22.2(7/8) | Ø28.58(1 1/8) |                           |             |            |            |
| Number of Outdoor Unit                                |                      |           |        | 1  |            |               |                           |             |            |            |
| Number of Maximum Connectable Indoor Units ***        |                      |           |        | 13(20)   | 16(25)     | 20(30)        | 23(35)                    | 26(40)      | 29(45)     | 32(50)     |
| Ratio of the Connectable Indoor Units    Min ~ Max    |                      |           |        | 50 ~ 200%  |            |               |                           |             |            |            |
| Heat exchanger  | Type                 |           |        | Wide Louver fin(Gold-coating)                      |            |               |                           |             |            |            |

Specifications

| HP  |                      |            |        | 22   | 24         | 26  | 28         |
|---|----------------------|------------|--------|--|------------|---|------------|
| Model   | Combination unit     |            |        | ARUN220LT3   | ARUN240LT3 | ARUN260LT3  | ARUN280LT3 |
|   | Independent unit     |            |        | ARUN120LT3   | ARUN120LT3 | ARUN140LT3  | ARUN160LT3 |
|   |                      |            |        | ARUN100LT3   | ARUN120LT3 | ARUN120LT3  | ARUN120LT3 |
|   |                      |            |        |  |            |   |            |
| Capacity  | Cooling              | Nom        | kW     | 61.6   | 67.2       | 72.8  | 78.4       |
|   | Heating +7°C         | Nom        | kW     | 69.3   | 75.6       | 81.9  | 88.2       |
|   | Heating -7°C         | Nom        | kW     | 66.7   | 72.8       | 78.9  | 80.5       |
| Power Input   | Cooling              | Nom        | kW     | 15.9   | 17.8       | 18.4  | 19.9       |
|   | Heating +7°C         | Nom        | kW     | 16.3   | 18.0       | 18.7  | 20.5       |
|   | Heating -7°C         | Nom        | kW     | 18.8   | 20.8       | 21.6  | 23.7       |
| COP   | Cooling              |            |        | 3.87   | 3.78       | 3.96  | 3.94       |
|   | Heating              |            |        | 4.26   | 4.20       | 4.38  | 4.30       |
| Operation Range                                       | Cooling              | Min~Max    | °C(DB) | -5°C ~ 43°C  |            |   |            |
|   | Heating              | Min~Max    | °C(WB) | -20°C ~ 16°C                                       |            |   |            |
| Compressor  | Type                 |            |        | HSS(High Pressure Side Shell) BLDC Inverter Scroll |            |   |            |
|   | Number of Compressor |            |        | 4  |            |   |            |
| Fan   | Type                 |            |        | Propeller fan                                      |            |   |            |
|   | Motor Type           |            |        | BLDC motor   |            |   |            |
| Airflow Rate  | Cooling              | High       | m³/min | 380  | 400        |   |            |
| Sound Pressure  |                      | High       | dBA    | 61   |            |   |            |
| Dimension   |                      | WxHxD      | mm     | (920 x 1,680 x 760) x 2                            |            | (920 x 1,680 x 760) x 1 + (1,240 x 1,680 x 760) x 1 |            |
| Net weight  |                      |            | kg     | 240 x 2  |            | 240 x 1 + 260 x 1                                   |            |
| Refrigerant   | Type                 |            |        | R410A  |            |   |            |
|   | Charge               |            |        | 12.8   | 13.4       |   |            |
|   | Control              |            |        | EEV  |            |   |            |
| Refrigerant Oil                                       | Type                 |            |        | FVC68D(PVE)  |            |   |            |
|   | Charge               |            |        | 10,400   | 10,700     |   |            |
| Power Supply  |                      | Ø / V / Hz |        | 3 / 380 ~ 415 / 50                                 |            |   |            |
| Transmission cable (VCTF-SB)                          |                      | N x mm²    |        | 2C x 1.0 ~ 1.5                                     |            |   |            |
| Total Piping Length                                   |                      | Max        | m      | 1,000  |            |   |            |
| Actual longest piping Length *                        |                      |            | m      | 200(225)   |            |   |            |
| Longest piping length after 1 <sup>st</sup> branch ** |                      |            | m      | 40(90)   |            |   |            |
| Piping level difference                               |                      | IDU-ODU    | m      | 110  |            |   |            |
| Piping Connection                                     | Liquid               | mm(inch)   |        | Ø15.88(5/8)  |            | Ø19.05(3/4)   |            |
|   | Gas                  | mm(inch)   |        | Ø28.58(1 1/8)                                      |            | Ø34.9(1 3/8)  |            |
| Number of Outdoor Unit                                |                      |            |        | 2  |            |   |            |
| Number of Maximum Connectable Indoor Units ***        |                      |            |        | 35(44)   | 39(48)     | 42(52)  | 45(56)     |
| Ratio of the Connectable Indoor Units    Min ~ Max    |                      |            |        | 50 ~ 160%  |            |   |            |
| Heat exchanger  | Type                 |            |        | Wide Louver fin(Gold-coating)                      |            |   |            |

Specifications

| HP  |                      |          |        | 30   | 32         | 34                | 36                | 38                | 40         |
|---|----------------------|----------|--------|--|------------|-------------------|-------------------|-------------------|------------|
| Model   | Combination unit     |          |        | ARUN300LT3   | ARUN320LT3 | ARUN340LT3        | ARUN360LT3        | ARUN380LT3        | ARUN400LT3 |
|   | Independent unit     |          |        | ARUN160LT3   | ARUN160LT3 | ARUN180LT3        | ARUN200LT3        | ARUN200LT3        | ARUN200LT3 |
|   |                      |          |        | ARUN140LT3   | ARUN160LT3 | ARUN160LT3        | ARUN160LT3        | ARUN180LT3        | ARUN200LT3 |
|   |                      |          |        |  |            |                   |                   |                   |            |
|   |                      |          |        |  |            |                   |                   |                   |            |
| Capacity  | Cooling              | Nom      | kW     | 84.0   | 89.6       | 95.2              | 100.8             | 106.4             | 112.0      |
|   | Heating +7°C         | Nom      | kW     | 94.5   | 100.8      | 107.1             | 113.4             | 119.7             | 126.0      |
|   | Heating -7°C         | Nom      | kW     | 86.6   | 88.3       | 98.7              | 104.8             | 115.2             | 121.3      |
| Power Input   | Cooling              | Nom      | kW     | 20.5   | 22.0       | 23.8              | 26.0              | 27.8              | 30.0       |
|   | Heating +7°C         | Nom      | kW     | 21.2   | 23.0       | 25.0              | 27.0              | 29.0              | 31.0       |
|   | Heating -7°C         | Nom      | kW     | 24.5   | 26.6       | 28.9              | 31.2              | 33.5              | 35.8       |
| COP   | Cooling              |          |        | 4.10   | 4.07       | 4.00              | 3.88              | 3.83              | 3.73       |
|   | Heating              |          |        | 4.46   | 4.38       | 4.28              | 4.20              | 4.13              | 4.06       |
| Operation Range                                       | Cooling              | Min~Max  | °C(DB) | -5°C ~ 43°C  |            |                   |                   |                   |            |
|   | Heating              | Min~Max  | °C(WB) | -20°C ~ 16°C                                       |            |                   |                   |                   |            |
| Compressor  | Type                 |          |        | HSS(High Pressure Side Shell) BLDC Inverter Scroll |            |                   |                   |                   |            |
|   | Number of Compressor |          |        | 4  |            | 5                 |                   | 6                 |            |
| Fan   | Type                 |          |        | Propeller fan                                      |            |                   |                   |                   |            |
|   | Motor Type           |          |        | BLDC motor   |            |                   |                   |                   |            |
| Airflow Rate  | Cooling              | High     | m³/min | 420  |            | 450               | 460               | 490               | 500        |
| Sound Pressure  |                      | High     | dBA    | 62.8   | 63.5       |                   | 65.0              |                   |            |
| Dimension   |                      | WxHxD    | mm     | (1,240 x 1,680 x 760) x 2                          |            |                   |                   |                   |            |
| Net weight  |                      |          | kg     | 260 x 2  |            | 260 x 1 + 315 x 1 | 260 x 1 + 325 x 1 | 315 x 1 + 325 x 1 | 325 x 2    |
| Refrigerant   | Type                 |          |        | R410A  |            |                   |                   |                   |            |
|   | Charge               |          |        | 14.0   |            | 14.5              | 16.0              | 16.5              | 18.0       |
|   | Control              |          |        | EEV  |            |                   |                   |                   |            |
| Refrigerant Oil                                       | Type                 |          |        | FVC68D(PVE)  |            |                   |                   |                   |            |
|   | Charge               |          |        | 11,000   |            | 12,700            |                   | 14,400            |            |
| Power Supply  | Ø / V /Hz            |          |        | 3 / 380 ~ 415 / 50                                 |            |                   |                   |                   |            |
| Transmission cable (VCTF-SB)                          | N x mm²              |          |        | 2C x 1.0 ~ 1.5                                     |            |                   |                   |                   |            |
| Total Piping Length                                   | Max                  |          |        | 1,000  |            |                   |                   |                   |            |
| Actual longest piping Length *                        |                      |          |        | 200(225)   |            |                   |                   |                   |            |
| Longest piping length after 1 <sup>st</sup> branch ** |                      |          |        | 40(90)   |            |                   |                   |                   |            |
| Piping level difference                               | IDU-ODU              |          |        | 110  |            |                   |                   |                   |            |
| Piping Connection                                     | Liquid               | mm(inch) |        | Ø19.05(3/4)  |            |                   |                   |                   |            |
|   | Gas                  | mm(inch) |        | Ø34.9(1 3/8)                                       |            |                   | Ø 41.3(1 5/8)     |                   |            |
| Number of Outdoor Unit                                |                      |          |        | 2  |            |                   |                   |                   |            |
| Number of Maximum Connectable Indoor Units ***        |                      |          |        | 49(60)   | 52(64)     | 55(64)            | 58(64)            | 61(64)            | 64         |
| Ratio of the Connectable Indoor Units                 |                      |          |        | Min ~ Max  |            |                   |                   |                   |            |
| Heat exchanger  | Type                 |          |        | Wide Louver fin(Gold-coating)                      |            |                   |                   |                   |            |

Specifications

| HP   |                      |          |        | 42  | 44         | 46                        | 48         | 50                |
|--|----------------------|----------|--------|---|------------|---------------------------|------------|-------------------|
| Model  | Combination unit     |          |        | ARUN420LT3  | ARUN440LT3 | ARUN460LT3                | ARUN480LT3 | ARUN500LT3        |
|  | Independent unit     |          |        | ARUN160LT3  | ARUN160LT3 | ARUN160LT3                | ARUN160LT3 | ARUN180LT3        |
|  |                      |          |        | ARUN140LT3  | ARUN160LT3 | ARUN160LT3                | ARUN160LT3 | ARUN160LT3        |
|  |                      |          |        | ARUN120LT3  | ARUN120LT3 | ARUN140LT3                | ARUN160LT3 | ARUN160LT3        |
|  |                      |          |        |   |            |                           |            |                   |
| Capacity                                       | Cooling              | Nom      | kW     | 117.6   | 123.2      | 128.8                     | 134.4      | 140.0             |
|  | Heating +7°C         | Nom      | kW     | 132.3   | 138.6      | 144.9                     | 151.2      | 157.5             |
|  | Heating -7°C         | Nom      | kW     | 123.0   | 124.7      | 130.7                     | 132.4      | 142.9             |
| Power Input                                    | Cooling              | Nom      | kW     | 29.4  | 30.9       | 31.5                      | 33.0       | 34.8              |
|  | Heating +7°C         | Nom      | kW     | 30.2  | 32.0       | 32.7                      | 34.5       | 36.5              |
|  | Heating -7°C         | Nom      | kW     | 34.9  | 37.0       | 37.8                      | 39.9       | 42.2              |
| COP  | Cooling              |          |        | 4.00  | 3.99       | 4.09                      | 4.07       | 4.02              |
|  | Heating              |          |        | 4.38  | 4.33       | 4.43                      | 4.38       | 4.32              |
| Operation Range                                | Cooling              | Min~Max  | °C(DB) | -5°C ~ 43°C   |            |                           |            |                   |
|  | Heating              | Min~Max  | °C(WB) | -20°C ~ 16°C  |            |                           |            |                   |
| Compressor                                     | Type                 |          |        | HSS(High Pressure Side Shell) BLDC Inverter Scroll  |            |                           |            |                   |
|  | Number of Compressor |          |        | 6   |            |                           |            | 7                 |
| Fan  | Type                 |          |        | Propeller fan                                       |            |                           |            |                   |
|  | Motor Type           |          |        | BLDC motor  |            |                           |            |                   |
| Airflow Rate                                   | Cooling              | High     | m³/min | 610   |            | 630                       |            | 660               |
| Sound Pressure                                 |                      | High     | dBA    | 62.8  | 64.0       | 64.5                      |            | 65.4              |
| Dimension                                      |                      | WxHxD    | mm     | (920 × 1,680 × 760) × 1 + (1,240 × 1,680 × 760) × 2 |            | (1,240 × 1,680 × 760) × 3 |            |                   |
| Net weight                                     |                      |          | kg     | 240 × 1 + 260 × 2                                   |            | 260 × 3                   |            | 260 × 2 + 315 × 1 |
| Refrigerant                                    | Type                 |          |        | R410A   |            |                           |            |                   |
|  | Charge               |          |        | 20.4  |            | 21.0                      |            | 21.5              |
|  | Control              |          |        | EEV   |            |                           |            |                   |
| Refrigerant Oil                                | Type                 |          |        | FVC68D(PVE)   |            |                           |            |                   |
|  | Charge               |          |        | 16,200  |            | 16,500                    |            | 18,200            |
| Power Supply                                   | Ø / V /Hz            |          |        | 3 / 380 ~ 415 / 50                                  |            |                           |            |                   |
| Transmission cable (VCTF-SB)                   | N x mm²              |          |        | 2C x 1.0 ~ 1.5                                      |            |                           |            |                   |
| Total Piping Length                            | Max                  |          |        | 1,000   |            |                           |            |                   |
| Actual longest piping Length *                 |                      |          |        | 200(225)  |            |                           |            |                   |
| Longest piping length after 1" branch **       |                      |          |        | 40(90)  |            |                           |            |                   |
| Piping level difference                        | IDU-ODU              |          |        | 110   |            |                           |            |                   |
| Piping Connection                              | Liquid               | mm(inch) |        | Ø19.05(3/4)   |            |                           |            |                   |
|  | Gas                  | mm(inch) |        | Ø41.3(1 5/8)  |            |                           |            |                   |
| Number of Outdoor Unit                         |                      |          |        | 3   |            |                           |            |                   |
| Number of Maximum Connectable Indoor Units *** |                      |          |        | 64  |            |                           |            |                   |
| Ratio of the Connectable Indoor Units          |                      |          |        | Min ~ Max   |            |                           |            |                   |
|  |                      |          |        | 50 ~ 130%   |            |                           |            |                   |
| Heat exchanger                                 | Type                 |          |        | Wide Louver fin(Gold-coating)                       |            |                           |            |                   |



Specifications

| HP   |                      |  |                               | 52                        | 54                | 56         | 58                | 60         |
|--|----------------------|--|-------------------------------|---------------------------|-------------------|------------|-------------------|------------|
| Model  | Combination unit     |  |                               | ARUN520LT3                | ARUN540LT3        | ARUN560LT3 | ARUN580LT3        | ARUN600LT3 |
|  | Independent unit     |  |                               | ARUN200LT3                | ARUN200LT3        | ARUN200LT3 | ARUN200LT3        | ARUN200LT3 |
|  |                      |  |                               | ARUN160LT3                | ARUN200LT3        | ARUN200LT3 | ARUN200LT3        | ARUN200LT3 |
|  |                      |  |                               | ARUN160LT3                | ARUN140LT3        | ARUN160LT3 | ARUN180LT3        | ARUN200LT3 |
|  |                      |  |                               |                           |                   |            |                   |            |
| Capacity   | Cooling              | Nom  | kW                            | 145.6                     | 151.2             | 156.8      | 162.4             | 168.0      |
|  | Heating +7°C         | Nom  | kW                            | 163.8                     | 170.1             | 176.4      | 182.7             | 189.0      |
|  | Heating -7°C         | Nom  | kW                            | 148.9                     | 163.8             | 165.5      | 175.9             | 182.0      |
| Power Input  | Cooling              | Nom  | kW                            | 37.0                      | 39.5              | 41.0       | 42.8              | 45.0       |
|  | Heating +7°C         | Nom  | kW                            | 38.5                      | 40.7              | 42.5       | 44.5              | 46.5       |
|  | Heating -7°C         | Nom  | kW                            | 44.5                      | 47.1              | 49.1       | 51.4              | 53.8       |
| COP  | Cooling              |  |                               | 3.94                      | 3.83              | 3.82       | 3.79              | 3.73       |
|  | Heating              |  |                               | 4.25                      | 4.18              | 4.15       | 4.11              | 4.06       |
| Operation Range                                    | Cooling              | Min~Max  | °C(DB)                        | -5°C ~ 43°C               |                   |            |                   |            |
|  | Heating              | Min~Max  | °C(WB)                        | -20°C ~ 16°C              |                   |            |                   |            |
| Compressor   | Type                 | HSS(High Pressure Side Shell) BLDC Inverter Scroll |                               |                           |                   |            |                   |            |
|  | Number of Compressor |  |                               | 7                         | 8                 |            | 9                 |            |
| Fan  | Type                 | Propeller fan                                      |                               |                           |                   |            |                   |            |
|  | Motor Type           | BLDC motor   |                               |                           |                   |            |                   |            |
| Airflow Rate                                       | Cooling              | High   | m³/min                        | 670                       | 710               |            | 740               | 750        |
| Sound Pressure                                     |                      |  | dBA                           | 65.8                      |                   | 66.5       | 66.8              |            |
| Dimension  | WxHxD                |  | mm                            | (1,240 x 1,680 x 760) x 3 |                   |            |                   |            |
| Net weight   |                      |  | kg                            | 260 × 2 + 325 × 1         | 260 × 1 + 325 × 2 |            | 315 × 1 + 325 × 2 | 325 × 3    |
| Refrigerant  | Type                 | R410A  |                               |                           |                   |            |                   |            |
|  | Charge               | kg   |                               | 23.0                      | 25.0              |            | 25.5              | 27.0       |
|  | Control              | EEV  |                               |                           |                   |            |                   |            |
| Refrigerant Oil                                    | Type                 | FVC68D(PVE)  |                               |                           |                   |            |                   |            |
|  | Charge               | cc   |                               | 18,200                    | 19,900            |            | 21,600            |            |
| Power Supply                                       | Ø / V /Hz            |  | 3 / 380 ~ 415 / 50            |                           |                   |            |                   |            |
| Transmission cable (VCTF-SB)                       | N x mm²              |  | 2C x 1.0 ~ 1.5                |                           |                   |            |                   |            |
| Total Piping Length                                | Max                  |  | m                             | 1,000                     |                   |            |                   |            |
| Actual longest piping Length *                     |                      |  | m                             | 200(225)                  |                   |            |                   |            |
| Longest piping length after 1" branch **           |                      |  | m                             | 40(90)                    |                   |            |                   |            |
| Piping level difference                            | IDU-ODU              |  | m                             | 110                       |                   |            |                   |            |
| Piping Connection                                  | Liquid               | mm(inch)   |                               | Ø19.05(3/4)               |                   |            |                   |            |
|  | Gas                  | mm(inch)   |                               | Ø41.3(1 5/8)              |                   |            |                   |            |
| Number of Outdoor Unit                             |                      |  | 3                             |                           |                   |            |                   |            |
| Number of Maximum Connectable Indoor Units ***     |                      |  | 64                            |                           |                   |            |                   |            |
| Ratio of the Connectable Indoor Units    Min ~ Max |                      |  | 50 ~ 130%                     |                           |                   |            |                   |            |
| Heat exchanger                                     | Type                 |  | Wide Louver fin(Gold-coating) |                           |                   |            |                   |            |

Specifications

| HP   |                      |          |                    | 62   | 64         | 66                | 68                | 70                          |
|--|----------------------|----------|--------------------|--|------------|-------------------|-------------------|-----------------------------|
| Model  | Combination unit     |          |                    | ARUN620LT3   | ARUN640LT3 | ARUN660LT3        | ARUN680LT3        | ARUN700LT3                  |
|  | Independent unit     |          |                    | ARUN160LT3   | ARUN160LT3 | ARUN180LT3        | ARUN180LT3        | ARUN200LT3                  |
|  |                      |          |                    | ARUN160LT3   | ARUN160LT3 | ARUN160LT3        | ARUN180LT3        | ARUN180LT3                  |
|  |                      |          |                    | ARUN160LT3   | ARUN160LT3 | ARUN160LT3        | ARUN160LT3        | ARUN160LT3                  |
|  |                      |          |                    | ARUN140LT3   | ARUN160LT3 | ARUN160LT3        | ARUN160LT3        | ARUN160LT3                  |
| Capacity   | Cooling              | Nom      | kW                 | 173.6  | 179.2      | 184.8             | 190.4             | 196.0                       |
|  | Heating +7°C         | Nom      | kW                 | 195.3  | 201.6      | 207.9             | 214.2             | 220.5                       |
|  | Heating -7°C         | Nom      | kW                 | 174.9  | 176.6      | 187.0             | 197.5             | 203.5                       |
| Power Input  | Cooling              | Nom      | kW                 | 42.5   | 44.0       | 45.8              | 47.6              | 49.8                        |
|  | Heating +7°C         | Nom      | kW                 | 44.2   | 46.0       | 48.0              | 50.0              | 52.0                        |
|  | Heating -7°C         | Nom      | kW                 | 51.1   | 53.2       | 55.5              | 57.8              | 60.1                        |
| COP  | Cooling              |          |                    | 4.08   | 4.07       | 4.03              | 4.00              | 3.94                        |
|  | Heating              |          |                    | 4.42   | 4.38       | 4.33              | 4.28              | 4.24                        |
| Operation Range                                    | Cooling              | Min~Max  | °C(DB)             | -5°C ~ 43°C  |            |                   |                   |                             |
|  | Heating              | Min~Max  | °C(WB)             | -20°C ~ 16°C                                       |            |                   |                   |                             |
| Compressor   | Type                 |          |                    | HSS(High Pressure Side Shell) BLDC Inverter Scroll |            |                   |                   |                             |
|  | Number of Compressor |          |                    | 8  |            | 9                 | 10                |                             |
| Fan  | Type                 |          |                    | Propeller fan                                      |            |                   |                   |                             |
|  | Motor Type           |          |                    | BLDC motor   |            |                   |                   |                             |
| Airflow Rate                                       | Cooling              | High     | m³/min             | 840  |            | 870               | 900               | 910                         |
| Sound Pressure                                     | High                 |          | dBA                | 66.4   | 67.0       | 67.3              | 67.5              |                             |
| Dimension  | WxHxD                |          | mm                 | (1,240 x 1,680 x 760) x 4                          |            |                   |                   |                             |
| Net weight   |                      |          | kg                 | 260 x 4  |            | 260 x 3 + 315 x 1 | 260 x 2 + 315 x 2 | 260 x 2 + 315 x 1 + 325 x 1 |
| Refrigerant  | Type                 |          |                    | R410A  |            |                   |                   |                             |
|  | Charge               |          | kg                 | 28.0   |            | 28.5              | 29.0              | 30.5                        |
|  | Control              |          |                    | EEV  |            |                   |                   |                             |
| Refrigerant Oil                                    | Type                 |          |                    | FVC68D(PVE)  |            |                   |                   |                             |
|  | Charge               |          | cc                 | 22,000   |            | 23,700            | 25,400            |                             |
| Power Supply                                       | Ø / V /Hz            |          | 3 / 380 ~ 415 / 50 |  |            |                   |                   |                             |
| Transmission cable (VCTF-SB)                       | N x mm²              |          | 2C x 1.0 ~ 1.5     |  |            |                   |                   |                             |
| Total Piping Length                                | Max                  |          | m                  | 1,000  |            |                   |                   |                             |
| Actual longest piping Length *                     |                      |          | m                  | 200(225)   |            |                   |                   |                             |
| Longest piping length after 1" branch **           |                      |          | m                  | 40(90)   |            |                   |                   |                             |
| Piping level difference                            | IDU-ODU              |          | m                  | 110  |            |                   |                   |                             |
| Piping Connection                                  | Liquid               | mm(inch) |                    | Ø22.2(7/8)   |            |                   |                   |                             |
|  | Gas                  | mm(inch) |                    | Ø44.5(1 3/4)                                       |            | Ø53.98(2)         |                   |                             |
| Number of Outdoor Unit                             |                      |          |                    | 4  |            |                   |                   |                             |
| Number of Maximum Connectable Indoor Units ***     |                      |          |                    | 64   |            |                   |                   |                             |
| Ratio of the Connectable Indoor Units    Min ~ Max |                      |          |                    | 50 ~ 130%  |            |                   |                   |                             |
| Heat exchanger                                     | Type                 |          |                    | Wide Louver fin(Gold-coating)                      |            |                   |                   |                             |

Specifications

| HP  |                      |           |           | 72   | 74                    | 76                | 78                | 80         |
|---|----------------------|-----------|-----------|--|-----------------------|-------------------|-------------------|------------|
| Model   | Combination unit     |           |           | ARUN720LT3   | ARUN740LT3            | ARUN760LT3        | ARUN780LT3        | ARUN800LT3 |
|   | Independent unit     |           |           | ARUN200LT3   | ARUN200LT3            | ARUN200LT3        | ARUN200LT3        | ARUN200LT3 |
|   |                      |           |           | ARUN200LT3   | ARUN200LT3            | ARUN200LT3        | ARUN200LT3        | ARUN200LT3 |
|   |                      |           |           | ARUN160LT3   | ARUN180LT3            | ARUN200LT3        | ARUN200LT3        | ARUN200LT3 |
|   |                      |           |           | ARUN160LT3   | ARUN160LT3            | ARUN160LT3        | ARUN180LT3        | ARUN200LT3 |
| Capacity  | Cooling              | Nom       | kW        | 201.6  | 207.2                 | 212.8             | 218.4             | 224.0      |
|   | Heating +7°C         | Nom       | kW        | 226.8  | 233.1                 | 239.4             | 245.7             | 252.0      |
|   | Heating -7°C         | Nom       | kW        | 209.6  | 220.0                 | 226.1             | 236.6             | 242.6      |
| Power Input   | Cooling              | Nom       | kW        | 52.0   | 53.8                  | 56.0              | 57.8              | 60.0       |
|   | Heating +7°C         | Nom       | kW        | 54.0   | 56.0                  | 58.0              | 60.0              | 62.0       |
|   | Heating -7°C         | Nom       | kW        | 62.4   | 64.7                  | 67.1              | 69.4              | 71.7       |
| COP   | Cooling              |           |           | 3.88   | 3.85                  | 3.80              | 3.78              | 3.73       |
|   | Heating              |           |           | 4.20   | 4.16                  | 4.13              | 4.10              | 4.06       |
| Operation Range                                       | Cooling              | Min~Max   | °C(DB)    | -5°C ~ 43°C  |                       |                   |                   |            |
|   | Heating              | Min~Max   | °C(WB)    | -20°C ~ 16°C                                       |                       |                   |                   |            |
| Compressor  | Type                 |           |           | HSS(High Pressure Side Shell) BLDC Inverter Scroll |                       |                   |                   |            |
|   | Number of Compressor |           |           | 10   | 11                    |                   | 12                |            |
| Fan   | Type                 |           |           | Propeller fan                                      |                       |                   |                   |            |
|   | Motor Type           |           |           | BLDC motor   |                       |                   |                   |            |
| Airflow Rate  | Cooling              | High      | m³/min    | 920  | 950                   | 960               | 990               | 1,000      |
| Sound Pressure  |                      | High      | dBA       | 67.5   | 67.8                  |                   | 68.0              |            |
| Dimension   |                      | WxHxD     | mm        | (1,240 x 1,680 x 760) x 4                          |                       |                   |                   |            |
| Net weight  |                      |           | kg        | 260 × 2 + 325 × 2                                  | 260×1 + 315×1 + 325×2 | 260 × 1 + 325 × 3 | 315 × 1 + 325 × 3 | 325 × 4    |
| Refrigerant   | Type                 |           |           | R410A  |                       |                   |                   |            |
|   | Charge               |           | kg        | 32.0   | 32.5                  | 34.0              | 34.5              | 36.0       |
|   | Control              |           |           | EEV  |                       |                   |                   |            |
| Refrigerant Oil                                       | Type                 |           |           | FVC68D(PVE)  |                       |                   |                   |            |
|   | Charge               |           | cc        | 25,400   | 27,100                |                   | 28,800            |            |
| Power Supply  |                      | Ø / V /Hz |           | 3 / 380 ~ 415 / 50                                 |                       |                   |                   |            |
| Transmission cable (VCTF-SB)                          |                      | N x mm²   |           | 2C x 1.0 ~ 1.5                                     |                       |                   |                   |            |
| Total Piping Length                                   | Max                  | m         |           | 1,000  |                       |                   |                   |            |
| Actual longest piping Length *                        |                      | m         |           | 200(225)   |                       |                   |                   |            |
| Longest piping length after 1 <sup>st</sup> branch ** |                      | m         |           | 40(90)   |                       |                   |                   |            |
| Piping level difference                               | IDU-ODU              | m         |           | 110  |                       |                   |                   |            |
| Piping Connection                                     | Liquid               | mm(inch)  |           | Ø22.2(7/8)   |                       |                   |                   |            |
|   | Gas                  | mm(inch)  |           | Ø53.98(2)  |                       |                   |                   |            |
| Number of Outdoor Unit                                |                      |           |           | 4  |                       |                   |                   |            |
| Number of Maximum Connectable Indoor Units ***        |                      |           |           | 64   |                       |                   |                   |            |
| Ratio of the Connectable Indoor Units                 |                      |           | Min ~ Max | 50 ~ 130%  |                       |                   |                   |            |
| Heat exchanger  | Type                 |           |           | Wide Louver fin(Gold-coating)                      |                       |                   |                   |            |

- \* ( ) : equivalent length
- \*\* Conditional Application  
To make 40-90m of pipe length after first branch refer to the part of "installation of outdoor units" in PDB
- \*\*\* ( ) : the number of max. connectable indoor units, for max indoor unit combination ratio (refer to the table below)

Note :

1. Capacities are based on the following conditions

Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m  
Level difference of zero

Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m  
Level difference of zero
2. Capacities are net capacities

3. Due to our policy of innovation some specifications may be changed without notification

4. EEV : Electronic Expansion Valve

CAUTION

- A combination operation over 100% cause to reduce each indoor unit capacity
- Combination ratio(50~200%)

| No. of outdoor unit | Connection Capacity |
|---------------------|---------------------|
| Single unit         | 200%                |
| Double unit         | 160%                |
| Triple unit         | 130%                |
| Over triple unit    | 130%                |

We can guarantee the operation only within 130% Combination.  
If you want to connect more than 130% combination, please contact us and discuss the requirement like below.

1) If the operational capacity of indoor units exceed 130%, then all the indoor units operate under low air flow step mode.

2) Over 130%, capacity is same as capacity of 130%, Same remark is valid for power input.





## Specifications

| HP  |                         |  |        | 8                             | 10          | 12            | 14                  | 16         | 18          | 20                 |
|---|-------------------------|--|--------|-------------------------------|-------------|---------------|---------------------|------------|-------------|--------------------|
| Model   | Combination unit        |  |        | ARUB80LT3                     | ARUB100LT3  | ARUB120LT3    | ARUB140LT3          | ARUB160LT3 | ARUB180LT3  | ARUB200LT3         |
|   | Independent unit        |  |        | ARUB80LT3                     | ARUB100LT3  | ARUB120LT3    | ARUB140LT3          | ARUB160LT3 | ARUB180LT3  | ARUB200LT3         |
|   |                         |  |        |                               |             |               |                     |            |             |                    |
|   |                         |  |        |                               |             |               |                     |            |             |                    |
| Capacity  | Cooling                 | Nom  | kW     | 22.4                          | 28.0        | 33.6          | 39.2                | 44.8       | 50.4        | 56.0               |
|   | Heating +7°C            | Nom  | kW     | 25.2                          | 31.5        | 37.8          | 44.1                | 50.4       | 56.7        | 63.0               |
|   | Heating -7°C            | Nom  | kW     | 24.3                          | 30.3        | 36.4          | 42.5                | 44.1       | 54.6        | 60.7               |
| Power Input   | Cooling                 | Nom  | kW     | 5.3                           | 7.0         | 8.9           | 9.5                 | 11.0       | 12.8        | 15.0               |
|   | Heating +7°C            | Nom  | kW     | 5.5                           | 7.3         | 9.0           | 9.7                 | 11.5       | 13.5        | 15.5               |
|   | Heating -7°C            | Nom  | kW     | 6.4                           | 8.4         | 10.4          | 11.2                | 13.3       | 15.6        | 17.9               |
| COP   | Cooling                 |  |        | 4.27                          | 4.00        | 3.78          | 4.13                | 4.07       | 3.94        | 3.73               |
|   | Heating                 |  |        | 4.58                          | 4.34        | 4.20          | 4.55                | 4.38       | 4.20        | 4.06               |
| Operation Range                                       | Cooling                 | Min~Max  | °C(DB) | -10°C ~ 43°C                  |             |               |                     |            |             |                    |
|   | Heating                 | Min~Max  | °C(WB) | -20°C ~ 16°C                  |             |               |                     |            |             |                    |
| Compressor  | Type                    | HSS(High Pressure Side Shell) BLDC Inverter Scroll |        |                               |             |               |                     |            |             |                    |
|   | Number of Compressor    |  |        | 1                             | 2           |               |                     |            | 3           |                    |
| Fan   | Type                    | Propeller fan                                      |        |                               |             |               |                     |            |             |                    |
|   | Motor Type              |  |        | BLDC motor                    |             |               |                     |            |             |                    |
| Airflow Rate  | Cooling                 | High   | m³/min | 180                           | 190         |               | 210                 |            | 240         | 250                |
| Sound Pressure  |                         |  | High   | dBA                           | 57          | 58            |                     | 61         | 62          |                    |
| Dimension   | WxHxD                   |  | mm     | (920×1,680×760)×1             |             |               | (1,240×1,680×760)×1 |            |             |                    |
| Net weight  |                         |  |        | kg                            | 190 × 1     | 240 × 1       |                     | 270 × 1    |             | 320 × 1<br>330 × 1 |
| Refrigerant   | Type                    |  |        |                               | R410A       |               |                     |            |             |                    |
|   | Charge                  |  |        | kg                            | 5.0         | 6.4           |                     | 7.0        |             | 7.5<br>9.0         |
|   | Control                 |  |        | EEV                           |             |               |                     |            |             |                    |
| Refrigerant Oil                                       | Type                    |  |        |                               | FVC68D(PVE) |               |                     |            |             |                    |
|   | Charge                  |  |        | cc                            | 3,500       | 5,200         |                     | 5,500      |             | 7,200              |
| Power Supply  | Ø / V /Hz               |  |        | 3 / 380~415 / 50              |             |               |                     |            |             |                    |
| Transmission cable (VCTF-SB)                          | N x mm²                 |  |        | 2C x 1.0 ~ 1.5                |             |               |                     |            |             |                    |
| Total Piping Length                                   | Max                     |  | m      | 1,000                         |             |               |                     |            |             |                    |
| Actual longest piping Length *                        |                         |  |        | m                             | 200(225)    |               |                     |            |             |                    |
| Longest piping length after 1 <sup>st</sup> branch ** |                         |  |        | m                             | 40(90)      |               |                     |            |             |                    |
| Piping level difference                               | IDU-ODU                 |  | m      | 110                           |             |               |                     |            |             |                    |
| Piping Connection                                     | Liquid Pipes            | mm(inch)   |        | Ø9.52(3/8)                    |             |               | Ø12.7(1/2)          |            | Ø15.88(5/8) |                    |
|   | Low Pressure Gas Pipes  | mm(inch)   |        | Ø19.05(3/4)                   | Ø22.2(7/8)  | Ø28.58(1 1/8) |                     |            |             |                    |
|   | High Pressure Gas Pipes | mm(inch)   |        | Ø15.88(5/8)                   | Ø19.05(3/4) |               |                     | Ø22.2(7/8) |             |                    |
| Number of Outdoor Unit                                |                         |  |        | 1                             |             |               |                     |            |             |                    |
| Number of Maximum Connectable Indoor Units ***        |                         |  |        | 13(20)                        | 16(25)      | 20(30)        | 23(35)              | 26(40)     | 29(45)      | 32(50)             |
| Ratio of the Connectable Indoor Units    Min ~ Max    |                         |  |        | 50 ~ 200%                     |             |               |                     |            |             |                    |
| Heat exchanger  | Type                    |  |        | Wide Louver fin(Gold-coating) |             |               |                     |            |             |                    |

## Specifications

| HP  |                         |           |          | 22   | 24         | 26  | 28         |
|---|-------------------------|-----------|----------|--|------------|---|------------|
| Model   | Combination unit        |           |          | ARUB220LT3   | ARUB240LT3 | ARUB260LT3  | ARUB280LT3 |
|   | Independent unit        |           |          | ARUB120LT3   | ARUB120LT3 | ARUB140LT3  | ARUB160LT3 |
|   |                         |           |          | ARUB100LT3   | ARUB120LT3 | ARUB120LT3  | ARUB120LT3 |
|   |                         |           |          |  |            |   |            |
|   |                         |           |          |  |            |   |            |
| Capacity  | Cooling                 | Nom       | kW       | 61.6   | 67.2       | 72.8  | 78.4       |
|   | Heating +7°C            | Nom       | kW       | 69.3   | 75.6       | 81.9  | 88.2       |
|   | Heating -7°C            | Nom       | kW       | 66.7   | 72.8       | 78.9  | 80.5       |
| Power Input   | Cooling                 | Nom       | kW       | 15.9   | 17.8       | 18.4  | 19.9       |
|   | Heating +7°C            | Nom       | kW       | 16.3   | 18.0       | 18.7  | 20.5       |
|   | Heating -7°C            | Nom       | kW       | 18.8   | 20.8       | 21.6  | 23.7       |
| COP   | Cooling                 |           |          | 3.87   | 3.78       | 3.96  | 3.94       |
|   | Heating                 |           |          | 4.26   | 4.20       | 4.38  | 4.30       |
| Operation Range                                       | Cooling                 | Min~Max   | °C(DB)   | -10°C ~ 43°C                                       |            |   |            |
|   | Heating                 | Min~Max   | °C(WB)   | -20°C ~ 16°C                                       |            |   |            |
| Compressor  | Type                    |           |          | HSS(High Pressure Side Shell) BLDC Inverter Scroll |            |   |            |
|   | Number of Compressor    |           |          | 4  |            |   |            |
| Fan   | Type                    |           |          | Propeller fan                                      |            |   |            |
|   | Motor Type              |           |          | BLDC motor   |            |   |            |
| Airflow Rate  | Cooling                 | High      | m³/min   | 380  | 400        |   |            |
| Sound Pressure  |                         | High      | dBA      | 61   |            |   |            |
| Dimension   |                         | WxHxD     | mm       | (920×1,680×760)×2                                  |            | (920 x 1,680 x 760) x 1 + (1,240 x 1,680 x 760) x 1 |            |
| Net weight  |                         |           | kg       | 240 × 2  |            | 240 × 1 + 270 × 1                                   |            |
| Refrigerant   | Type                    |           |          | R410A  |            |   |            |
|   | Charge                  |           |          | kg   | 12.8       | 13.4  |            |
|   | Control                 |           |          | EEV  |            |   |            |
| Refrigerant Oil                                       | Type                    |           |          | FVC68D(PVE)  |            |   |            |
|   | Charge                  |           |          | cc   | 10,400     | 10,700  |            |
| Power Supply  |                         | Ø / V /Hz |          | 3 / 380 ~ 415 / 50                                 |            |   |            |
| Transmission cable (VCTF-SB)                          |                         | N x mm²   |          | 2C x 1.0 ~ 1.5                                     |            |   |            |
| Total Piping Length                                   |                         | Max       | m        | 1,000  |            |   |            |
| Actual longest piping Length *                        |                         |           | m        | 200(225)   |            |   |            |
| Longest piping length after 1 <sup>st</sup> branch ** |                         |           | m        | 40(90)   |            |   |            |
| Piping level difference                               |                         | IDU-ODU   | m        | 110  |            |   |            |
| Piping Connection                                     | Liquid Pipes            |           | mm(inch) | Ø15.88(5/8)  |            | Ø19.05(3/4)   |            |
|   | Low Pressure Gas Pipes  |           | mm(inch) | Ø34.9(1 3/8)                                       |            |   |            |
|   | High Pressure Gas Pipes |           | mm(inch) | Ø28.58(1 1/8)                                      |            |   |            |
| Number of Outdoor Unit                                |                         |           |          | 2  |            |   |            |
| Number of Maximum Connectable Indoor Units ***        |                         |           |          | 35(44)   | 39(48)     | 42(52)  | 45(56)     |
| Ratio of the Connectable Indoor Units    Min ~ Max    |                         |           |          | 50 ~ 160%  |            |   |            |
| Heat exchanger  | Type                    |           |          | Wide Louver fin(Gold-coating)                      |            |   |            |

Specifications

| HP   |                         |           |        | 30   | 32         | 34                | 36                | 38                | 40         |
|--|-------------------------|-----------|--------|--|------------|-------------------|-------------------|-------------------|------------|
| Model  | Combination unit        |           |        | ARUB300LT3   | ARUB320LT3 | ARUB340LT3        | ARUB360LT3        | ARUB380LT3        | ARUB400LT3 |
|  | Independent unit        |           |        | ARUB160LT3   | ARUB160LT3 | ARUB180LT3        | ARUB200LT3        | ARUB200LT3        | ARUB200LT3 |
|  |                         |           |        | ARUB140LT3   | ARUB160LT3 | ARUB160LT3        | ARUB160LT3        | ARUB180LT3        | ARUB200LT3 |
|  |                         |           |        |  |            |                   |                   |                   |            |
| Capacity   | Cooling                 | Nom       | kW     | 84.0   | 89.6       | 95.2              | 100.8             | 106.4             | 112.0      |
|  | Heating +7°C            | Nom       | kW     | 94.5   | 100.8      | 107.1             | 113.4             | 119.7             | 126.0      |
|  | Heating -7°C            | Nom       | kW     | 86.6   | 88.3       | 98.7              | 104.8             | 115.2             | 121.3      |
| Power Input  | Cooling                 | Nom       | kW     | 20.5   | 22.0       | 23.8              | 26.0              | 27.8              | 30.0       |
|  | Heating +7°C            | Nom       | kW     | 21.2   | 23.0       | 25.0              | 27.0              | 29.0              | 31.0       |
|  | Heating -7°C            | Nom       | kW     | 24.5   | 26.6       | 28.9              | 31.2              | 33.5              | 35.8       |
| COP  | Cooling                 |           |        | 4.10   | 4.07       | 4.00              | 3.88              | 3.83              | 3.73       |
|  | Heating                 |           |        | 4.46   | 4.38       | 4.28              | 4.20              | 4.13              | 4.06       |
| Operation Range                                    | Cooling                 | Min~Max   | °C(DB) | -10°C ~ 43°C                                       |            |                   |                   |                   |            |
|  | Heating                 | Min~Max   | °C(WB) | -20°C ~ 16°C                                       |            |                   |                   |                   |            |
| Compressor   | Type                    |           |        | HSS(High Pressure Side Shell) BLDC Inverter Scroll |            |                   |                   |                   |            |
|  | Number of Compressor    |           |        | 4  |            | 5                 |                   | 6                 |            |
| Fan  | Type                    |           |        | Propeller fan                                      |            |                   |                   |                   |            |
|  | Motor Type              |           |        | BLDC motor   |            |                   |                   |                   |            |
| Airflow Rate                                       | Cooling                 | High      | m³/min | 420  |            | 450               | 460               | 490               | 500        |
| Sound Pressure                                     |                         | High      | dBA    | 62.8   | 63.5       |                   | 65.0              |                   |            |
| Dimension  |                         | WxHxD     | mm     | (1,240×1,680×760)×2                                |            |                   |                   |                   |            |
| Net weight   |                         |           | kg     | 270 × 2  |            | 270 × 1 + 320 × 1 | 270 × 1 + 330 × 1 | 320 × 1 + 330 × 1 | 330 × 2    |
| Refrigerant  | Type                    |           |        | R410A  |            |                   |                   |                   |            |
|  | Charge                  |           | kg     | 14.0   |            | 14.5              | 16.0              | 16.5              | 18.0       |
|  | Control                 |           |        | EEV  |            |                   |                   |                   |            |
| Refrigerant Oil                                    | Type                    |           |        | FVC68D(PVE)  |            |                   |                   |                   |            |
|  | Charge                  |           | cc     | 11,000   |            | 12,700            |                   | 14,400            |            |
| Power Supply                                       |                         | Ø / V /Hz |        | 3 / 380 ~ 415 / 50                                 |            |                   |                   |                   |            |
| Transmission cable (VCTF-SB)                       |                         | N x mm²   |        | 2C x 1.0 ~ 1.5                                     |            |                   |                   |                   |            |
| Total Piping Length                                |                         | Max       | m      | 1,000  |            |                   |                   |                   |            |
| Actual longest piping Length *                     |                         |           | m      | 200(225)   |            |                   |                   |                   |            |
| Longest piping length after 1" branch **           |                         |           | m      | 40(90)   |            |                   |                   |                   |            |
| Piping level difference                            |                         | IDU-ODU   | m      | 110  |            |                   |                   |                   |            |
| Piping Connection                                  | Liquid Pipes            |           |        | Ø19.05(3/4)  |            |                   |                   |                   |            |
|  | Low Pressure Gas Pipes  |           |        | Ø34.9(1 3/8)                                       |            |                   | Ø41.3(1 5/8)      |                   |            |
|  | High Pressure Gas Pipes |           |        | Ø28.58(1 1/8)                                      |            |                   | Ø34.9(1 3/8)      |                   |            |
| Number of Outdoor Unit                             |                         |           |        | 2  |            |                   |                   |                   |            |
| Number of Maximum Connectable Indoor Units ***     |                         |           |        | 49(60)   | 52(64)     | 55(64)            | 58(64)            | 61(64)            | 64         |
| Ratio of the Connectable Indoor Units    Min ~ Max |                         |           |        | 50 ~ 160%  |            |                   |                   |                   |            |
| Heat exchanger                                     | Type                    |           |        | Wide Louver fin(Gold-coating)                      |            |                   |                   |                   |            |

Specifications

| HP   |                         |         |           | 42   | 44                                      | 46         | 48         | 50                  |        |
|--|-------------------------|---------|-----------|--|---|------------|------------|---------------------|--------|
| Model  | Combination unit        |         |           | ARUB420LT3   | ARUB440LT3                              | ARUB460LT3 | ARUB480LT3 | ARUB500LT3          |        |
|  | Independent unit        |         |           | ARUB160LT3   | ARUB160LT3                              | ARUB160LT3 | ARUB160LT3 | ARUB180LT3          |        |
|  |                         |         |           | ARUB140LT3   | ARUB160LT3                              | ARUB160LT3 | ARUB160LT3 | ARUB160LT3          |        |
|  |                         |         |           | ARUB120LT3   | ARUB120LT3                              | ARUB140LT3 | ARUB160LT3 | ARUB160LT3          |        |
|  |                         |         |           |  |   |            |            |                     |        |
| Capacity   | Cooling                 | Nom     | kW        | 117.6  | 123.2                                   | 128.8      | 134.4      | 140.0               |        |
|  | Heating +7°C            | Nom     | kW        | 132.3  | 138.6                                   | 144.9      | 151.2      | 157.5               |        |
|  | Heating -7°C            | Nom     | kW        | 123.0  | 124.7                                   | 130.7      | 132.4      | 142.9               |        |
| Power Input  | Cooling                 | Nom     | kW        | 29.4   | 30.9                                    | 31.5       | 33.0       | 34.8                |        |
|  | Heating +7°C            | Nom     | kW        | 30.2   | 32.0                                    | 32.7       | 34.5       | 36.5                |        |
|  | Heating -7°C            | Nom     | kW        | 34.9   | 37.0                                    | 37.8       | 39.9       | 41.2                |        |
| COP  | Cooling                 |         |           | 4.00   | 3.99                                    | 4.09       | 4.07       | 4.02                |        |
|  | Heating                 |         |           | 4.38   | 4.33                                    | 4.43       | 4.38       | 4.32                |        |
| Operation Range                                    | Cooling                 | Min~Max | °C(DB)    | -10°C ~ 43°C                                       |   |            |            |                     |        |
|  | Heating                 | Min~Max | °C(WB)    | -20°C ~ 16°C                                       |   |            |            |                     |        |
| Compressor   | Type                    |         |           | HSS(High Pressure Side Shell) BLDC Inverter Scroll |   |            |            |                     |        |
|  | Number of Compressor    |         |           | 6  |   |            |            | 7                   |        |
| Fan  | Type                    |         |           | Propeller fan                                      |   |            |            |                     |        |
|  | Motor Type              |         |           | BLDC motor   |   |            |            |                     |        |
| Airflow Rate                                       | Cooling                 | High    | m³/min    | 610  |   | 630        |            | 660                 |        |
| Sound Pressure                                     |                         |         | High      | dBA  | 62.8                                    | 64.0       | 64.5       |                     | 65.4   |
| Dimension  |                         |         | WxHxD     | mm   | (920×1,680×760)×1 + (1,240×1,680×760)×2 |            |            | (1,240×1,680×760)×3 |        |
| Net weight   |                         |         | kg        | 240 × 1 + 270 × 2                                  |   | 270 × 3    |            | 270 × 2 + 320 × 1   |        |
| Refrigerant  | Type                    |         |           | R410A  |   |            |            |                     |        |
|  | Charge                  |         |           | kg   | 20.4                                    |            | 21.0       |                     | 21.5   |
| Refrigerant Oil                                    | Control                 |         |           | EEV  |   |            |            |                     |        |
|  | Type                    |         |           | FVC68D(PVE)  |   |            |            |                     |        |
|  | Charge                  |         |           | cc   | 16,200                                  |            | 16,500     |                     | 18,200 |
| Power Supply                                       |                         |         | Ø / V /Hz | 3 / 380 ~ 415 / 50                                 |   |            |            |                     |        |
| Transmission cable (VCTF-SB)                       |                         |         | N x mm²   | 2C x 1.0 - 1.5                                     |   |            |            |                     |        |
| Total Piping Length                                | Max                     |         | m         | 1,000  |   |            |            |                     |        |
| Actual longest piping Length *                     |                         |         | m         | 200(225)   |   |            |            |                     |        |
| Longest piping length after 1" branch **           |                         |         | m         | 40(90)   |   |            |            |                     |        |
| Piping level difference                            | IDU-ODU                 |         | m         | 110  |   |            |            |                     |        |
| Piping Connection                                  | Liquid Pipes            |         | mm(inch)  | Ø19.05(3/4)  |   |            |            |                     |        |
|  | Low Pressure Gas Pipes  |         | mm(inch)  | Ø41.3(1 5/8)                                       |   |            |            |                     |        |
|  | High Pressure Gas Pipes |         | mm(inch)  | Ø34.9(1 3/8)                                       |   |            |            |                     |        |
| Number of Outdoor Unit                             |                         |         |           | 3  |   |            |            |                     |        |
| Number of Maximum Connectable Indoor Units ***     |                         |         |           | 64   |   |            |            |                     |        |
| Ratio of the Connectable Indoor Units    Min ~ Max |                         |         |           | 50 ~ 130%  |   |            |            |                     |        |
| Heat exchanger                                     | Type                    |         |           | Wide Louver fin(Gold-coating)                      |   |            |            |                     |        |



Specifications

| HP   |                         |           |        | 52   | 54                | 56         | 58                | 60         |
|--|-------------------------|-----------|--------|--|-------------------|------------|-------------------|------------|
| Model  | Combination unit        |           |        | ARUB520LT3   | ARUB540LT3        | ARUB560LT3 | ARUB580LT3        | ARUB600LT3 |
|  | Independent unit        |           |        | ARUB200LT3   | ARUB200LT3        | ARUB200LT3 | ARUB200LT3        | ARUB200LT3 |
|  |                         |           |        | ARUB160LT3   | ARUB200LT3        | ARUB200LT3 | ARUB200LT3        | ARUB200LT3 |
|  |                         |           |        | ARUB160LT3   | ARUB140LT3        | ARUB160LT3 | ARUB180LT3        | ARUB200LT3 |
|  |                         |           |        |  |                   |            |                   |            |
| Capacity   | Cooling                 | Nom       | kW     | 145.6  | 151.2             | 156.8      | 162.4             | 168.0      |
|  | Heating +7°C            | Nom       | kW     | 163.8  | 170.1             | 176.4      | 182.7             | 189.0      |
|  | Heating -7°C            | Nom       | kW     | 148.9  | 163.8             | 165.5      | 175.9             | 182.0      |
| Power Input  | Cooling                 | Nom       | kW     | 37.0   | 39.5              | 41.0       | 42.8              | 45.0       |
|  | Heating +7°C            | Nom       | kW     | 38.5   | 40.7              | 42.5       | 44.5              | 46.5       |
|  | Heating -7°C            | Nom       | kW     | 44.5   | 47.1              | 49.1       | 51.4              | 53.8       |
| COP  | Cooling                 |           |        | 3.94   | 3.83              | 3.82       | 3.79              | 3.73       |
|  | Heating                 |           |        | 4.25   | 4.18              | 4.15       | 4.11              | 4.06       |
| Operation Range                                    | Cooling                 | Min~Max   | °C(DB) | -10°C ~ 43°C                                       |                   |            |                   |            |
|  | Heating                 | Min~Max   | °C(WB) | -20°C ~ 16°C                                       |                   |            |                   |            |
| Compressor   | Type                    |           |        | HSS(High Pressure Side Shell) BLDC Inverter Scroll |                   |            |                   |            |
|  | Number of Compressor    |           |        | 7  | 8                 |            | 9                 |            |
| Fan  | Type                    |           |        | Propeller fan                                      |                   |            |                   |            |
|  | Motor Type              |           |        | BLDC motor   |                   |            |                   |            |
| Airflow Rate                                       | Cooling                 | High      | m³/min | 670  | 710               |            | 740               | 750        |
| Sound Pressure                                     |                         | High      | dBA    | 65.8   |                   | 66.5       | 66.8              |            |
| Dimension  |                         | WxHxD     | mm     | (1,240 × 1,680 × 760) × 3                          |                   |            |                   |            |
| Net weight   |                         |           | kg     | 270 × 2 + 330 × 1                                  | 270 × 1 + 330 × 2 |            | 320 × 1 + 330 × 2 | 330× 3     |
| Refrigerant  | Type                    |           |        | R410A  |                   |            |                   |            |
|  | Charge                  |           |        | 23.0   | 25.0              |            | 25.5              | 27.0       |
|  | Control                 |           |        | EEV  |                   |            |                   |            |
| Refrigerant Oil                                    | Type                    |           |        | FVC68D(PVE)  |                   |            |                   |            |
|  | Charge                  |           |        | 18,200   | 19,900            |            | 21,600            |            |
| Power Supply                                       |                         | Ø / V /Hz |        | 3 / 380 ~ 415 / 50                                 |                   |            |                   |            |
| Transmission cable (VCTF-SB)                       |                         | N x mm²   |        | 2C x 1.0 ~ 1.5                                     |                   |            |                   |            |
| Total Piping Length                                | Max                     | m         |        | 1,000  |                   |            |                   |            |
| Actual longest piping Length *                     |                         | m         |        | 200(225)   |                   |            |                   |            |
| Longest piping length after 1" branch **           |                         | m         |        | 40(90)   |                   |            |                   |            |
| Piping level difference                            | IDU-ODU                 | m         |        | 110  |                   |            |                   |            |
| Piping Connection                                  | Liquid Pipes            |           |        | Ø19.05(3/4)  |                   |            |                   |            |
|  | Low Pressure Gas Pipes  |           |        | Ø41.3(1 5/8)                                       |                   |            |                   |            |
|  | High Pressure Gas Pipes |           |        | Ø34.9(1 3/8)                                       |                   |            |                   |            |
| Number of Outdoor Unit                             |                         |           |        | 3  |                   |            |                   |            |
| Number of Maximum Connectable Indoor Units ***     |                         |           |        | 64   |                   |            |                   |            |
| Ratio of the Connectable Indoor Units    Min ~ Max |                         |           |        | 50 ~ 130%  |                   |            |                   |            |
| Heat exchanger                                     | Type                    |           |        | Wide Louver fin(Gold-coating)                      |                   |            |                   |            |

Specifications

| HP   |                         |           |        | 62   | 64         | 66                | 68               | 70                          |
|--|-------------------------|-----------|--------|--|------------|-------------------|------------------|-----------------------------|
| Model  | Combination unit        |           |        | ARUB620LT3   | ARUB640LT3 | ARUB660LT3        | ARUB680LT3       | ARUB700LT3                  |
|  | Independent unit        |           |        | ARUB160LT3   | ARUB160LT3 | ARUB180LT3        | ARUB180LT3       | ARUB200LT3                  |
|  |                         |           |        | ARUB160LT3   | ARUB160LT3 | ARUB160LT3        | ARUB180LT3       | ARUB180LT3                  |
|  |                         |           |        | ARUB160LT3   | ARUB160LT3 | ARUB160LT3        | ARUB160LT3       | ARUB160LT3                  |
|  |                         |           |        | ARUB140LT3   | ARUB160LT3 | ARUB160LT3        | ARUB160LT3       | ARUB160LT3                  |
| Capacity   | Cooling                 | Nom       | kW     | 173.6  | 179.2      | 184.8             | 190.4            | 196.0                       |
|  | Heating +7°C            | Nom       | kW     | 195.3  | 201.6      | 207.9             | 214.2            | 220.5                       |
|  | Heating -7°C            | Nom       | kW     | 174.9  | 176.6      | 187.0             | 197.5            | 203.5                       |
| Power Input  | Cooling                 | Nom       | kW     | 42.5   | 44.0       | 45.8              | 47.6             | 49.8                        |
|  | Heating +7°C            | Nom       | kW     | 44.2   | 46.0       | 48.0              | 50.0             | 52.0                        |
|  | Heating -7°C            | Nom       | kW     | 51.1   | 53.2       | 55.5              | 57.8             | 60.1                        |
| COP  | Cooling                 |           |        | 4.08   | 4.07       | 4.03              | 4.00             | 3.94                        |
|  | Heating                 |           |        | 4.42   | 4.38       | 4.33              | 4.28             | 4.24                        |
| Operation Range                                    | Cooling                 | Min~Max   | °C(DB) | -10°C ~ 43°C                                       |            |                   |                  |                             |
|  | Heating                 | Min~Max   | °C(WB) | -20°C ~ 16°C                                       |            |                   |                  |                             |
| Compressor   | Type                    |           |        | HSS(High Pressure Side Shell) BLDC Inverter Scroll |            |                   |                  |                             |
|  | Number of Compressor    |           |        | 8  |            | 9                 | 10               |                             |
| Fan  | Type                    |           |        | Propeller fan                                      |            |                   |                  |                             |
|  | Motor Type              |           |        | BLDC motor   |            |                   |                  |                             |
| Airflow Rate                                       | Cooling                 | High      | m³/min | 840  |            | 870               | 900              | 910                         |
| Sound Pressure                                     |                         | High      | dBA    | 66.4   | 67.0       | 67.3              | 67.5             |                             |
| Dimension  |                         | WxHxD     | mm     | (1,240 × 1,680 × 760) × 4                          |            |                   |                  |                             |
| Net weight   |                         |           | kg     | 270 × 4  |            | 270 × 3 + 320 × 1 | 270 × 2 + 320× 2 | 270 × 2 + 320 × 1 + 330 × 1 |
| Refrigerant  | Type                    |           |        | R410A  |            |                   |                  |                             |
|  | Charge                  |           |        | 28.0   |            | 28.5              | 29.0             | 30.5                        |
|  | Control                 |           |        | EEV  |            |                   |                  |                             |
| Refrigerant Oil                                    | Type                    |           |        | FVC68D(PVE)  |            |                   |                  |                             |
|  | Charge                  |           |        | 22,000   |            | 23,700            | 25,400           |                             |
| Power Supply                                       |                         | Ø / V /Hz |        | 3 / 380 ~ 415 / 50                                 |            |                   |                  |                             |
| Transmission cable (VCTF-SB)                       |                         | N x mm²   |        | 2C x 1.0 - 1.5                                     |            |                   |                  |                             |
| Total Piping Length                                |                         | Max       | m      | 1,000  |            |                   |                  |                             |
| Actual longest piping Length *                     |                         |           | m      | 200(225)   |            |                   |                  |                             |
| Longest piping length after 1" branch **           |                         |           | m      | 40(90)   |            |                   |                  |                             |
| Piping level difference                            |                         | IDU-ODU   | m      | 110  |            |                   |                  |                             |
| Piping Connection                                  | Liquid Pipes            |           |        | Ø22.2(7/8)   |            |                   |                  |                             |
|  | Low Pressure Gas Pipes  |           |        | Ø44.5(1 3/4)                                       |            | Ø53.98(2 1/8)     |                  |                             |
|  | High Pressure Gas Pipes |           |        | Ø41.3(1 5/8)                                       |            | Ø44.5(1 3/4)      |                  |                             |
| Number of Outdoor Unit                             |                         |           |        | 4  |            |                   |                  |                             |
| Number of Maximum Connectable Indoor Units ***     |                         |           |        | 64   |            |                   |                  |                             |
| Ratio of the Connectable Indoor Units    Min ~ Max |                         |           |        | 50 ~ 130%  |            |                   |                  |                             |
| Heat exchanger                                     | Type                    |           |        | Wide Louver fin(Gold-coating)                      |            |                   |                  |                             |

Specifications

| HP  |                         |           |        | 72   | 74                    | 76                | 78                | 80         |
|---|-------------------------|-----------|--------|--|-----------------------|-------------------|-------------------|------------|
| Model   | Combination unit        |           |        | ARUB720LT3   | ARUB740LT3            | ARUB760LT3        | ARUB780LT3        | ARUB800LT3 |
|   | Independent unit        |           |        | ARUB200LT3   | ARUB200LT3            | ARUB200LT3        | ARUB200LT3        | ARUB200LT3 |
|   |                         |           |        | ARUB200LT3   | ARUB200LT3            | ARUB200LT3        | ARUB200LT3        | ARUB200LT3 |
|   |                         |           |        | ARUB160LT3   | ARUB180LT3            | ARUB200LT3        | ARUB200LT3        | ARUB200LT3 |
|   |                         |           |        | ARUB160LT3   | ARUB160LT3            | ARUB160LT3        | ARUB180LT3        | ARUB200LT3 |
| Capacity  | Cooling                 | Nom       | kW     | 201.6  | 207.2                 | 212.8             | 218.4             | 224.0      |
|   | Heating +7°C            | Nom       | kW     | 226.8  | 233.1                 | 239.4             | 245.7             | 252.0      |
|   | Heating -7°C            | Nom       | kW     | 209.6  | 220.0                 | 226.1             | 236.6             | 242.6      |
| Power Input   | Cooling                 | Nom       | kW     | 52.0   | 53.8                  | 56.0              | 57.8              | 60.0       |
|   | Heating +7°C            | Nom       | kW     | 54.0   | 56.0                  | 58.0              | 60.0              | 62.0       |
|   | Heating -7°C            | Nom       | kW     | 62.4   | 64.7                  | 67.1              | 69.4              | 71.7       |
| COP   | Cooling                 |           |        | 3.88   | 3.85                  | 3.80              | 3.78              | 3.73       |
|   | Heating                 |           |        | 4.20   | 4.16                  | 4.13              | 4.10              | 4.06       |
| Operation Range                                       | Cooling                 | Min~Max   | °C(DB) | -10°C ~ 43°C                                       |                       |                   |                   |            |
|   | Heating                 | Min~Max   | °C(WB) | -20°C ~ 16°C                                       |                       |                   |                   |            |
| Compressor  | Type                    |           |        | HSS(High Pressure Side Shell) BLDC Inverter Scroll |                       |                   |                   |            |
|   | Number of Compressor    |           |        | 10   | 11                    |                   | 12                |            |
| Fan   | Type                    |           |        | Propeller fan                                      |                       |                   |                   |            |
|   | Motor Type              |           |        | BLDC motor   |                       |                   |                   |            |
| Airflow Rate  | Cooling                 | High      | m³/min | 920  | 950                   | 960               | 990               | 1,000      |
| Sound Pressure  |                         | High      | dBA    | 67.5   | 67.8                  |                   | 68.0              |            |
| Dimension   |                         | WxHxD     | mm     | (1,240×1,680×760)×4                                |                       |                   |                   |            |
| Net weight  |                         |           | kg     | 270 × 2 + 330 × 2                                  | 270×1 + 320×1 + 330×2 | 270 × 1 + 330 × 3 | 320 × 1 + 330 × 3 | 330 × 4    |
| Refrigerant   | Type                    |           |        | R410A  |                       |                   |                   |            |
|   | Charge                  |           |        | 32.0   | 32.5                  | 34.0              | 34.5              | 36.0       |
|   | Control                 |           |        | EEV  |                       |                   |                   |            |
| Refrigerant Oil                                       | Type                    |           |        | FVC68D(PVE)  |                       |                   |                   |            |
|   | Charge                  |           |        | 25,400   | 27,100                |                   | 28,800            |            |
| Power Supply  | Ø / V /Hz               |           |        | 3 / 380 ~ 415 / 50                                 |                       |                   |                   |            |
| Transmission cable (VCTF-SB)                          | N x mm²                 |           |        | 2C x 1.0 ~ 1.5                                     |                       |                   |                   |            |
| Total Piping Length                                   | Max                     |           |        | 1,000  |                       |                   |                   |            |
| Actual longest piping Length *                        |                         |           |        | 200(225)   |                       |                   |                   |            |
| Longest piping length after 1 <sup>st</sup> branch ** |                         |           |        | 40(90)   |                       |                   |                   |            |
| Piping level difference                               | IDU-ODU                 |           |        | 110  |                       |                   |                   |            |
| Piping Connection                                     | Liquid Pipes            |           |        | Ø22.2(7/8)   |                       |                   |                   |            |
|   | Low Pressure Gas Pipes  |           |        | Ø53.98(2 1/8)                                      |                       |                   |                   |            |
|   | High Pressure Gas Pipes |           |        | Ø44.5(1 3/4)                                       |                       |                   |                   |            |
| Number of Outdoor Unit                                |                         |           |        | 4  |                       |                   |                   |            |
| Number of Maximum Connectable Indoor Units ***        |                         |           |        | 64   |                       |                   |                   |            |
| Ratio of the Connectable Indoor Units                 |                         | Min ~ Max |        | 50 ~ 130%  |                       |                   |                   |            |
| Heat exchanger  | Type                    |           |        | Wide Louver fin(Gold-coating)                      |                       |                   |                   |            |

- \* ( ) : equivalent length
- \*\* Conditional Application  
To make 40-90m of pipe length after first branch refer to the part of "installation of outdoor units" in PDB
- \*\*\* ( ) : the number of max. connectable indoor units, for max indoor unit combination ratio (refer to the table below)

Note :

- Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m  
Level difference of zero  
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m  
Level difference of zero
- Capacities are net capacities
- Due to our policy of innovation some specifications may be changed without notification
- EEV : Electronic Expansion Valve

CAUTION

- A combination operation over 100% cause to reduce each indoor unit capacity

- Combination ratio(50~200%)

| No. of outdoor unit | Connection Capacity |
|---------------------|---------------------|
| Single unit         | 200%                |
| Double unit         | 160%                |
| Triple unit         | 130%                |
| Over triple unit    | 130%                |

We can guarantee the operation only within 130% Combination.

If you want to connect more than 130% combination, please contact us and discuss the requirement like below.

- If the operational capacity of indoor units exceed 130%, then all the indoor units operate under low air flow step mode.
- Over 130%, capacity is same as capacity of 130%, Same remark is valid for power input.



# MULTI V™ MINI



1Ø 4HP



1Ø 5HP,6HP  
3Ø 4HP,5HP,6HP



## Specifications

\*1Ø, 220V

\*3Ø, 380V

| HP                                    |                      |           |        | 4                  | 5                             | 6                 | 4                             | 5          | 6           |
|---------------------------------------|----------------------|-----------|--------|--------------------|-------------------------------|-------------------|-------------------------------|------------|-------------|
| Model                                 | Combination unit     |           |        | ARUN40GS2A         | ARUN50GS2A                    | ARUN60GS2A        | ARUN40LS2A                    | ARUN50LS2A | ARUN60LS2A  |
| Capacity                              | Cooling              | Nom       | kW     | 11.2               | 14.0                          | 15.5              | 11.2                          | 14.0       | 15.5        |
|                                       | Heating +7°C         | Nom       | kW     | 12.5               | 16.0                          | 18.0              | 12.5                          | 16.0       | 18.0        |
|                                       | Heating -7°C         | Nom       | kW     | 11.4               | 14.6                          | 16.4              | 11.38                         | 14.56      | 16.38       |
| Power Input                           | Cooling              | Nom       | kW     | 3.0                | 3.5                           | 4.2               | 2.6                           | 3.5        | 4.2         |
|                                       | Heating +7°C         | Nom       | kW     | 3.2                | 3.9                           | 4.6               | 2.9                           | 3.9        | 4.6         |
|                                       | Heating -7°C         | Nom       | kW     | 3.9                | 4.8                           | 5.6               | 3.2                           | 4.8        | 5.6         |
| COP                                   | Cooling              |           |        | 3.73               | 4.00                          | 3.69              | 4.31                          | 4.00       | 3.69        |
|                                       | Heating              |           |        | 3.91               | 4.10                          | 3.91              | 4.31                          | 4.10       | 3.91        |
| Operation Range                       | Cooling              | Min~Max   | °C(DB) | -5°C ~ 48°C        |                               |                   | -5°C ~ 48°C                   |            |             |
|                                       | Heating              | Min~Max   | °C(WB) | -20°C ~ 16°C       |                               |                   | -20°C ~ 16°C                  |            |             |
| Compressor                            | Type                 |           |        |                    | DC INV Rotary                 |                   | DC INV Rotary                 |            |             |
|                                       | Number of Compressor |           |        | 1                  |                               |                   | 1                             |            |             |
| Fan                                   | Type                 |           |        |                    | Propeller Fan                 |                   | Propeller Fan                 |            |             |
|                                       | Motor Type           |           |        | BLDC motor         |                               |                   | BLDC motor                    |            |             |
| Airflow Rate                          | Cooling              | High      | m³/min | 60                 | 110                           |                   | 110                           |            |             |
| Sound Pressure                        |                      | High      | dBA    | 52                 | 53                            | 54                | 52                            | 53         | 54          |
| Dimension                             |                      | WxHxD     | mm     | 950 x 834 x 330    |                               | 950 x 1,380 x 330 | 950 x 1,380 x 330             |            |             |
| Net weight                            |                      |           | kg     | 77                 | 106                           |                   | 107                           |            |             |
| Refrigerant                           | Type                 |           |        |                    | R410A                         |                   | R410A                         |            |             |
|                                       | Charge               |           | kg     | 1.8                | 3.0                           |                   | 3.0                           |            |             |
|                                       | Control              |           |        |                    | EEV                           |                   | EEV                           |            |             |
| Refrigerant Oil                       | Type                 |           |        |                    | FVC68D (PVE)                  |                   | FVC68D (PVE)                  |            |             |
|                                       | Charge               |           | cc     | 1,300              |                               |                   | 1,300                         |            |             |
| Power Supply                          | Ø / V / Hz           |           |        | 1 / 220 ~ 240 / 50 |                               |                   | 3 / 380 ~ 415 / 50            |            |             |
| Transmission cable (VCTF-SB)          | N x mm²              |           |        | 2C x 1.0 ~ 1.5     |                               |                   | 2C x 1.0 ~ 1.5                |            |             |
| Total Piping Length                   | Max                  | m         |        | 300                |                               |                   | 300                           |            |             |
| Actual longest piping Length *        |                      | m         |        | 150(175)           |                               |                   | 150(175)                      |            |             |
| Longest piping length after 1" branch |                      | m         |        | 40                 |                               |                   | 40                            |            |             |
| Piping level difference **            | IDU-ODU              | m         |        | 50(40)             |                               |                   | 50(40)                        |            |             |
| Piping connection                     | Liquid               | mm(inch)  |        | Ø9.52(3/8)         |                               |                   | Ø9.52(3/8)                    |            |             |
|                                       | Gas                  | mm(inch)  |        | Ø15.88(5/8)        |                               | Ø19.05(3/4)       | Ø15.88(5/8)                   |            | Ø19.05(3/4) |
| Number of Outdoor Unit                |                      |           |        | 1                  |                               |                   | 1                             |            |             |
| Number of Connectable Indoor          |                      | Max       |        | 6                  | 8                             | 9                 | 6                             | 8          | 9           |
| Ratio of the Connectable Indoor       |                      | Min ~ Max |        | 50 ~ 130%          |                               |                   | 50 ~ 130%                     |            |             |
| Heat exchanger                        | Type                 |           |        |                    | Wide Louver fin(Gold-coating) |                   | Wide Louver fin(Gold-coating) |            |             |

Note :

- Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m  
Level difference of zero  
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m  
Level difference of zero
- Capacities are net capacities
- Due to our policy of innovation some specifications may be changed without notification
- EEV : Electronic Expansion Valve

\* ( ) : equivalent length  
\*\* ( ) : In case of outdoor unit installed lower than indoor unit.

# MULTI V™ SPACE II



## Specifications

| HP                                    |                      |            |        | 6                  | 8                             |
|---------------------------------------|----------------------|------------|--------|--------------------|-------------------------------|
| Model                                 | Combination unit     |            |        | ARUN60LL2(R2)      | ARUN80LL2(R2)                 |
| Capacity                              | Cooling              | Nom        | kW     | 16.0               | 21.7                          |
|                                       | Heating +7°C         | Nom        | kW     | 18.0               | 23.0                          |
|                                       | Heating -7°C         | Nom        | kW     | 16.4               | 20.9                          |
| Power Input                           | Cooling              | Nom        | kW     | 4.7                | 6.7                           |
|                                       | Heating +7°C         | Nom        | kW     | 4.9                | 7.1                           |
|                                       | Heating -7°C         | Nom        | kW     | 6.0                | 8.7                           |
| COP                                   | Cooling              |            |        | 3.40               | 3.24                          |
|                                       | Heating              |            |        | 3.67               | 3.24                          |
| Operation Range                       | Cooling              | Min~Max    | °C(DB) | -5°C ~ 43°C        |                               |
|                                       | Heating              | Min~Max    | °C(WB) | -20°C ~ 16°C       |                               |
| Compressor                            | Type                 |            |        | DC Scroll          |                               |
|                                       | Number of Compressor |            |        | 1                  |                               |
| Fan                                   | Type                 |            |        | Sirocco            |                               |
|                                       | Motor Type           |            |        | BLDC motor         |                               |
| Airflow Rate                          | Cooling              | High       | m³/min | 100                | 120                           |
| Sound Pressure                        |                      | High       | dBA    | 62                 | 65                            |
| Dimension                             |                      | WxHxD      | mm     | 750 x 1,790 x 650  |                               |
| Net weight                            |                      |            | kg     | 200                |                               |
| Refrigerant                           | Type                 |            |        | R410A              |                               |
|                                       | Charge               |            | kg     | 5.2                | 6.4                           |
|                                       | Control              |            |        | EEV                |                               |
| Refrigerant Oil                       | Type                 |            |        | FVC68D(PVE)        |                               |
|                                       | Charge               |            | cc     | 2,300              |                               |
| Power Supply                          |                      | Ø / V / Hz |        | 3 / 380 ~ 415 / 50 |                               |
| Transmission cable (VCTF-SB)          |                      | N x mm²    |        | 2C x 1.0 ~ 1.5     |                               |
| Total Piping Length                   | Max                  | m          |        | 300                |                               |
| Actual longest piping Length *        |                      | m          |        | 150(175)           |                               |
| Longest piping length after 1" branch |                      | m          |        | 40                 |                               |
| Piping level difference               | IDU-ODU              | m          |        | 50                 |                               |
| Piping connection                     | Liquid               | mm(inch)   |        | Ø9.52(3/8)         |                               |
|                                       | Gas                  | mm(inch)   |        | Ø19.05(3/4)        |                               |
| Number of Outdoor Unit                |                      |            |        | 1                  |                               |
| Number of Connectable Indoor          | Max                  |            |        | 9                  | 13                            |
| Ratio of the Connectable Indoor       | Min ~ Max            |            |        | 50 ~ 130%          |                               |
| Heat exchanger                        | Type                 |            |        | Gold fin           | Wide Louver fin(Gold-coating) |

Note :

- Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m  
Level difference of zero  
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m  
Level difference of zero
- Capacities are net capacities
- Due to our policy of innovation some specifications may be changed without notification
- EEV : Electronic Expansion Valve

\* ( ) : equivalent length

# MULTI V™ WATERIII Heat Pump



## Specifications

| HP                                    |                      |                               |   | 10          | 20         | 30         | 40         | 50         | 60         |  |
|---------------------------------------|----------------------|-------------------------------|---|-------------|------------|------------|------------|------------|------------|--|
| Model                                 | Combination unit     |                               |   | ARWN100LA2  | ARWN200LA2 | ARWN300LA2 | ARWN400LA2 | ARWN500LA2 | ARWN600LA2 |  |
|                                       | Independent unit     |                               |   | ARWN100LA2  | ARWN200LA2 | ARWN200LA2 | ARWN200LA2 | ARWN200LA2 | ARWN200LA2 |  |
|                                       |                      |                               |   |             |            | ARWN100LA2 | ARWN200LA2 | ARWN200LA2 | ARWN200LA2 |  |
|                                       |                      |                               |   |             |            |            |            | ARWN100LA2 | ARWN200LA2 |  |
| Capacity                              | Cooling              | Nom                           | kW  | 28.0        | 56.0       | 84.0       | 112.0      | 140.0      | 168.0      |  |
|                                       | Heating +7°C         | Nom                           | kW  | 31.5        | 63.0       | 94.5       | 126.0      | 157.5      | 189.0      |  |
| Power Input                           | Cooling              | Nom                           | kW  | 5.6         | 11.2       | 16.8       | 22.4       | 28.0       | 33.6       |  |
|                                       | Heating +7°C         | Nom                           | kW  | 5.8         | 11.7       | 17.5       | 23.4       | 29.2       | 35.1       |  |
| COP                                   | Cooling              | 5.00                          |   |             |            |            |            |            |            |  |
|                                       | Heating              | 5.43 5.38 5.40 5.38 5.39 5.38 |   |             |            |            |            |            |            |  |
| Operation Range                       | Cooling              | Min~Max                       | °C(DB)  | 10°C ~ 45°C |            |            |            |            |            |  |
|                                       | Heating              | Min~Max                       | °C(WB)  | -5°C ~ 45°C |            |            |            |            |            |  |
| Compressor                            | Type                 | Hermetic Scroll               |   |             |            |            |            |            |            |  |
|                                       | Number of Compressor | 1 2 3 4 5 6                   |   |             |            |            |            |            |            |  |
| Sound Pressure                        | High                 | dBA                           | 51 53 54 55 56  |             |            |            |            |            |            |  |
| Dimension                             | WxHxD                | mm                            | (772x1,120x547)x1 (772x1,120x547)x2 (772x1,120x547)x3   |             |            |            |            |            |            |  |
| Net weight                            |                      | kg                            | 170 x 1 238 x 1 238 x 1 + 170 x 1 238 x 2 238 x 2 + 170 x 1 238 x 3   |             |            |            |            |            |            |  |
| Refrigerant                           | Type                 | R410A                         |   |             |            |            |            |            |            |  |
|                                       | Charge               | kg                            | 7.3 8.8 16.1 17.6 24.9 26.4   |             |            |            |            |            |            |  |
|                                       | Control              | EEV                           |   |             |            |            |            |            |            |  |
| Refrigerant Oil                       | Type                 | FVC68D(PVE)                   |   |             |            |            |            |            |            |  |
|                                       | Charge               | cc                            | 2,325±10 (2,325±10)x2+(2,325±70) (2,325±10)x2+(2,325±70)x2 (2,325±10)x3+(2,325±70) x2 (2,325±10)x3+(2,325±70)x3 |             |            |            |            |            |            |  |
| Power Supply                          | Ø / V / Hz           | 3 / 380 ~ 415 / 50            |   |             |            |            |            |            |            |  |
| Transmission cable (VCTF-SB)          | N x mm²              | 2C x 1.0 ~ 1.5                |   |             |            |            |            |            |            |  |
| Total Piping Length                   | Max                  | m                             | 300   |             |            |            |            |            |            |  |
| Actual longest piping Length *        |                      | m                             | 150(175)  |             |            |            |            |            |            |  |
| Longest piping length after 1" branch |                      | m                             | 40  |             |            |            |            |            |            |  |
| Piping level difference **            | IDU-ODU              | m                             | 50(40)  |             |            |            |            |            |            |  |
| Piping connection                     | Liquid               | mm(inch)                      | Ø9.52(3/8) Ø12.7(1/2) Ø19.05(3/4)   |             |            |            |            |            |            |  |
|                                       | Gas                  | mm(inch)                      | Ø22.2(7/8) Ø28.58(1 1/8) Ø34.9(1 3/8) Ø41.3(1 5/8)  |             |            |            |            |            |            |  |
| Number of Outdoor Unit                |                      |                               | 1 2 3   |             |            |            |            |            |            |  |
| Number of Connectable Indoor          | Max                  |                               | 16 32 49 64   |             |            |            |            |            |            |  |
| Ratio of the Connectable Indoor       | Min ~ Max            |                               | 50 ~ 130%   |             |            |            |            |            |            |  |
| Heat exchanger                        | Type                 | Stainless Steel Plate         |   |             |            |            |            |            |            |  |
|                                       | Rated Water Flow     | L/min                         | 96 192 192+96 192x2 192x2+96 192x3  |             |            |            |            |            |            |  |
|                                       | Head Loss            | kPa                           | 26.5 43.0   |             |            |            |            |            |            |  |
| Water Connection Pipe                 | Inlet                | m                             | PT32 PT40 PT40 + PT32 PT40x2 PT40 x 2 + PT32 PT40x3   |             |            |            |            |            |            |  |
|                                       | Outlet               | m                             | PT32 PT40 PT40 + PT32 PT40x2 PT40 x 2 + PT32 PT40x3   |             |            |            |            |            |            |  |
|                                       | Drain Outlet         | m                             | 20  |             |            |            |            |            |            |  |

- Notes:
- Capacities and Inputs are based on the following conditions  
Cooling : Indoor temp. 27°C [80.6°F]DB/19°C[66.2°F]WB, Water inlet temp. 30°C[86°F], Interconnecting piping length 7.5m, Level difference of zero  
Heating : - Indoor temp. 20°C[68°F]DB - Water inlet temp. 20°C[68°F]
  - Capacities are net capacities
  - Due to our policy of innovation some specifications may be changed without notification
  - EEV : Electronic Expansion Valve
  - Add an anti freeze to circulation water when outside units is operating undet 10°C [50°F], and change the DIP switch on main PCB.(For more information oninstallation section.)

\* ( ) : equivalent length  
\*\* ( ) : In case of outdoor unit installed lower than indoor unit.

# MULTI V™ WATERIII Heat Recovery



## Specifications

| HP   |                      |                       |               | 10                    | 20           | 30                      | 40                        | 50                         | 60                        |
|--|----------------------|-----------------------|---------------|-----------------------|--------------|-------------------------|---------------------------|----------------------------|---------------------------|
| Model  | Combination unit     |                       |               | ARWB100LA2            | ARWB200LA2   | ARWB300LA2              | ARWB400LA2                | ARWB500LA2                 | ARWB600LA2                |
|  | Independent unit     |                       |               | ARWB100LA2            | ARWB200LA2   | ARWB200LA2              | ARWB200LA2                | ARWB200LA2                 | ARWB200LA2                |
|  |                      |                       |               |                       |              | ARWB100LA2              | ARWB200LA2                | ARWB200LA2                 | ARWB200LA2                |
|  |                      |                       |               |                       |              |                         |                           | ARWB100LA2                 | ARWB200LA2                |
| Capacity   | Cooling              | Nom                   | kW            | 28.0                  | 56.0         | 84.0                    | 112.0                     | 140.0                      | 168.0                     |
|  | Heating +7°C         | Nom                   | kW            | 31.5                  | 63.0         | 94.5                    | 126.0                     | 157.5                      | 189.0                     |
| Power Input  | Cooling              | Nom                   | kW            | 5.6                   | 11.2         | 16.8                    | 22.4                      | 28.0                       | 33.6                      |
|  | Heating +7°C         | Nom                   | kW            | 5.8                   | 11.7         | 17.5                    | 23.4                      | 29.2                       | 35.1                      |
| COP  | Cooling              | 5.00                  |               |                       |              |                         |                           |                            |                           |
|  | Heating              |                       |               |                       | 5.43         | 5.38                    | 5.40                      | 5.38                       | 5.39                      |
| Operation Range                                    | Cooling              | Min~Max               | °C(DB)        | 10°C ~ 45°C           |              |                         |                           |                            |                           |
|  | Heating              | Min~Max               | °C(WB)        | -5°C ~ 45°C           |              |                         |                           |                            |                           |
| Compressor   | Type                 | Hermetic Scroll       |               |                       |              |                         |                           |                            |                           |
|  | Number of Compressor |                       |               | 1                     | 2            | 3                       | 4                         | 5                          | 6                         |
| Sound Pressure                                     | High                 | dBA                   | 51            |                       |              | 53                      | 54                        | 55                         | 56                        |
| Dimension  | WxHxD                | mm                    | 772x1,120x547 |                       |              | (772x1,120x547)x2       |                           | (772x1,120x547)x3          |                           |
| Net weight   | kg                   |                       |               | 170 x 1               | 238 x 1      | 238 x 1 + 170 x 1       | 238 x 2                   | 238 x 2 + 170 x 1          | 238 x 3                   |
| Refrigerant  | Type                 | R410A                 |               |                       |              |                         |                           |                            |                           |
|  | Charge               | kg                    | 7.3           | 8.8                   | 16.1         | 17.6                    | 24.9                      | 26.4                       |                           |
|  | Control              | EEV                   |               |                       |              |                         |                           |                            |                           |
| Refrigerant Oil                                    | Type                 | FVC68D(PVE)           |               |                       |              |                         |                           |                            |                           |
|  | Charge               | cc                    | 2,325±10      | (2,325±10)+(2,325±70) |              | (2,325±10)x2+(2,325±70) | (2,325±10)x2+(2,325±70)x2 | (2,325±10)x3+(2,325±70) x2 | (2,325±10)x3+(2,325±70)x3 |
| Power Supply                                       | Ø / V / Hz           |                       |               | 3 / 380 ~ 415 / 50    |              |                         |                           |                            |                           |
| Transmission cable (VCTF-SB)                       | N x mm²              |                       |               | 2C x 1.0 ~ 1.5        |              |                         |                           |                            |                           |
| Total Piping Length                                | Max                  | m                     | 300           |                       |              |                         |                           |                            |                           |
| Actual longest piping Length *                     |                      |                       | m             | 150(175)              |              |                         |                           |                            |                           |
| Longest piping length after 1 <sup>st</sup> branch |                      |                       | m             | 40                    |              |                         |                           |                            |                           |
| Piping level difference **                         | IDU-ODU              | m                     | 50(40)        |                       |              |                         |                           |                            |                           |
| Piping connection                                  | Liquid               | mm(inch)              | Ø9.52(3/8)    | Ø12.7(1/2)            | Ø19.05(3/4)  |                         |                           |                            |                           |
|  | Gas                  | mm(inch)              | Ø22.2(7/8)    | Ø28.58(1 1/8)         | Ø34.9(1 3/8) | Ø41.3(1 5/8)            |                           |                            |                           |
| Number of Outdoor Unit                             |                      |                       | 1             |                       |              | 2                       |                           | 3                          |                           |
| Number of Connectable Indoor                       | Max                  | 16                    |               |                       | 32           | 49                      | 64                        |                            |                           |
| Ratio of the Connectable Indoor                    | Min ~ Max            | 50 ~ 130%             |               |                       |              |                         |                           |                            |                           |
| Heat exchanger                                     | Type                 | Stainless Steel Plate |               |                       |              |                         |                           |                            |                           |
|  | Rated Water Flow     | L/min                 | 96            | 192                   | 192+96       |                         | 192x2                     | 192x2+96                   | 192x3                     |
|  | Head Loss            | kPa                   | 26.5          | 43.0                  | 43.0+26.5    |                         | 43.0x2                    | 43.0x2+26.5                | 43.0x3                    |
| Water Connection Pipe                              | Inlet                | PT32A                 |               |                       | PT40A        | PT40A+PT32A             | PT40Ax2                   | PT40Ax2+PT32A              | PT40Ax3                   |
|  | Outlet               | PT32A                 |               |                       | PT40A        | PT40A+PT32A             | PT40Ax2                   | PT40Ax2+PT32A              | PT40Ax3                   |
|  | Drain Outlet         | 20                    |               |                       |              |                         |                           |                            |                           |

- Notes:
- Capacities and Inputs are based on the following conditions  
Cooling : Indoor temp. 27°C [80.6°F]DB/19°C[66.2°F]WB, Water inlet temp. 30°C[86°F], Interconnecting piping length 7.5m, Level difference of zero  
Heating : - Indoor temp. 20°C[68°F]DB - Water inlet temp. 20°C[68°F]
  - Capacities are net capacities
  - Due to our policy of innovation some specifications may be changed without notification
  - EEV : Electronic Expansion Valve
  - Add an anti freeze to circulation water when outside units is operating undet 10°C [50°F], and change the DIP switch on main PCB.(For more information oninstallation section.)

\* ( ) : equivalent length  
\*\* ( ) : In case of outdoor unit installed lower than indoor unit.



# MULTI V™ series

## INDOOR UNIT

If you need a highly efficient air conditioning system in your building, MULTI V is the right choice for you.

- 66

ARTCOOL
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Standard
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Wall mounted
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Console
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Ceiling Cassette
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Ceiling Concealed Duct
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Fresh Air Intake Unit
- 82

Ceiling & Floor
- 83

Ceiling Suspended
- 84

Floor standing



# ART COOL

## Aesthetic Design

You no longer have to be told what your air conditioner should look like. With LG's revolutionary ARTCOOL photo changeable, you can simply change the look of your air conditioner to what you want, when you want to.

ARTCOOL series with outstanding designs have received International Forum Design Award, Reddot Design Award and G Mark.

• How to change the picture



• Panel type



Silver  
07/09/12GSFV2



Gold  
07/09/12GSFG2



Red  
07/09/12GSFE2



White silver  
07/09/12GSFH2

• ARTCOOL Mirror



Mirror 07/09/12/15GSER2  
18/24GS8R2



Silver 07/09/12/15GSEV2  
18/24GS8V2



Blue 07/09/12/15GSEB2  
18/24GS8B2

## Digital Air Flow Control

The air flow can be controlled to ensure maximum comfort and convenience.



Normal  
fast & even widely



Jet cool  
speedy & powerful

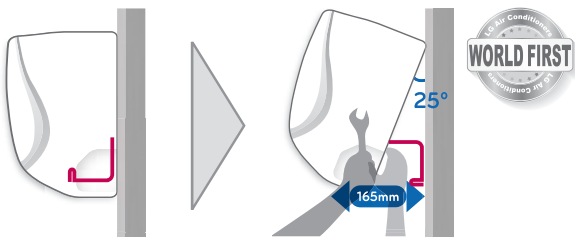


Sleep mode  
indirectly & softly

# STANDARD

## Installation support clip

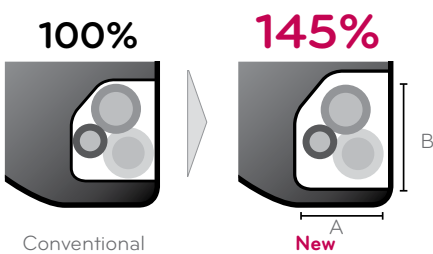
Installation support clip makes installation easier  
\*Only Standard



## Bigger tubing space

Wider installation space can make you installation much easier.

|       | LG   | Co.A | Co.B | Co.C |
|-------|------|------|------|------|
| A(mm) | 67.7 | 50.0 | 60.0 | 45.0 |
| B(mm) | 72.0 | 80.0 | 70.0 | 70.0 |
| %     | 116% | 95%  | 100% | 75%  |



## Deodorizing\_Triple Filter

The triple filter consists of three specialized filters to reduce the symptoms associated with various organic compounds including formaldehyde. It also has the ability to remove unpleasant odors creating a more comfortable environment.



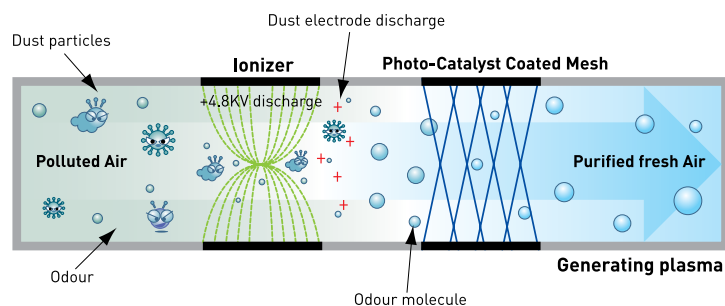
- 1 VOC filter removes odor and hazardous VOCs that is discharged from household materials made with chemical substances (carpet, paint, cleaners, furniture, etc.) (VOC= Volatile Organic Chemical)
- 2 Formaldehyde filter cuts off formaldehyde, a leading cause of new-house syndrome, and prevents dermatitis, vomiting, and pneumonia
- 3 Common odor filter removes ordinary odors that cause migraine and chronic fatigue



# STANDARD

## Eliminating\_Plasma Filter

The plasma air purifying system was initially developed by LG not only reduction of microscopic contaminants and dust, but also removal of house mites, micro dust, and pet fur in order to reduce allergy and asthma symptoms.



## Auto Cleaning

A main cause of air conditioner odors is mould and bacteria that breed in the heat exchanger. The auto clean function dries the wet heat exchanger to help prevent mould and bacteria from breeding thus significantly reducing the old rag smell and saves you from frequent cleaning.



### 1st Step

Dries the evaporator with soft, low-noise wind and removes remaining moisture. Press "Auto Clean" and the function starts after cooling operation.

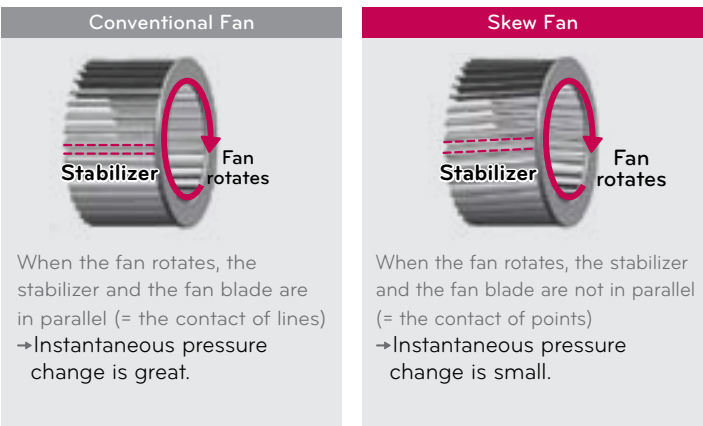


### 2nd Step

Removes the source of mold once again with neo plasma plus system. In 30 minutes, "Auto Clean" dries the inner part of air conditioners' indoor unit.

## Low Noise Level

The indoor unit has a quiet operational noise level in the sleep mode to offer you peace and quiet for the bedroom or office. For example, LG model ARNU09GSBL2, ARNU12GSBL2 in sleep mode is only 19dB. In addition, the outdoor units have reduced vibration and noise thanks to a super quiet fan and motor.



# CONSOLE

## LG Unique design

Console has been designed with the latest technologies to ensure optimum comfort.

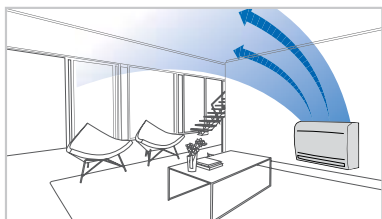
- Full front panel
- 3 dimensional round design



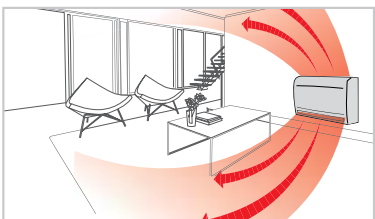
## Comfort Air Flow

Different air flow of cooling & heating

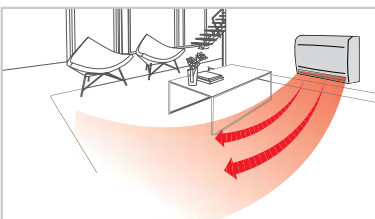
For cooling, the vane is adjusted upwards to let the cold air travel up. As for heating, the vane sends the heated air downwards to balance room temperature specially for floor.



Cooling



Heating (Nomal)



Heating (Floor Heating Mode)

## Healthy Air (3 stage air filter system)

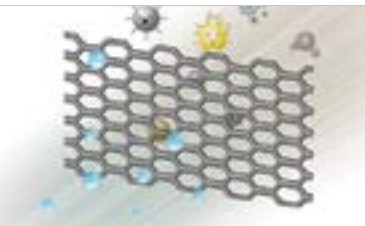
1st Advanced pre filter :

The antibacterial pre-filter primarily reduces large dust, mould and quilt dust.



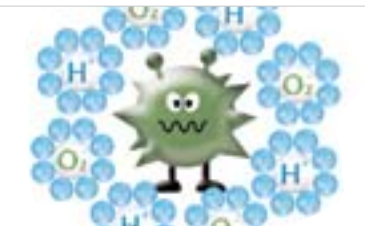
2nd Allergy Filter :

Filter consists of enzyme that breaks down allergen, apatite, and organic/inorganic binder that attaches the enzyme to the filter. When the air passes the filter, allergen clings to the filter and like tiny pairs of scissors the enzymes cut allergen's protein to deactivate the allergen.



3rd Plasma Ion Generator :

The sterilized ion generating system, Ion Generator, emits around 1.2 million ions, and catches hazardous substances floating in the air, therefore proactively looking for and catching germs.

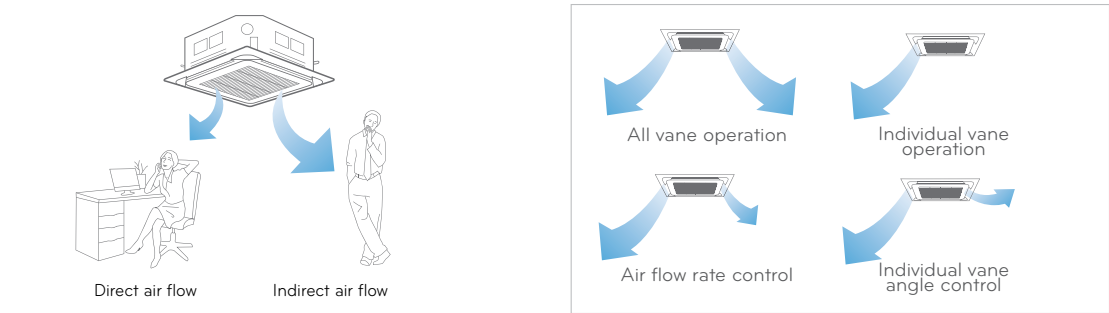




# CEILING CASSETTE

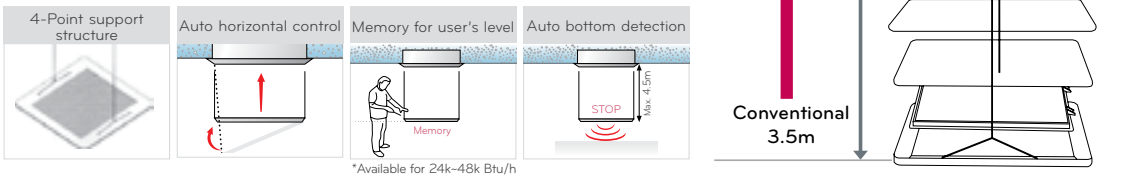
## 4 Vanes Independent Operation

Vane angle control satisfies both users who like direct wind and indirect wind. and also it prevents cold air draft.



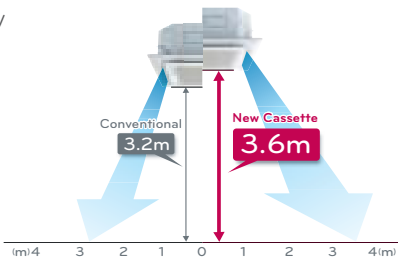
## Auto Elevation Grille

- Easy filter cleaning with elevation grille
- Installed inside main body
  - Auto horizontal level
  - 4 points support
  - Memory for user's level
  - Max. 4.5m length



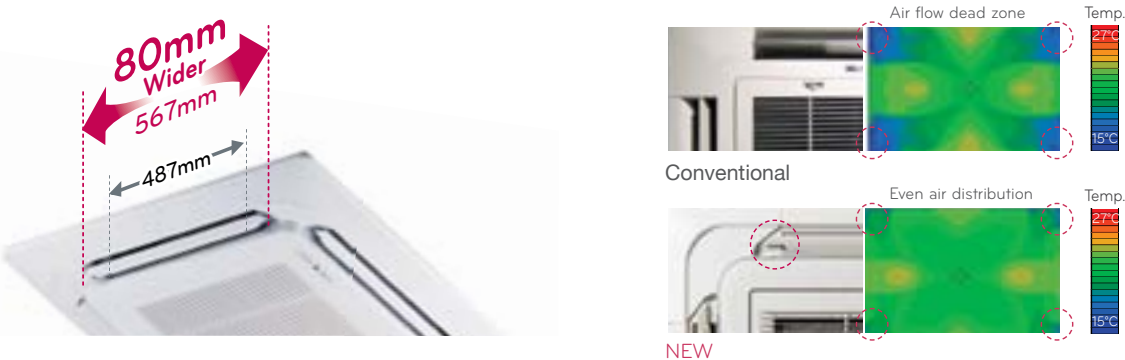
## High Ceiling Mode

High ceiling mode with phase-control algorithm is possible to apply as high as 3.6m of ceiling.



## Wide Jet Vane

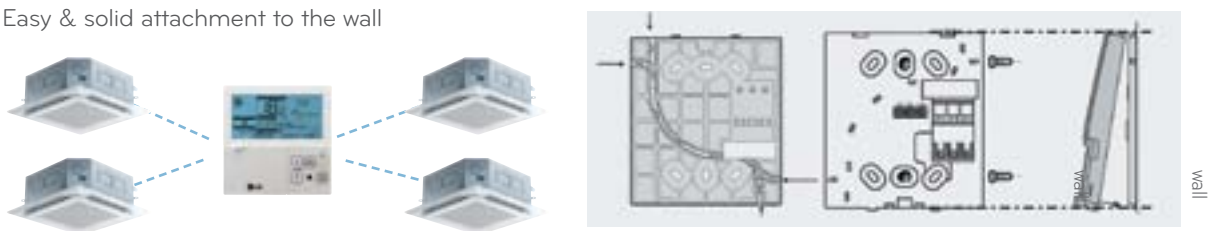
Improved wide vanes reduce dead bands and provide better air and temperature distribution.



# CEILING CASSETTE

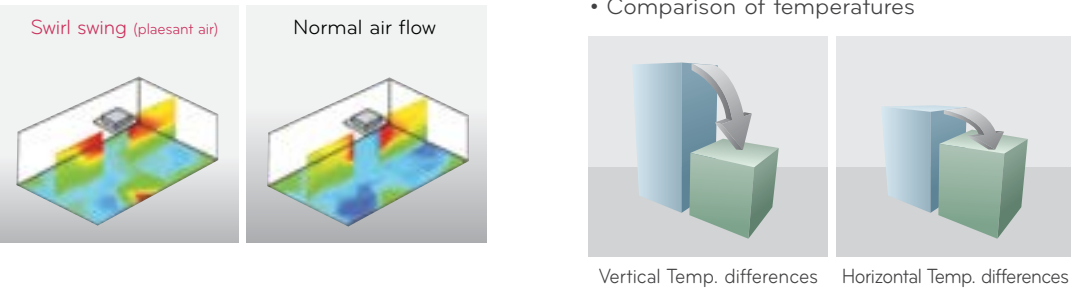
## Flexible Connection

- Flexible connection of remote controller
- Group control : 1 remote controller to several indoor units
  - Second remote control : 2 remote controllers to 1 indoor unit



## Swirl Swing

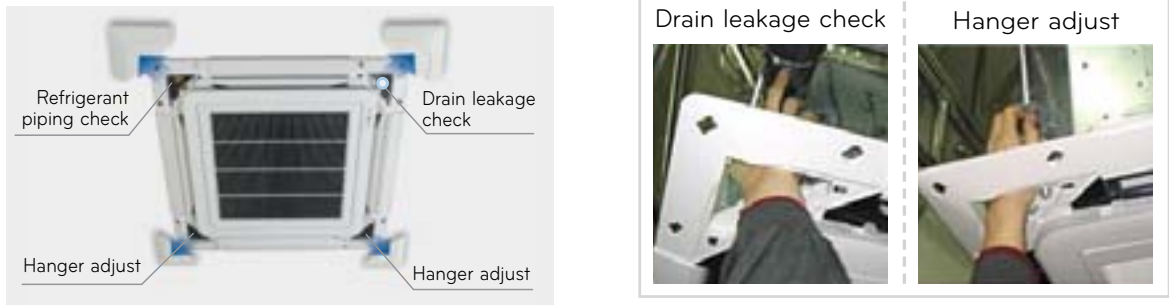
Swirl swing distributes air evenly throughout the room to ensure a more comfortable conditioned environment by adjusting the movement of the vane.



## Convenient Installation

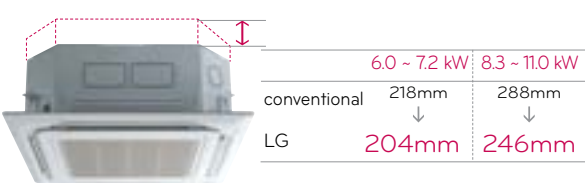
Easy installation with corner detachable decoration panel.

- Coner detachable design



## Compact Size

The indoor unit with slim and compact size has reduced the restriction which enables successful installation in various spaces.



## One Touch Type Panel

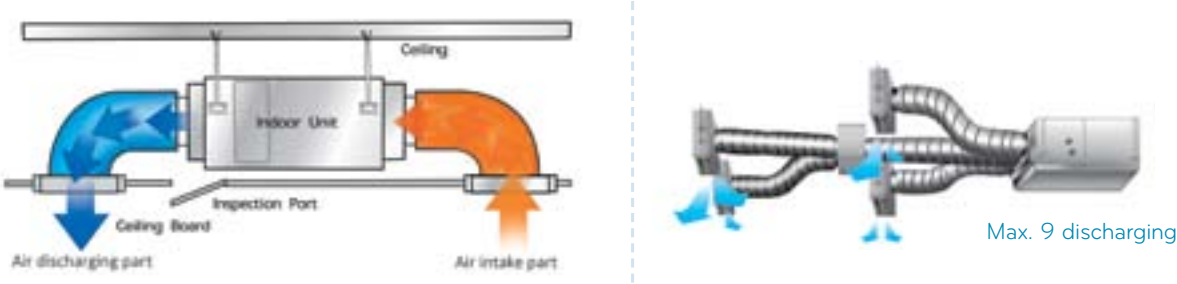
It provides easy installation with a one-touch detachable panel.



# CEILING CONCEALED DUCT

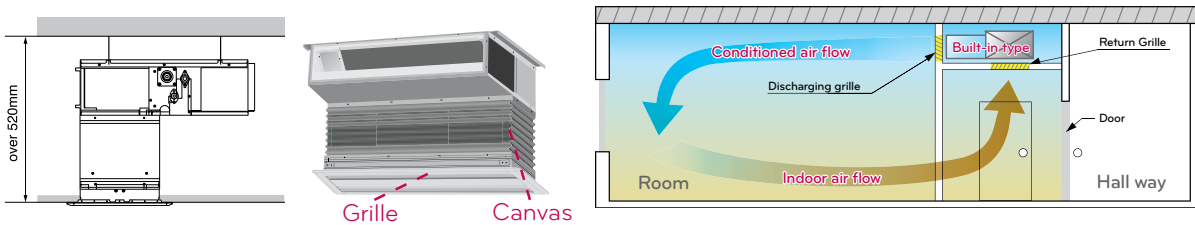
## Application of Ceiling Concealed Duct

It is possible to make each room cool & warm with installing a chamber and a spiral duct.



## Application of Built-in Duct

Built-in duct has no need of duct space with using suction canvas and grille.

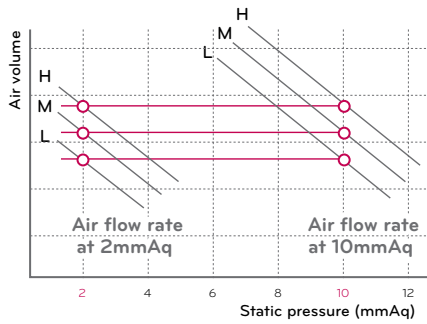


## Linear E.S.P Control

Air volume and sound are always kept as design regardless of E.S.P change using this technology , you can

- Optimize duct work Installation
- Keep capacity & sound level as desired
- Simplify model numbers

The phase control motor technology offers money saving benefit to the installer.



\*E.S.P is easily controlled by remote controller

# CEILING & FLOOR

## Flexible Installation

The Ceiling & Floor model can be installed either ceiling or floor. So you can save the space when you install this units on your shop or office.

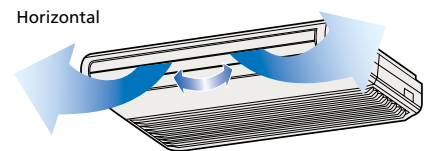


\*Floor is only for DC inverter

## Airflow Direction Control

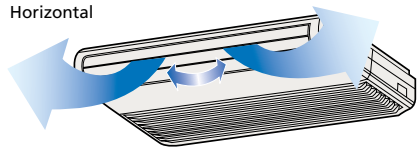
Horizontal Airflow Direction Control.

Adjust the horizontal airflow direction by manually moving the horizontal airflow direction louver by hand.



Vertical Airflow Direction Control

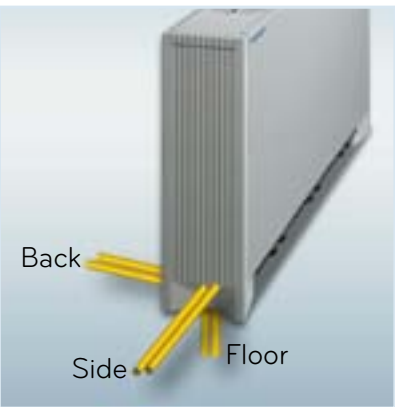
The airflow direction can be adjusted as desired by using the remote controller.



# FLOOR STANDING

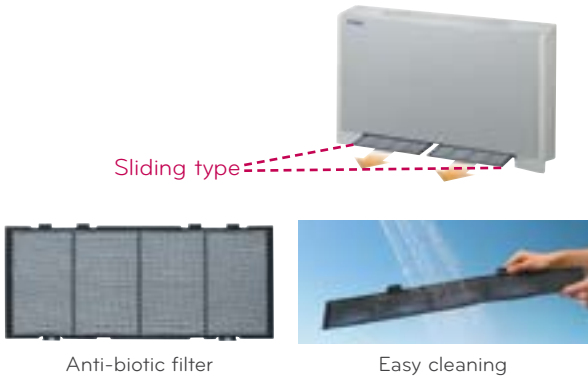
## 3Way Flexible Installation

All sides (side, back, floor) are possible to install and connect to the outdoor unit.



## Sliding Type Filter

Easy maintenance and extended product life with sliding type anti-biotic filter.



# ARNU07GSF\*2 / ARNU09GSF\*2 / ARNU12GSF\*2

Photo changeable

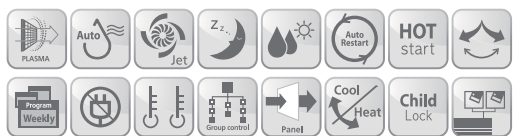


\* 1: Photo changeable  
V: Silver, E: Red, G: Gold, H: White Silver

Panel type



ART COOL Gallery

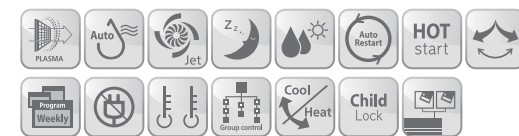


# ARNU07GSE\*2 / ARNU09GSE\*2 / ARNU12GSE\*2 ARNU15GSE\*2 / ARNU18GS8\*2 / ARNU24GS8\*2

ART COOL MIRROR



\* R : Mirror, B : Blue, V : Silver



## Specifications

| Model             |              |           |           | ARNU07GSF*2        | ARNU09GSF*2 | ARNU12GSF*2     |
|-------------------|--------------|-----------|-----------|--------------------|-------------|-----------------|
| Capacity          | Cooling      | Nom       | kW        | 2.2                | 2.8         | 3.6             |
|                   | Heating +7°C | Nom       | kW        | 2.5                | 3.2         | 4.0             |
| Power Input       | Cooling      | Max       | W         | 35                 |             |                 |
|                   | Heating +7°C | Max       | W         | 35                 |             |                 |
| Power Supply      |              | Ø / V /Hz |           | 1 / 220 ~ 240 / 50 |             |                 |
| Fan Airflow Rate  | Cooling      | H/M/L     | m³/min    | 8.1 / 6.3 / 4.2    |             | 9.3 / 7.7 / 6.0 |
|                   | Heating      | H/M/L     | m³/min    | 8.1 / 6.3 / 4.2    |             | 9.3 / 7.7 / 6.0 |
| Sound Pressure    |              | H/M/L     | dBA       | 38 / 32 / 27       |             | 44 / 38 / 32    |
| Dimension         | Body         | WxHxD     | mm        | 600 x 600 x 145    |             |                 |
| Net weight        |              |           | kg(lbs)   | 15(33.1)           |             |                 |
| Piping connection | Liquid       | mm (Inch) |           | Ø6.35(1/4)         |             |                 |
|                   | Gas          | mm (Inch) |           | Ø12.7(1/2)         |             |                 |
|                   | Drain        | I.D.      | mm (Inch) | Ø12.2(15/32)       |             |                 |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero

## Specifications

| Model             |              |           |           | ARNU07GSE*2        | ARNU09GSE*2     | ARNU12GSE*2      | ARNU15GSE*2      | ARNU18GS8*2        | ARNU24GS8*2        |
|-------------------|--------------|-----------|-----------|--------------------|-----------------|------------------|------------------|--------------------|--------------------|
| Capacity          | Cooling      | Nom       | kW        | 2.2                | 2.8             | 3.6              | 4.5              | 5.6                | 7.1                |
|                   | Heating +7°C | Nom       | kW        | 2.5                | 3.2             | 4.0              | 5.0              | 6.3                | 8.0                |
| Power Input       | Cooling      | Max       | W         | 40                 |                 |                  |                  | 35                 |                    |
|                   | Heating +7°C | Max       | W         | 40                 |                 |                  |                  | 35                 |                    |
| Power Supply      |              |           | Ø / V /Hz | 1 / 220 ~ 240 / 50 |                 |                  |                  |                    |                    |
| Fan Airflow Rate  | Cooling      | H/M/L     | m³/min    | 7.0 / 6.0 / 4.0    | 8.0 / 7.0 / 5.0 | 10.0 / 8.0 / 6.0 | 10.5 / 8.0 / 6.0 | 14.4 / 13.0 / 11.0 | 17.9 / 14.4 / 12.0 |
|                   | Heating      | H/M/L     | m³/min    | 7.0 / 6.0 / 4.0    | 8.0 / 7.0 / 5.0 | 10.0 / 8.0 / 6.0 | 10.5 / 8.0 / 6.0 | 14.4 / 13.0 / 11.0 | 17.9 / 14.4 / 12.0 |
| Sound Pressure    |              | H/M/L     | dBA       | 37 / 33 / 23       | 39 / 35 / 25    | 41 / 36 / 27     | 42 / 36 / 27     | 37 / 34 / 31       | 43 / 37 / 32       |
| Dimension         | Body         | WxHxD     | mm        | 915 x 282 x 165    |                 |                  |                  | 1,107 x 299 x 200  |                    |
| Net weight        |              |           | kg(lbs)   | 11.2(24.7)         |                 |                  |                  | 15(33.1)           |                    |
| Piping connection | Liquid       | mm (Inch) |           | Ø6.35(1/4)         |                 |                  |                  | Ø9.52(3/8)         |                    |
|                   | Gas          | mm (Inch) |           | Ø12.7(1/2)         |                 |                  |                  | Ø15.88(5/8)        |                    |
|                   | Drain        | I.D.      | mm (Inch) | Ø16(5/8)           |                 |                  |                  |                    |                    |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero

## Accessories

| Model       |                               | ARNU07GSF*2   | ARNU09GSF*2 | ARNU12GSF*2 |
|-------------|-------------------------------|---------------|-------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |             |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |             |             |
|             | With case(2 contact point)    | PQDSBC        |             |             |

| Wired remote controller |               |   |   | Wireless remote controller |
|-------------------------|---------------|---|---|----------------------------|
| Standard type           | Standard type | Simple type                             | Simple type for hotel                   |                            |
|                         |               |   |   |                            |
| PQRCVSL0                | PQRCVSLOQW    | PQRCVCLOQ (Black)<br>PQRCVCLOQW (white) | PQRCHCAOQ (Black)<br>PQRCHCAOQW (White) | PQWRHDF0                   |

## Accessories

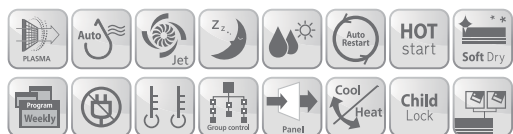
| Model       |                               | ARNU07GSE*2   | ARNU09GSE*2 | ARNU12GSE*2 | ARNU15GSE*2 | ARNU18GS8*2 | ARNU24GS8*2 |
|-------------|-------------------------------|---------------|-------------|-------------|-------------|-------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |             |             |             |             |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |             |             |             |             |             |
|             | With case(2 contact point)    | PQDSBC        |             |             |             |             |             |

| Wired remote controller |               |   |   | Wireless remote controller |
|-------------------------|---------------|---|---|----------------------------|
| Standard type           | Standard type | Simple type                             | Simple type for hotel                   |                            |
|                         |               |   |   |                            |
| PQRCVSL0                | PQRCVSLOQW    | PQRCVCLOQ (Black)<br>PQRCVCLOQW (white) | PQRCHCAOQ (Black)<br>PQRCHCAOQW (White) | PQWRHDF0                   |



# ARNU07GSBL2 / ARNU09GSBL2 / ARNU12GSBL2 ARNU15GSBL2 / ARNU18GSCL2 / ARNU24GSCL2

## Standard



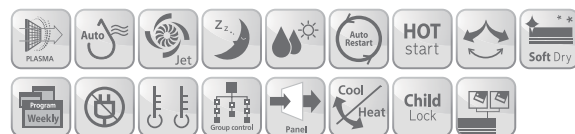
### Specifications

| Model             |              |           |           | ARNU07CSBL2      | ARNU09GSBL2 | ARNU12CSBL2 | ARNU15GSBL2  | ARNU18CSCL2      | ARNU24GSCL2    |
|-------------------|--------------|-----------|-----------|------------------|-------------|-------------|--------------|------------------|----------------|
| Capacity          | Cooling      | Nom       | kW        | 2.2              | 2.8         | 3.6         | 4.5          | 5.6              | 7.1            |
|                   | Heating +7°C | Nom       | kW        | 2.5              | 3.2         | 4.0         | 5.0          | 6.3              | 8.0            |
| Power Input       | Cooling      | Max       | W         | 35               |             |             |              | 75               |                |
|                   | Heating +7°C | Max       | W         | 35               |             |             |              | 75               |                |
| Power Supply      |              | Ø / V /Hz |           | 1 /220 ~ 240 /50 |             |             |              |                  |                |
| Fan Airflow Rate  | Cooling      | H/M/L     | m³/min    | 6.3/5.6/4.6      | 7.5/6.1/5.1 | 8.8/7.6/6.8 | 10.5/8.5/7.0 | 12.5/10.0/9.0    | 14.0/12.5/10.0 |
|                   | Heating      | H/M/L     | m³/min    | 6.3/5.6/4.6      | 7.5/6.1/5.1 | 8.8/7.6/6.8 | 10.5/8.5/7.0 | 16.2/14.2/12.3   | 20.4/17.0/13.2 |
| Sound Pressure    |              | H/M/L     | dBA       | 32/30/28         | 34/31/30    | 40/34/31    | 42/40/34     | 40/35/31         | 45/40/35       |
| Dimension         | Body         | WxHxD     | mm        | 895 x 289 x 215  |             |             |              | 1030 x 325 x 250 |                |
| Net weight        |              | kg(lbs)   |           | 11.5(25.4)       |             |             |              | 18(39.7)         |                |
| Piping connection | Liquid       | mm (Inch) |           | Ø6.35(1/4)       |             |             |              | Ø9.52(3/8)       |                |
|                   | Gas          | mm (Inch) |           | Ø12.7(1/2)       |             |             |              | Ø15.88(5/8)      |                |
|                   | Drain        | I.D.      | mm (Inch) | Ø16(5/8)         |             |             |              |                  |                |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

# ARNU07GSEL2 / ARNU09GSEL2 / ARNU12GSEL2 ARNU15GSEL2 / ARNU18GS5L2 / ARNU24GS5L2

## Wall Mounted



### Specifications

| Model             |              |           |           | ARNU07GSEL2      | ARNU09GSEL2     | ARNU12GSEL2     | ARNU15GSEL2      | ARNU18GS5L2       | ARNU24GS5L2        |
|-------------------|--------------|-----------|-----------|------------------|-----------------|-----------------|------------------|-------------------|--------------------|
| Capacity          | Cooling      | Nom       | kW        | 2.2              | 2.8             | 3.6             | 4.5              | 5.6               | 7.1                |
|                   | Heating +7°C | Nom       | kW        | 2.5              | 3.2             | 4.0             | 5.0              | 6.3               | 8.0                |
| Power Input       | Cooling      | Max       | W         | 40               |                 |                 |                  |                   |                    |
|                   | Heating +7°C | Max       | W         | 40               |                 |                 |                  |                   |                    |
| Power Supply      |              | Ø / V /Hz |           | 1 /220 ~ 240 /50 |                 |                 |                  |                   |                    |
| Fan Airflow Rate  | Cooling      | H/M/L     | m³/min    | 5.6 / 5.0 / 4.6  | 7.0 / 6.5 / 6.0 | 9.5 / 9.0 / 8.5 | 10.5 / 9.0 / 8.5 | 12.0 / 10.5 / 9.0 | 14.0 / 13.0 / 10.0 |
|                   | Heating      | H/M/L     | m³/min    | 5.6 / 5.0 / 4.6  | 7.0 / 6.5 / 6.0 | 9.5 / 9.0 / 8.5 | 10.5 / 9.0 / 8.5 | 12.0 / 10.5 / 9.0 | 14.0 / 13.0 / 10.0 |
| Sound Pressure    |              | H/M/L     | dBA       | 37 / 33 / 23     | 39 / 35 / 25    | 41 / 36 / 27    | 42 / 36 / 27     | 44 / 40 / 36      | 46 / 41 / 38       |
| Dimension         | Body         | WxHxD     | mm        | 895 x 282 x 165  |                 |                 |                  | 1,090 x 300 x 178 |                    |
| Net weight        |              | kg(lbs)   |           | 9(19.8)          |                 |                 |                  | 12(26.5)          |                    |
| Piping connection | Liquid       | mm (Inch) |           | Ø6.35(1/4)       |                 |                 |                  | Ø9.52(3/8)        |                    |
|                   | Gas          | mm (Inch) |           | Ø12.7(1/2)       |                 |                 |                  | Ø15.88(5/8)       |                    |
|                   | Drain        | I.D.      | mm (Inch) | Ø16(5/8)         |                 |                 |                  |                   |                    |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

### Accessories

| Model       |                               | ARNU07GSBL2   | ARNU09GSBL2 | ARNU12GSBL2 | ARNU15GSBL2 | ARNU18GSCL2 | ARNU24GSCL2 |
|-------------|-------------------------------|---------------|-------------|-------------|-------------|-------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |             |             |             |             |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |             |             |             |             |             |
|             | With case(2 contact point)    | PQDSBC        |             |             |             |             |             |

| Wired remote controller |               |   |   | Wireless remote controller |
|-------------------------|---------------|---|---|----------------------------|
| Standard type           | Standard type | Simple type                             | Simple type for hotel                   |                            |
|                         |               |   |   |                            |
| PQRCVSL0                | PQRCVSLOQW    | PQRCVCLOQ (Black)<br>PQRCVCLOQW (white) | PQRCHCAOQ (Black)<br>PQRCHCAOQW (White) | PQWRHDF0                   |

### Accessories

| Model       |                               | ARNU07GSEL2   | ARNU09GSEL2 | ARNU12GSEL2 | ARNU15GSEL2 | ARNU18GS5L2 | ARNU24GS5L2 |
|-------------|-------------------------------|---------------|-------------|-------------|-------------|-------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |             |             |             |             |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |             |             |             |             |             |
|             | With case(2 contact point)    | PQDSBC        |             |             |             |             |             |

| Wired remote controller |               |   |   | Wireless remote controller |
|-------------------------|---------------|---|---|----------------------------|
| Standard type           | Standard type | Simple type                             | Simple type for hotel                   |                            |
|                         |               |   |   |                            |
| PQRCVSL0                | PQRCVSLOQW    | PQRCVCLOQ (Black)<br>PQRCVCLOQW (white) | PQRCHCAOQ (Black)<br>PQRCHCAOQW (White) | PQWRHDF0                   |

ARNU07GQAA2 / ARNU09GQAA2  
ARNU12GQAA2 / ARNU15GQAA2

CONSOLE



Specifications

| Model             |              |            |           | ARNU07GQAA2        | ARNU09GQAA2 | ARNU12GQAA2     | ARNU15GQAA2     |
|-------------------|--------------|------------|-----------|--------------------|-------------|-----------------|-----------------|
| Capacity          | Cooling      | Nom        | kW        | 2.2                | 2.8         | 3.6             | 4.5             |
|                   | Heating +7°C | Nom        | kW        | 2.5                | 3.2         | 4.0             | 5.0             |
| Power Input       | Cooling      | Max        | W         | 30                 |             |                 |                 |
|                   | Heating +7°C | Max        | W         | 30                 |             |                 |                 |
| Power Supply      |              | Ø / V / Hz |           | 1 / 220 ~ 240 / 50 |             |                 |                 |
| Fan Airflow Rate  | Cooling      | H/M/L      | m³/min    | 6.7 / 5.9 / 4.8    |             | 7.5 / 5.9 / 4.8 | 8.7 / 6.7 / 5.9 |
|                   | Heating      | H/M/L      | m³/min    | 6.7 / 5.9 / 4.8    |             | 7.5 / 5.9 / 4.8 | 8.7 / 6.7 / 5.9 |
| Sound Pressure    |              | H/M/L      | dBA       | 37 / 34 / 28       |             | 39 / 34 / 28    | 42 / 37 / 31    |
| Dimension         | Body         | WxHxD      | mm        | 700 x 600 x 210    |             |                 |                 |
| Net weight        |              |            | kg(lbs)   | 14.0(30.9)         |             |                 |                 |
| Piping connection | Liquid       | mm (Inch)  |           | Ø6.35(1/4)         |             |                 |                 |
|                   | Gas          | mm (Inch)  |           | Ø12.7(1/2)         |             |                 |                 |
|                   | Drain        | I.D.       | mm (Inch) | Ø12.2(1/2)         |             |                 |                 |

Note 1. Capacities are based on the following conditions

Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero

Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification

Accessories

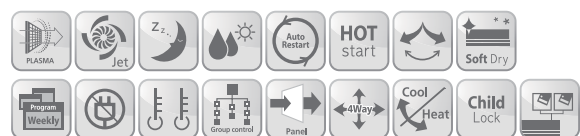
| Model       | ARNU07GQAA2                   | ARNU09GQAA2   | ARNU12GQAA2 | ARNU15GQAA2 |
|-------------|-------------------------------|---------------|-------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |             |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |             |             |
|             | With case(2 contact point)    | PQDSBC        |             |             |
|             |                               |               |             |             |

| Wired remote controller                                 |               |               |                                       |                                       | Wireless remote controller |
|---|---------------|---------------|---------------------------------------|---------------------------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                           | Simple type for hotel                 |                            |
|   |               |               |                                       |                                       |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVCLOQW(white) | PQRCVCAOQ(Black)<br>PQRCVCAOQW(White) | PQWRHDF0                   |

ARNU05GTRC2 / ARNU07GTRC2 / ARNU09GTRC2  
ARNU12GTRC2 / ARNU15GTQC2 / ARNU18GTQC2



4 Way Cassette (570x570)



### Specifications

| Model                      |              |              |           | ARNU05GTRC2        | ARNU07GTRC2 | ARNU09GTRC2     | ARNU12GTRC2     | ARNU15GTQC2       | ARNU18GTQC2        |
|----------------------------|--------------|--------------|-----------|--------------------|-------------|-----------------|-----------------|-------------------|--------------------|
| Capacity                   | Cooling      | Nom          | kW        | 1.6                | 2.2         | 2.8             | 3.6             | 4.5               | 5.6                |
|                            | Heating +7°C | Nom          | kW        | 1.8                | 2.5         | 3.2             | 4.0             | 5.0               | 6.3                |
| Power Input                | Cooling      | Max          | W         | 30                 |             |                 |                 |                   |                    |
|                            | Heating +7°C | Max          | W         | 30                 |             |                 |                 |                   |                    |
| Power Supply               |              |              | Ø / V /Hz | 1 / 220 ~ 240 / 50 |             |                 |                 |                   |                    |
| Fan Airflow Rate           | Cooling      | H/M/L        | m³/min    | 7.5 / 7.0 / 6.6    |             | 8.0 / 7.5 / 7.1 | 8.7 / 8.0 / 7.0 | 11.0 / 10.0 / 9.3 | 11.2 / 11.0 / 10.0 |
|                            | Heating      | H/M/L        | m³/min    | 7.5 / 7.0 / 6.6    |             | 8.0 / 7.5 / 7.1 | 8.7 / 8.0 / 7.0 | 11.0 / 10.0 / 9.3 | 11.2 / 11.0 / 10.0 |
| Sound Pressure             |              | H/M/L        | dBA       | 29 / 27 / 26       |             | 30 / 29 / 27    | 32 / 30 / 27    | 36 / 34 / 32      | 37 / 35 / 34       |
| Dimension                  | Body         | WxHxD        | mm        | 570 x 214 x 570    |             |                 |                 | 570 x 256 x 570   |                    |
| Net weight                 |              |              | kg(lbs)   | 13.1(28.9)         |             | 14.2(31.3)      |                 | 15.5(34.2)        |                    |
| Neoplasma Purifying Filter |              | Model Number |           | Option(PTPKQ0)     |             |                 |                 |                   |                    |
| Piping connection          | Liquid       | mm (Inch)    |           | Ø6.35(1/4)         |             |                 |                 |                   |                    |
|                            | Gas          | mm (Inch)    |           | Ø12.7(1/2)         |             |                 |                 |                   |                    |
|                            | Drain        | I.D.         | mm (Inch) | Ø25(31/32)         |             |                 |                 |                   |                    |
| Decoration Panel           | Model        |              |           | PT-UQC             |             |                 |                 |                   |                    |
|                            | Color        |              |           | Morning fog        |             |                 |                 |                   |                    |
|                            | Dimensions   | WxHxD        | mm        | 700 x 22 x 700     |             |                 |                 |                   |                    |
|                            | Weight       | kg           |           | 3                  |             |                 |                 |                   |                    |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

### Accessories

| Model       |                               | ARNU05GTRC2   | ARNU07GTRC2 | ARNU09GTRC2 | ARNU12GTRC2 | ARNU15GTQC2 | ARNU18GTQC2 |
|-------------|-------------------------------|---------------|-------------|-------------|-------------|-------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |             |             |             |             |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |             |             |             |             |             |
|             | With case(2 contact point)    | PQDSBC        |             |             |             |             |             |
| Front panel |                               | PT-UQC        |             |             |             |             |             |

| Wired remote controller                                 |               |               |                                       |                                       | Wireless remote controller |
|---|---------------|---------------|---------------------------------------|---------------------------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                           | Simple type for hotel                 |                            |
|   |               |               |                                       |                                       |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVCLOQW(white) | PQRCVCAOQ(Black)<br>PQRCVCAOQW(White) | PQWRHDF0                   |

ARNU24GTPC2 / ARNU28GTPC2  
ARNU36GTNC2 / ARNU42GTMC2 / ARNU48GTMC2



4 Way Cassette (840x840)



### Specifications

| Model                      |              |              |           | ARNU24G <b>TPC2</b> | ARNU28G <b>TPC2</b> | ARNU36G <b>TNC2</b> | ARNU42G <b>TM</b> C2 | ARNU48G <b>TM</b> C2 |
|----------------------------|--------------|--------------|-----------|---------------------|---------------------|---------------------|----------------------|----------------------|
| Capacity                   | Cooling      | Nom          | kW        | 7.1                 | 8.2                 | 10.6                | 12.3                 | 14.1                 |
|                            | Heating +7°C | Nom          | kW        | 8.0                 | 9.2                 | 11.9                | 13.8                 | 15.9                 |
| Power Input                | Cooling      | Max          | W         | 30                  |                     | 144                 |                      |                      |
|                            | Heating +7°C | Max          | W         | 30                  |                     | 144                 |                      |                      |
| Power Supply               |              | Ø / V /Hz    |           | 1 / 220 ~ 240 / 50  |                     |                     |                      |                      |
| Fan Airflow Rate           | Cooling      | H/M/L        | m³/min    | 17 / 15 / 13        | 19 / 16 / 14        | 25 / 21 / 19        | 30 / 27 / 24         | 31 / 29 / 27         |
|                            | Heating      | H/M/L        | m³/min    | 17 / 15 / 13        | 19 / 16 / 14        | 25 / 21 / 19        | 30 / 27 / 24         | 31 / 29 / 27         |
| Sound Pressure             |              | H/M/L        | dBA       | 36 / 34 / 31        | 39 / 35 / 33        | 43 / 40 / 37        | 44 / 41 / 38         | 46 / 43 / 41         |
| Dimension                  | Body         | WxHxD        | mm        | 840 x 204 x 840     |                     | 840 x 246 x 840     | 840 x 288 x 840      |                      |
| Net weight                 |              |              | kg(lbs)   | 20.8(45.8)          |                     | 23.5(51.8)          | 25.6(56.4)           |                      |
| Neoplasma Purifying Filter |              | Model Number |           | Option(PTPKM0)      |                     |                     |                      |                      |
| Piping connection          | Liquid       | mm (Inch)    |           | Ø9.52(3/8)          |                     |                     |                      |                      |
|                            | Gas          | mm (Inch)    |           | Ø15.88(5/8)         |                     |                     |                      |                      |
|                            | Drain        | I.D.         | mm (Inch) | Ø25(31/32)          |                     |                     |                      |                      |
| Decoration Panel           | Model        |              |           | PT-UMC              |                     |                     |                      |                      |
|                            | Color        |              |           | Morning fog         |                     |                     |                      |                      |
|                            | Dimensions   | WxHxD        | mm        | 950 x 25 x 950      |                     |                     |                      |                      |
|                            | Weight       |              | kg        | 5.6                 |                     |                     |                      |                      |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

### Accessories

| Model                 |                               | ARNU24GTPC2                  | ARNU28GTPC2 | ARNU36GTNC2 | ARNU42GTMC2 | ARNU48GTMC2 |
|-----------------------|-------------------------------|------------------------------|-------------|-------------|-------------|-------------|
| Dry Contact           | Without case(1 contact point) | PQDSA                        |             |             |             |             |
|                       | With case(1 contact point)    | PQDSB/ PQDSB1                |             |             |             |             |
|                       | With case(2 contact point)    | PQDSBC                       |             |             |             |             |
| Front panel           |                               | PT-UMC                       |             |             |             |             |
| Auto Elevation Grille |                               | PTEGMO                       |             |             |             |             |
| Ventilation Kit       |                               | PTVK410 / PTVK420 / PTVK 430 |             |             |             |             |

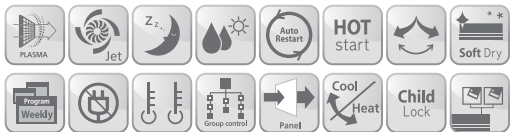
| Wired remote controller                                 |               |               |                                       |                                       | Wireless remote controller |
|---|---------------|---------------|---------------------------------------|---------------------------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                           | Simple type for hotel                 |                            |
|   |               |               |                                       |                                       |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVCLOQW(white) | PQRCVCAOQ(Black)<br>PQRCVCAOQW(White) | PQWRHDF0                   |



# ARNU18GTLC2 / ARNU24GTLC2



2 Way Cassette



## Specifications

| Model             |              |                |        | ARNU18GTLC2        | ARNU24GTLC2  |
|-------------------|--------------|----------------|--------|--------------------|--------------|
| Capacity          | Cooling      | Nom            | kW     | 5.6                | 7.1          |
|                   | Heating +7°C | Nom            | kW     | 6.3                | 8.0          |
| Power Input       | Cooling      | Max            | W      | 70                 |              |
|                   | Heating +7°C | Max            | W      | 70                 |              |
| Power Supply      |              | Ø / V / Hz     |        | 1 / 220 ~ 240 / 50 |              |
| Fan Airflow Rate  | Cooling      | H/M/L          | m³/min | 13 / 12 / 10       | 17 / 15 / 13 |
|                   | Heating      | H/M/L          | m³/min | 13 / 12 / 10       | 17 / 15 / 13 |
| Sound Pressure    | H/M/L        |                | dBA    | 40 / 36 / 32       | 42 / 38 / 34 |
| Dimension         | Body         | WxHxD          | mm     | 830 x 225 x 550    |              |
|                   |              |                |        | 22(48.5)           |              |
| Piping connection | Liquid       | mm (Inch)      |        | Ø6.35(1/4)         | Ø9.52(3/8)   |
|                   | Gas          | mm (Inch)      |        | Ø12.7(1/2)         | Ø15.88(5/8)  |
|                   | Drain        | I.D. mm (Inch) |        | Ø25(31/32)         |              |
| Decoration Panel  | Model        |                |        | PT-HLC             |              |
|                   | Color        |                |        | Morning fog        |              |
|                   | Dimensions   | WxHxD          | mm     | 1,050 x 28 x 640   |              |
|                   | Weight       |                | kg     | 4                  |              |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

## Accessories

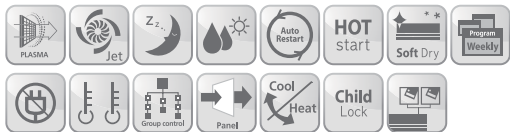
| Model       |                               |  |  | ARNU18GTLC2   | ARNU24GTLC2 |
|-------------|-------------------------------|--|--|---------------|-------------|
| Dry Contact | Without case(1 contact point) |  |  | PQDSA         |             |
|             | With case(1 contact point)    |  |  | PQDSB/ PQDSB1 |             |
|             | With case(2 contact point)    |  |  | PQDSBC        |             |

| Wired remote controller                                 |               |               |                                       |                                      | Wireless remote controller |
|---|---------------|---------------|---------------------------------------|--------------------------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                           | Simple type for hotel                |                            |
|   |               |               |                                       |                                      |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVCLOQW(white) | PQRCVCLQW(Black)<br>PQRCVCLQW(White) | PQWRHDF0                   |

# ARNU07GTUC2 / ARNU09GTUC2 ARNU12GTUC2 / ARNU18GTTC2 / ARNU24GTTC2



1 Way Cassette



## Specifications

| Model             |              |            |           | ARNU07GTUC2                  | ARNU09GTUC2     | ARNU12GTUC2    | ARNU18GTTC2                  | ARNU24GTTC2        |
|-------------------|--------------|------------|-----------|------------------------------|-----------------|----------------|------------------------------|--------------------|
| Capacity          | Cooling      | Nom        | kW        | 2.2                          | 2.8             | 3.6            | 5.6                          | 7.1                |
|                   | Heating +7°C | Nom        | kW        | 2.5                          | 3.2             | 4.0            | 6.3                          | 7.1                |
| Power Input       | Cooling      | Max        | W         | 40                           |                 |                | 70                           |                    |
|                   | Heating +7°C | Max        | W         | 40                           |                 |                | 70                           |                    |
| Power Supply      |              | Ø / V / Hz |           | 1 / 220 ~ 240 / 50           |                 |                |                              |                    |
| Fan Airflow Rate  | Cooling      | H/M/L      | m³/min    | 8.2 / 7.3 / 6.4              | 9.2 / 8.6 / 8.2 | 10 / 9.2 / 8.2 | 13.3 / 12.1 / 10.9           | 14.6 / 13.3 / 11.5 |
|                   | Heating      | H/M/L      | m³/min    | 8.2 / 7.3 / 6.4              | 9.2 / 8.6 / 8.2 | 10 / 9.2 / 8.2 | 13.3 / 12.1 / 10.9           | 14.6 / 13.3 / 11.5 |
| Sound Pressure    |              | H/M/L      | dBA       | 32 / 29 / 25                 | 35 / 34 / 32    | 38 / 35 / 32   | 40 / 37 / 35                 | 43 / 40 / 36       |
| Dimension         | Body         | WxHxD      | mm        | 860 x 132 x 450              |                 |                | 1,180 x 132 x 450            |                    |
| Net weight        |              | kg(lbs)    |           | 14.7(32.4)                   |                 |                | 18.7(41.23)                  |                    |
| Piping connection | Liquid       | mm (Inch)  |           | Ø6.35(1/4)                   |                 |                |                              | Ø9.52(3/8)         |
|                   | Gas          | mm (Inch)  |           | Ø12.7(1/2)                   |                 |                |                              | Ø15.88(5/8)        |
|                   | Drain        | I.D.       | mm (Inch) | Ø25(31/32)                   |                 |                |                              |                    |
| Decoration Panel  | Model        |            |           | PT-UUC(Grill), PT-UUD(Panel) |                 |                | PT-UTC(Grill), PT-UTD(Panel) |                    |
|                   | Color        |            |           | White                        |                 |                |                              |                    |
|                   | Dimensions   | WxHxD      | mm        | 1,100 x 34 x 500             |                 |                | 1,420 x 34 x 500             |                    |
|                   | Weight       |            | kg        | 4.6                          |                 |                | 5.5                          |                    |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

## Accessories

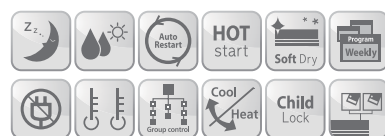
| Model       |                               |  |  | ARNU07GTUC2   | ARNU09GTUC2 | ARNU12GTUC2 | ARNU18GTTC2   | ARNU24GTTC2 |
|-------------|-------------------------------|--|--|---------------|-------------|-------------|---------------|-------------|
| Dry Contact | Without case(1 contact point) |  |  | PQDSA         |             |             | PQDSA         |             |
|             | With case(1 contact point)    |  |  | PQDSB/ PQDSB1 |             |             | PQDSB/ PQDSB1 |             |
|             | With case(2 contact point)    |  |  | PQDSBC        |             |             | PQDSBC        |             |

| Wired remote controller                                 |               |               |                                       |                                      | Wireless remote controller |
|---|---------------|---------------|---------------------------------------|--------------------------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                           | Simple type for hotel                |                            |
|   |               |               |                                       |                                      |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVCLOQW(white) | PQRCVCLQW(Black)<br>PQRCVCLQW(White) | PQWRHDF0                   |

ARNU07GB1G2 / ARNU09GB1G2 / ARNU12GB1G2  
ARNU15GB1G2 / ARNU18GB2G2 / ARNU24GB2G2



Low Static Duct



Specifications

| Model                           |              |                                   |           | ARNU07GB1G2        | ARNU09GB1G2     | ARNU12GB1G2      | ARNU15GB1G2       | ARNU18GB2G2        | ARNU24GB2G2        |
|---------------------------------|--------------|-----------------------------------|-----------|--------------------|-----------------|------------------|-------------------|--------------------|--------------------|
| Capacity                        | Cooling      | Nom                               | kW        | 2.2                | 2.8             | 3.6              | 4.5               | 5.6                | 7.1                |
|                                 | Heating +7°C | Nom                               | kW        | 2.5                | 3.2             | 4.0              | 5.0               | 6.3                | 8.0                |
| Power Input                     | Cooling      | Max                               | W         | 30                 |                 |                  |                   | 80                 |                    |
|                                 | Heating +7°C | Max                               | W         | 30                 |                 |                  |                   | 80                 |                    |
| Power Supply                    |              | Ø / V / Hz                        |           | 1 / 220 ~ 240 / 50 |                 |                  |                   |                    |                    |
| Fan Airflow Rate<br>(High Mode) | Cooling      | H/M/L                             | m³/min    | 8.5 / 7.5 / 6.5    | 9.5 / 8.5 / 7.5 | 10.5 / 9.5 / 8.5 | 11.5 / 10.5 / 9.5 | 16.0 / 14.0 / 12.0 | 19.0 / 17.0 / 15.0 |
|                                 | Heating      | H/M/L                             | m³/min    | 8.5 / 7.5 / 6.5    | 9.5 / 8.5 / 7.5 | 10.5 / 9.5 / 8.5 | 11.5 / 10.5 / 9.5 | 16.0 / 14.0 / 12.0 | 19.0 / 17.0 / 15.0 |
| External Static Pressure        |              | High Mode-Factory Set<br>mmAq(Pa) |           | 2(20)              |                 |                  |                   |                    |                    |
| Sound Pressure                  |              | H/M/L                             | dBA       | 29 / 26 / 24       | 31 / 29 / 26    | 33 / 30 / 29     | 34 / 33 / 31      | 40 / 37 / 34       | 43 / 40 / 37       |
| Dimension                       | Body         | WxHxD                             | mm        | 820 x 190 x 575    |                 |                  |                   | 1,100 x 190 x 575  |                    |
| Net weight                      |              | kg(lbs)                           |           | 21(46.3)           |                 |                  |                   | 26(57.3)           |                    |
| Piping connection               | Liquid       | mm (Inch)                         |           | Ø6.35(1/4)         |                 |                  |                   | Ø9.52(3/8)         |                    |
|                                 | Gas          | mm (Inch)                         |           | Ø12.7(1/2)         |                 |                  |                   | Ø15.88(5/8)        |                    |
|                                 | Drain        | I.D.                              | mm (Inch) | Ø25.4(1)           |                 |                  |                   |                    |                    |

Note 1: Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

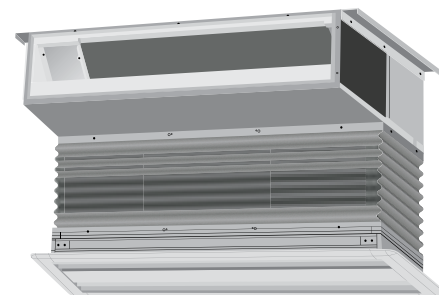
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero

Accessories

| Model       |                               |               |  | ARNU07GB1G2 | ARNU09GB1G2 | ARNU12GB1G2 | ARNU15GB1G2 | ARNU18GB2G2 | ARNU24GB2G2 |
|-------------|-------------------------------|---------------|--|-------------|-------------|-------------|-------------|-------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |  |             |             |             |             |             |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |  |             |             |             |             |             |             |
|             | With case(2 contact point)    | PQDSBC        |  |             |             |             |             |             |             |

| Wired remote controller                                 |               |               |                                       |                                       | Wireless remote controller |
|---|---------------|---------------|---------------------------------------|---------------------------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                           | Simple type for hotel                 |                            |
|   |               |               |                                       |                                       |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVCLOQW(white) | PQRCVCAOQ(Black)<br>PQRCVCAOQW(White) | PQWRHDF0                   |

ARNU07GB3G2 / ARNU09GB3G2 / ARNU12GB3G2  
ARNU15GB3G2 / ARNU18GB4G2 / ARNU24GB4G2



Built-in Duct



Specifications

| Model  |                |           |           | ARNU07GB3G2        | ARNU09GB3G2     | ARNU12GB3G2      | ARNU15GB3G2       | ARNU18GB4G2          | ARNU24GB4G2        |
|--|----------------|-----------|-----------|--------------------|-----------------|------------------|-------------------|----------------------|--------------------|
| Capacity                                       | Cooling        | Nom       | kW        | 2.2                | 2.8             | 3.6              | 4.5               | 5.6                  | 7.1                |
|  | Heating +7°C   | Nom       | kW        | 2.5                | 3.2             | 4.0              | 5.0               | 6.3                  | 8.0                |
| Power Input                                    | Cooling        | Max       | W         | 30                 |                 |                  |                   | 80                   |                    |
|  | Heating +7°C   | Max       | W         | 30                 |                 |                  |                   | 80                   |                    |
| Power Supply                                   |                | Ø / V /Hz |           | 1 / 220 ~ 240 / 50 |                 |                  |                   |                      |                    |
| Fan Airflow Rate<br>(High Mode)                | Cooling        | H/M/L     | m³/min    | 8.0 / 6.5 / 5.5    | 9.0 / 7.0 / 6.0 | 10.0 / 8.0 / 6.5 | 11.0 / 10.0 / 8.0 | 14.0 / 12.0 / 10.0   | 17.0 / 15.0 / 10.0 |
|  | Heating        | H/M/L     | m³/min    | 8.0 / 6.5 / 5.5    | 9.0 / 7.0 / 6.0 | 10.0 / 8.0 / 6.5 | 11.0 / 10.0 / 8.0 | 14.0 / 12.0 / 10.0   | 17.0 / 15.0 / 10.0 |
| External Static Pressure High Mode-Factory Set |                | mmAq(Pa)  |           | 2(20)              |                 |                  |                   |                      |                    |
| Sound Pressure                                 |                | H/M/L     | dBA       | 33 / 32 / 29       | 34 / 33 / 32    | 35 / 34 / 33     | 41 / 40 / 37      | 43 / 40 / 37         | 46 / 43 / 37       |
| Dimension                                      | Body           | WxHxD     | mm        | 820 x 190 x 575    |                 |                  |                   | 1,100 x 190 x 575    |                    |
|  | Suction Grille | WxHxD     | mm        | 910 x 56 x 359     |                 |                  |                   | 1,188 x 56 x 359     |                    |
|  | Suction Canvas | WxHxD     | mm        | 821 x 42-250 x 274 |                 |                  |                   | 1,100 x 42-250 x 274 |                    |
| Net weight                                     |                | kg(lbs)   |           | 21(46.3)           |                 |                  |                   | 26(57.3)             |                    |
| Piping connection                              | Liquid         | mm (Inch) |           | Ø6.35(1/4)         |                 |                  |                   | Ø9.52(3/8)           |                    |
|  | Gas            | mm (Inch) |           | Ø12.7(1/2)         |                 |                  |                   | Ø15.88(5/8)          |                    |
|  | Drain          | I.D.      | mm (Inch) | Ø25.4(1)           |                 |                  |                   |                      |                    |

Note 1: Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero

Accessories

| Model          |                               |               |  | ARNU07GB3G2 | ARNU09GB3G2 | ARNU12GB3G2 | ARNU15GB3G2 | ARNU18GB4G2 | ARNU24GB4G2 |
|----------------|-------------------------------|---------------|--|-------------|-------------|-------------|-------------|-------------|-------------|
| Dry Contact    | Without case(1 contact point) | PQDSA         |  |             |             |             |             |             |             |
|                | With case(1 contact point)    | PQDSB/ PQDSB1 |  |             |             |             |             |             |             |
|                | With case(2 contact point)    | PQDSBC        |  |             |             |             |             |             |             |
| Suction Grille |                               | PBSGB30       |  |             |             | PBSGB40     |             |             |             |
| Suction Canvas |                               | PBSC30        |  |             |             | PBSC40      |             |             |             |

| Wired remote controller                                 |               |               |                                       |                                       | Wireless remote controller |
|---|---------------|---------------|---------------------------------------|---------------------------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                           | Simple type for hotel                 |                            |
|   |               |               |                                       |                                       |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVCLOQW(white) | PQRCVCAOQ(Black)<br>PQRCVCAOQW(White) | PQWRHDF0                   |

# ARNU07GBHA2 / ARNU09GBHA2 / ARNU12GBHA2 ARNU15GBHA2 / ARNU18GBHA2 / ARNU24GBHA2



## High Static Duct



### Specifications

| Model  |              |                |            | ARNU07GBHA2        | ARNU09GBHA2      | ARNU12GBHA2       | ARNU15GBHA2       | ARNU18GBHA2        | ARNU24GBHA2        |
|--|--------------|----------------|------------|--------------------|------------------|-------------------|-------------------|--------------------|--------------------|
| Capacity                                       | Cooling      | Nom            | kW         | 2.2                | 2.8              | 3.6               | 4.5               | 5.6                | 7.1                |
|  | Heating +7°C | Nom            | kW         | 2.5                | 3.2              | 4.0               | 5.0               | 6.3                | 8.0                |
| Power Input                                    | Cooling      | Max            | W          | 150                |                  |                   |                   |                    |                    |
|  | Heating +7°C | Max            | W          | 150                |                  |                   |                   |                    |                    |
| Power Supply                                   |              |                |            | Ø / V / Hz         |                  |                   |                   |                    |                    |
|  |              |                |            | 1 / 220 ~ 240 / 50 |                  |                   |                   |                    |                    |
| Fan Airflow Rate (High Mode)                   | Cooling      | H/M/L          | m³/min     | 8.5 / 7.5 / 6.0    | 10.0 / 8.5 / 7.5 | 12.0 / 10.0 / 8.5 | 13.5 / 12.0 / 8.5 | 15.5 / 13.5 / 12.4 | 18.3 / 16.9 / 15.5 |
|  | Heating      | H/M/L          | m³/min     | 8.5 / 7.5 / 6.0    | 10.0 / 8.5 / 7.5 | 12.0 / 10.0 / 8.5 | 13.5 / 12.0 / 8.5 | 15.5 / 13.5 / 12.4 | 18.3 / 16.9 / 15.5 |
| External Static Pressure High Mode-Factory Set |              |                |            | mmAq(Pa)           |                  |                   |                   |                    |                    |
|  |              |                |            | 8(78)              |                  |                   |                   |                    |                    |
| Sound Pressure                                 |              |                |            | H/M/L dBA          |                  |                   |                   |                    |                    |
|  |              |                |            | 34 / 33 / 32       |                  |                   |                   |                    |                    |
| Dimension                                      |              |                |            | Body WxHxD mm      |                  |                   |                   |                    |                    |
|  |              |                |            | 882 x 260 x 450    |                  |                   |                   |                    |                    |
| Net weight                                     |              |                |            | kg(lbs)            |                  |                   |                   |                    |                    |
|  |              |                |            | 26.0(57.4)         |                  |                   |                   |                    |                    |
| Piping connection                              | Liquid       | mm (Inch)      | Ø6.35(1/4) |                    |                  |                   |                   |                    | Ø9.52(3/8)         |
|  | Gas          | mm (Inch)      | Ø12.7(1/2) |                    |                  |                   |                   |                    | Ø15.88(5/8)        |
|  | Drain        | I.D. mm (Inch) | Ø25(31/32) |                    |                  |                   |                   |                    |                    |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero

### Accessories

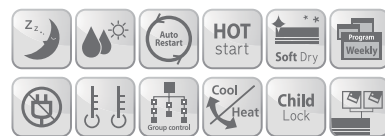
| Model       |                               | ARNU07GBHA2   | ARNU09GBHA2 | ARNU12GBHA2 | ARNU15GBHA2 | ARNU18GBHA2 | ARNU24GBHA2 |
|-------------|-------------------------------|---------------|-------------|-------------|-------------|-------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |             |             |             |             |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |             |             |             |             |             |
|             | With case(2 contact point)    | PQDSBC        |             |             |             |             |             |

| Wired remote controller                                 |               |               |                                      |                       | Wireless remote controller |
|---|---------------|---------------|--------------------------------------|-----------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                          | Simple type for hotel |                            |
|   |               |               |                                      |                       |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVLOQW(white) | PQRCVLOQW(White)      | PQWRHDF0                   |

# ARNU28GBGA2 / ARNU36GBGA2 / ARNU42GBGA2 ARNU48GBRA2 / ARNU54GBRA2 / ARNU76GB8A2 / ARNU96GB8A2



## High Static Duct



### Specifications

| Model                           |              |                       |           | ARNU28GBGA2        | ARNU36GBGA2        | ARNU42GBGA2        | ARNU48GBRA2        | ARNU54GBRA2        | ARNU76GB8A2        | ARNU96GB8A2        |              |
|---------------------------------|--------------|-----------------------|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------|
| Capacity                        | Cooling      | Nom                   | kW        | 8.2                | 10.6               | 12.3               | 14.1               | 15.8               | 22.4               | 28.0               |              |
|                                 | Heating +7°C | Nom                   | kW        | 9.2                | 11.9               | 13.8               | 15.9               | 18.0               | 25.2               | 31.5               |              |
| Power Input                     | Cooling      | Max                   | W         | 450                |                    |                    |                    |                    | 800                |                    |              |
|                                 | Heating +7°C | Max                   | W         | 450                |                    |                    |                    |                    | 800                |                    |              |
| Power Supply                    |              | Ø / V / Hz            |           | 1 / 220 ~ 240 / 50 |                    |                    |                    |                    |                    |                    |              |
| Fan Airflow Rate<br>(High Mode) | Cooling      | H/M/L                 | m³/min    | 25.9 / 24.1 / 21.8 | 32.3 / 29.0 / 25.3 | 34.5 / 32.3 / 30.7 | 44.8 / 40.6 / 33.3 | 51.0 / 44.8 / 40.6 | 60.0 / 50.0 / 50.0 | 72.0 / 64.0 / 64.0 |              |
|                                 | Heating      | H/M/L                 | m³/min    | 25.9 / 24.1 / 21.8 | 32.3 / 29.0 / 25.3 | 34.5 / 32.3 / 30.7 | 44.8 / 40.6 / 33.3 | 51.0 / 44.8 / 40.6 | 60.0 / 50.0 / 50.0 | 72.0 / 64.0 / 64.0 |              |
| External Static Pressure        |              | High Mode-Factory Set |           | mmAq(Pa)           |                    |                    | 10(98)             |                    | 14(137)            |                    | 22(216)      |
| Sound Pressure                  |              | H/M/L                 |           | dBA                | 42 / 41 / 40       | 44 / 43 / 42       | 45 / 44 / 44       | 44 / 42 / 41       | 47 / 46 / 45       | 50 / 48 / 48       | 52 / 50 / 50 |
| Dimension                       |              | Body                  | WxHxD     | mm                 | 1,182 x 298 x 450  |                    |                    | 1,230 x 380 x 590  |                    | 1,562 x 460 x 688  |              |
| Net weight                      |              | kg(lbs)               |           |                    | 38.0(83.8)         |                    |                    | 53.0(117.0)        |                    | 87.0(192.0)        |              |
| Piping connection               | Liquid       | mm (Inch)             |           |                    | Ø9.52(3/8)         |                    |                    |                    |                    |                    |              |
|                                 | Gas          | mm (Inch)             |           |                    | Ø15.88(5/8)        |                    |                    |                    |                    | Ø19.05(3/4)        | Ø22.2(7/8)   |
|                                 | Drain        | I.D.                  | mm (Inch) |                    |                    | Ø25(31/32)         |                    |                    |                    |                    |              |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero

### Accessories

| Model       |                               | ARNU28GBGA2   | ARNU36GBGA2 | ARNU42GBGA2 | ARNU48GBRA2 | ARNU54GBRA2 | ARNU76GB8A2 | ARNU96GB8A2 |
|-------------|-------------------------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |             |             |             |             |             |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |             |             |             |             |             |             |
|             | With case(2 contact point)    | PQDSBC        |             |             |             |             |             |             |

| Wired remote controller                                 |               |               |                                      |                       | Wireless remote controller |
|---|---------------|---------------|--------------------------------------|-----------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                          | Simple type for hotel |                            |
|   |               |               |                                      |                       |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVLOQW(white) | PQRCVLOQW(White)      | PQWRHDF0                   |



# FRESH AIR INTAKE UNIT

## Fresh Outdoor Air Supply

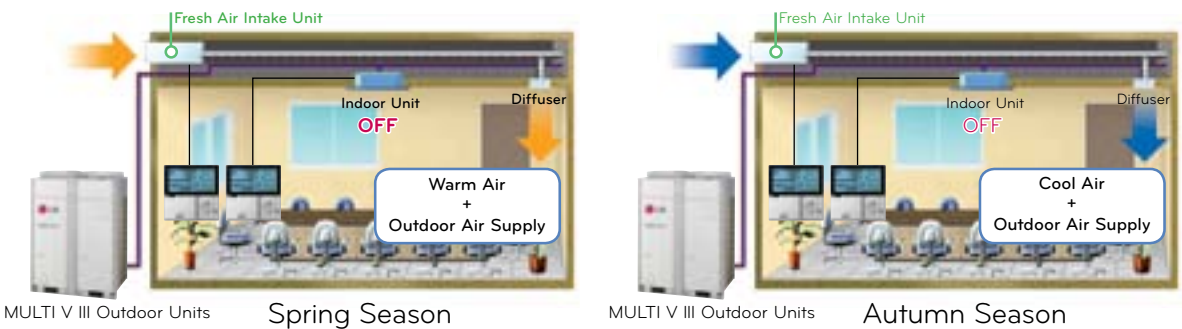
The LG Fresh Air Intake Unit (FAU) is the alternative solution for ventilation, which allows to supply the Fresh outdoor air into the indoor space as well as cool and Heat air inside simultaneously. It makes indoor space be in positive pressure consistently, which can block cold, hot and contaminated air from outside.



MULTI V III Outdoor Units

## Economic Operation

Using the free cooling and heating can save cost by blowing the natural outdoor air in when the season changes.



MULTI V III Outdoor Units

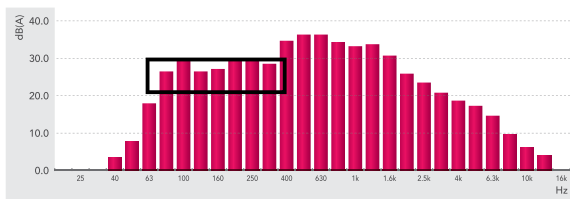
Spring Season

MULTI V III Outdoor Units

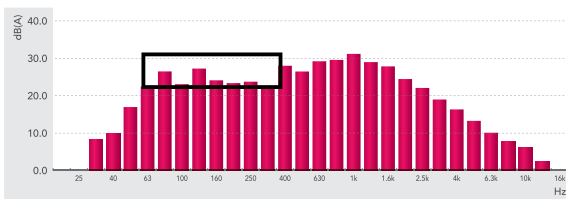
Autumn Season

## BLDC Fan Motor

It can reduce a noise on low frequency which is stressful for humans.



AC Tap motor



BLDC motor

## ARNU48GBRZ2 / ARNU76GB8Z2 / ARNU96GB8Z2

### Fresh Air Intake Unit



ARNU48GBRZ2



ARNU76GB8Z2



ARNU96GB8Z2

### Specifications

| Model                           |                       |           |           | ARNU48GBRZ2        | ARNU76GB8Z2       | ARNU96GB8Z2    |
|---------------------------------|-----------------------|-----------|-----------|--------------------|-------------------|----------------|
| Capacity                        | Cooling               | Nom       | kW        | 14.1               | 22.4              | 28.0           |
|                                 | Heating +7°C          | Nom       | kW        | 13.5               | 21.4              | 26.7           |
| Power Input                     | Cooling               | Max       | W         | 169                | 230               | 360            |
|                                 | Heating +7°C          | Max       | W         | 169                | 230               | 360            |
| Power Supply                    |                       | Ø / V /Hz |           | 1 / 220 ~ 240 / 50 |                   |                |
| Fan Airflow Rate<br>(High Mode) | Cooling               | H/M/L     | m³/min    | 18.8/14.7/14.7     | 23.7/13.2/13.2    | 35.7/23.7/23.7 |
|                                 | Heating               | H/M/L     | m³/min    | 18.8/14.7/14.7     | 23.7/13.2/13.2    | 35.7/23.7/23.7 |
| External Static Pressure        | High Mode-Factory Set |           | mmAq(Pa)  | 18(0.7)            | 22(0.86)          |                |
| Sound Pressure                  |                       | H/M/L     | dBA       | 44/42/42           | 49/47/47          | 50/48/48       |
| Dimension                       | Body                  | WxHxD     | mm        | 1,230 x 380 x 590  | 1,562 x 460 x 688 |                |
| Net weight                      |                       |           | kg(lbs)   | 45(99)             | 73(161)           |                |
| Piping connection               | Liquid                |           | mm (Inch) |                    | Ø9.52(3/8)        |                |
|                                 | Gas                   |           | mm (Inch) | Ø15.88(5/8)        | Ø19.05(3/4)       | Ø22.2(7/8)     |
|                                 | Drain                 | I.D.      | mm (Inch) |                    | Ø25(31/32)        |                |

Notes:

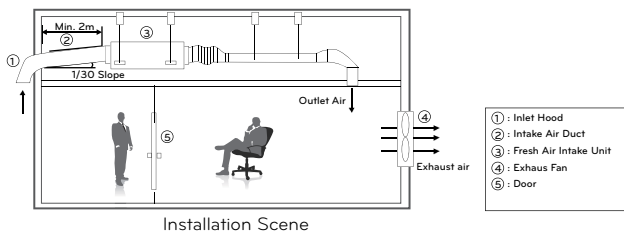
1. Capacities are based on the following conditions:

Cooling: Outdoor temp. 33°C(91.4°F)DB / 28°C(82.4°F)WB  
IDU-ODU Piping Length : 7.5m  
Level Difference of Zero  
Heating: Outdoor temp. 0°C(32°F)DB / -2.9°C(26.78°F)WB  
Interconnecting Piping Length : 7.5m  
Level Difference of Zero

2. Capacities are net capacities

3. Noise Level is under standard mode(For actual High Mode(Factory set) condition, Noise Level may exceed the standard level by 1.5dB(A))

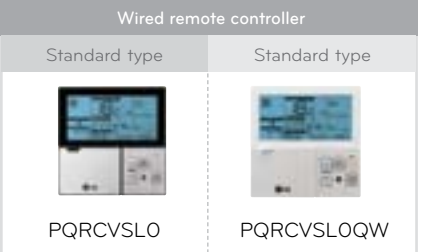
4. Due to our policy of innovation some specifications may be changed without prior notification



### CAUTION

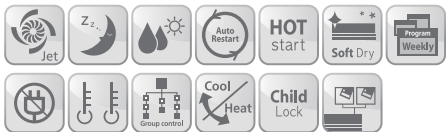
- Operation range (Cooling : 5°C ~ 43°C, Heating : -5°C ~ 43°C)
- Installation of exhaust fan is recommended for a sealed room.
- Indoor Unit Connection

| No | Connection Condition  | Combination  |
|----|---|--|
| 1  | Fresh Air Intake Units only are connected with outdoor units            | 1) The total capacity of Fresh Air Intake Unit should be 50~100% of outdoor unit.<br>2) The max quantity of Fresh Air Intake is 2 units.   |
| 2  | Mixture connection with general indoor units and Fresh Air Intake units | 1) The total capacity of indoor units(standard indoor unit + Fresh Air Intake Unit) should be 50~100% of outdoor unit.<br>2) The total capacity of Fresh Air Intake Unit should be less than 30% of the outdoor units. |



## ARNU09GVEA2 / ARNU12GVEA2

### Ceiling & Floor



#### Specifications

| Model             |              |            |           | ARNU09GVEA2        | ARNU12GVEA2     |
|-------------------|--------------|------------|-----------|--------------------|-----------------|
| Capacity          | Cooling      | Nom        | kW        | 2.8                | 3.6             |
|                   | Heating +7°C | Nom        | kW        | 3.2                | 4.0             |
| Power Input       | Cooling      | Max        | W         | 30                 |                 |
|                   | Heating +7°C | Max        | W         | 30                 |                 |
| Power Supply      |              | Ø / V / Hz |           | 1 / 220 ~ 240 / 50 |                 |
| Fan Airflow Rate  | Cooling      | H/M/L      | m³/min    | 7.6 / 6.9 / 6.2    | 9.2 / 7.6 / 6.9 |
|                   | Heating      | H/M/L      | m³/min    | 7.6 / 6.9 / 6.2    | 9.2 / 7.6 / 6.9 |
| Sound Pressure    |              | H/M/L      | dBA       | 36 / 32 / 28       | 38 / 36 / 30    |
| Dimension         | Body         | WxHxD      | mm        | 900 x 490 x 200    |                 |
| Net weight        |              |            | kg(lbs)   | 13.7(30.2)         |                 |
| Piping connection | Liquid       | mm (Inch)  |           | Ø6.35(1/4)         |                 |
|                   | Gas          | mm (Inch)  |           | Ø12.7(1/2)         |                 |
|                   | Drain        | I.D.       | mm (Inch) | Ø16(5/8)           |                 |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero

#### Accessories

| Model       |                               | ARNU09GVEA2   | ARNU12GVEA2 |
|-------------|-------------------------------|---------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |             |
|             | With case(2 contact point)    | PQDSBC        |             |

| Wired remote controller                                 |               |               |                                       |                                       | Wireless remote controller |
|---|---------------|---------------|---------------------------------------|---------------------------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                           | Simple type for hotel                 |                            |
|   |               |               |                                       |                                       |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVCLOQW(white) | PQRCVCAOQ(Black)<br>PQRCVCAOQW(White) | PQWRHDF0                   |

## URNU18GVJA2 / URNU24GVJA2 URNU36GVKA2 / URNU48GVLA2

### Ceiling Suspended



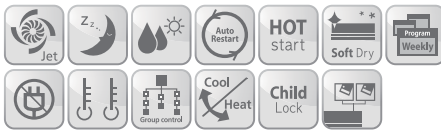
URNU18GVJA2 / URNU24GVJA2



URNU36GVKA2



URNU48GVLA2



#### Specifications

| Model             |              |            |           | URNU18G <b>VJA</b> 2 | URNU24G <b>VJA</b> 2 | URNU36G <b>VKA</b> 2 | URNU48G <b>VLA</b> 2 |
|-------------------|--------------|------------|-----------|----------------------|----------------------|----------------------|----------------------|
| Capacity          | Cooling      | Nom        | kW        | 5.6                  | 7.1                  | 10.6                 | 14.1                 |
|                   | Heating +7°C | Nom        | kW        | 6.3                  | 8.0                  | 11.9                 | 15.9                 |
| Power Input       | Cooling      | Max        | W         | 63                   |                      | 140                  | 190                  |
|                   | Heating +7°C | Max        | W         | 63                   |                      | 140                  | 190                  |
| Power Supply      |              | Ø / V / Hz |           | 1 / 220 ~ 240 / 50   |                      |                      |                      |
| Fan Airflow Rate  | Cooling      | H/M/L      | m³/min    | 16.0 / 14.0 / 12.0   | 18.0 / 16.0 / 14.0   | 24.6 / 23.0 / 21.4   | 35.0 / 32.0 / 30.0   |
|                   | Heating      | H/M/L      | m³/min    | 16.0 / 14.0 / 12.0   | 18.0 / 16.0 / 14.0   | 24.6 / 23.0 / 21.4   | 35.0 / 32.0 / 30.0   |
| Sound Pressure    |              | H/M/L      | dBA       | 42 / 40 / 37         | 43 / 41 / 39         | 48 / 46 / 44         | 49 / 48 / 47         |
| Dimension         | Body         | WxHxD      | mm        | 950 x 650 x 220      |                      | 1350 x 650 x 220     | 1750 x 650 x 220     |
| Net weight        |              | kg(lbs)    |           | 24.6(54.2)           |                      | 35.0(77.2)           | 45.0(99.2)           |
| Piping connection | Liquid       | mm (Inch)  |           | Ø6.35(1/4)           |                      | Ø9.52(3/8)           |                      |
|                   | Gas          | mm (Inch)  |           | Ø12.7(1/2)           |                      | Ø15.88(5/8)          |                      |
|                   | Drain        | I.D.       | mm (Inch) | Ø16(5/8)             |                      |                      |                      |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero

#### Accessories

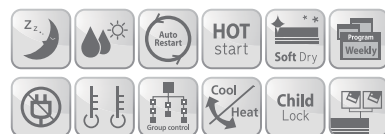
| Model       |                               | URNU18GVJA2   | URNU24GVJA2 | URNU36GVKA2 | URNU48GVLA2 |
|-------------|-------------------------------|---------------|-------------|-------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |             |             |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |             |             |             |
|             | With case(2 contact point)    | PQDSBC        |             |             |             |

| Wired remote controller                                 |               |               |                                       |                                       | Wireless remote controller |
|---|---------------|---------------|---------------------------------------|---------------------------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                           | Simple type for hotel                 |                            |
|   |               |               |                                       |                                       |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVCLOQW(white) | PQRCVCAOQ(Black)<br>PQRCVCAOQW(White) | PQWRHDF0                   |

ARNU07GCEA2 / ARNU09GCEA2 / ARNU12GCEA2  
ARNU15GCEA2 / ARNU18GCFA2 / ARNU24GCFA2



Floor Standing with Case



Specifications

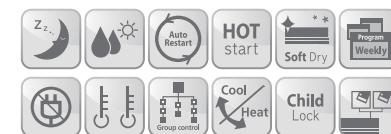
| Model             |              |           |           | ARNU07GCEA2        | ARNU09GCEA2     | ARNU12GCEA2      | ARNU15GCEA2       | ARNU18GCFA2        | ARNU24GCFA2        |
|-------------------|--------------|-----------|-----------|--------------------|-----------------|------------------|-------------------|--------------------|--------------------|
| Capacity          | Cooling      | Nom       | kW        | 2.2                | 2.8             | 3.6              | 4.5               | 5.6                | 7.1                |
|                   | Heating +7°C | Nom       | kW        | 2.5                | 3.2             | 4.0              | 5.0               | 6.3                | 8.0                |
| Power Input       | Cooling      | Max       | W         | 30                 |                 |                  |                   | 80                 |                    |
|                   | Heating +7°C | Max       | W         | 30                 |                 |                  |                   | 80                 |                    |
| Power Supply      |              | Ø / V /Hz |           | 1 / 220 ~ 240 / 50 |                 |                  |                   |                    |                    |
| Fan Airflow Rate  | Cooling      | H/M/L     | m³/min    | 8.5 / 7.5 / 6.5    | 9.5 / 8.5 / 7.5 | 10.5 / 9.5 / 8.5 | 11.5 / 10.0 / 9.5 | 16.0 / 14.0 / 12.0 | 18.0 / 16.0 / 14.0 |
|                   | Heating      | H/M/L     | m³/min    | 8.5 / 7.5 / 6.5    | 9.5 / 8.5 / 7.5 | 10.5 / 9.5 / 8.5 | 11.5 / 10.0 / 9.5 | 16.0 / 14.0 / 12.0 | 18.0 / 16.0 / 14.0 |
| Sound Pressure    |              | H/M/L     | dBA       | 35 / 33 / 31       | 36 / 34 / 32    | 37 / 35 / 33     | 38 / 37 / 35      | 40 / 37 / 34       | 43 / 40 / 37       |
| Dimension         | Body         | WxHxD     | mm        | 1,067 x 635 x 203  |                 |                  |                   | 1,345 x 635 x 203  |                    |
| Net weight        |              | kg(lbs)   |           | 27(59.5)           |                 |                  |                   | 34 (75.0)          |                    |
| Piping connection | Liquid       | mm (Inch) |           | Ø6.35(1/4)         |                 |                  |                   | Ø9.52(3/8)         |                    |
|                   | Gas          | mm (Inch) |           | Ø12.7(1/2)         |                 |                  |                   | Ø15.88(5/8)        |                    |
|                   | Drain        | I.D.      | mm (Inch) | Ø12(15/32)         |                 |                  |                   |                    |                    |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

ARNU07GCEU2 / ARNU09GCEU2 / ARNU12GCEU2  
ARNU15GCEU2 / ARNU18GCFU2 / ARNU24GCFU2



Floor Standing without Case



Specifications

| Model             |              |       |            | ARNU07GCEU2        | ARNU09GCEU2     | ARNU12GCEU2      | ARNU15GCEU2       | ARNU18GCFU2        | ARNU24GCFU2        |
|-------------------|--------------|-------|------------|--------------------|-----------------|------------------|-------------------|--------------------|--------------------|
| Capacity          | Cooling      | Nom   | kW         | 2.2                | 2.8             | 3.6              | 4.5               | 5.6                | 7.1                |
|                   | Heating +7°C | Nom   | kW         | 2.5                | 3.2             | 4.0              | 5.0               | 6.3                | 8.0                |
| Power Input       | Cooling      | Max   | W          | 30                 |                 |                  |                   | 80                 |                    |
|                   | Heating +7°C | Max   | W          | 30                 |                 |                  |                   | 80                 |                    |
| Power Supply      |              |       | Ø / V / Hz | 1 / 220 ~ 240 / 50 |                 |                  |                   |                    |                    |
| Fan Airflow Rate  | Cooling      | H/M/L | m³/min     | 8.5 / 7.5 / 6.5    | 9.5 / 8.5 / 7.5 | 10.5 / 9.5 / 8.5 | 11.5 / 10.0 / 9.5 | 16.0 / 14.0 / 12.0 | 18.0 / 16.0 / 14.0 |
|                   | Heating      | H/M/L | m³/min     | 8.5 / 7.5 / 6.5    | 9.5 / 8.5 / 7.5 | 10.5 / 9.5 / 8.5 | 11.5 / 10.0 / 9.5 | 16.0 / 14.0 / 12.0 | 18.0 / 16.0 / 14.0 |
| Sound Pressure    |              | H/M/L | dBA        | 35 / 33 / 31       | 36 / 34 / 32    | 37 / 35 / 33     | 38 / 37 / 35      | 40 / 37 / 34       | 43 / 40 / 37       |
| Dimension         | Body         | WxHxD | mm         | 978 x 639 x 190    |                 |                  |                   | 1,256 x 639 x 190  |                    |
| Net weight        |              |       | kg(lbs)    | 20(44.1)           |                 |                  |                   | 27(59.5)           |                    |
| Piping connection | Liquid       |       | mm (Inch)  | Ø6.35(1/4)         |                 |                  |                   | Ø9.52(3/8)         |                    |
|                   | Gas          |       | mm (Inch)  | Ø12.7(1/2)         |                 |                  |                   | Ø15.88(5/8)        |                    |
|                   | Drain        | I.D.  | mm (Inch)  | Ø12(15/32)         |                 |                  |                   |                    |                    |

Note :1. Capacities are based on the following conditions  
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB  
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB  
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB  
Interconnecting piping length 7.5m / Level difference of zero  
2. Due to our policy of innovation some specifications may be changed without notification

Accessories

| Model       |                               | ARNU07GCEA2   | ARNU09GCEA2 | ARNU12GCEA2 | ARNU15GCEA2 | ARNU18GCFA2 | ARNU24GCFA2 |
|-------------|-------------------------------|---------------|-------------|-------------|-------------|-------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |             |             |             |             |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |             |             |             |             |             |
|             | With case(2 contact point)    | PQDSBC        |             |             |             |             |             |

Accessories

| Model       |                               | ARNU07GCEU2   | ARNU09GCEU2 | ARNU12GCEU2 | ARNU15GCEU2 | ARNU18GCFU2 | ARNU24GCFU2 |
|-------------|-------------------------------|---------------|-------------|-------------|-------------|-------------|-------------|
| Dry Contact | Without case(1 contact point) | PQDSA         |             |             |             |             |             |
|             | With case(1 contact point)    | PQDSB/ PQDSB1 |             |             |             |             |             |
|             | With case(2 contact point)    | PQDSBC        |             |             |             |             |             |

| Wired remote controller                                 |               |               |                                       |                                       | Wireless remote controller |
|---|---------------|---------------|---------------------------------------|---------------------------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                           | Simple type for hotel                 |                            |
|   |               |               |                                       |                                       |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVCLOQW(white) | PQRCCHA0Q(Black)<br>PQRCCHA0QW(White) | PQWRHDF0                   |

| Wired remote controller                                 |               |               |                                       |                                       | Wireless remote controller |
|---|---------------|---------------|---------------------------------------|---------------------------------------|----------------------------|
| Deluxe type   | Standard type | Standard type | Simple type                           | Simple type for hotel                 |                            |
|   |               |               |                                       |                                       |                            |
| PQRCUDSO(white)<br>PQRCUDSOB(blue)<br>PQRCUDSOS(silver) | PQRCVSLO      | PQRCVSLOQW    | PQRCVCLOQ(Black)<br>PQRCVCLOQW(white) | PQRCCHA0Q(Black)<br>PQRCCHA0QW(White) | PQWRHDF0                   |



# Hydro Kit

TOTAL HEATING & HOT WATER SOLUTION

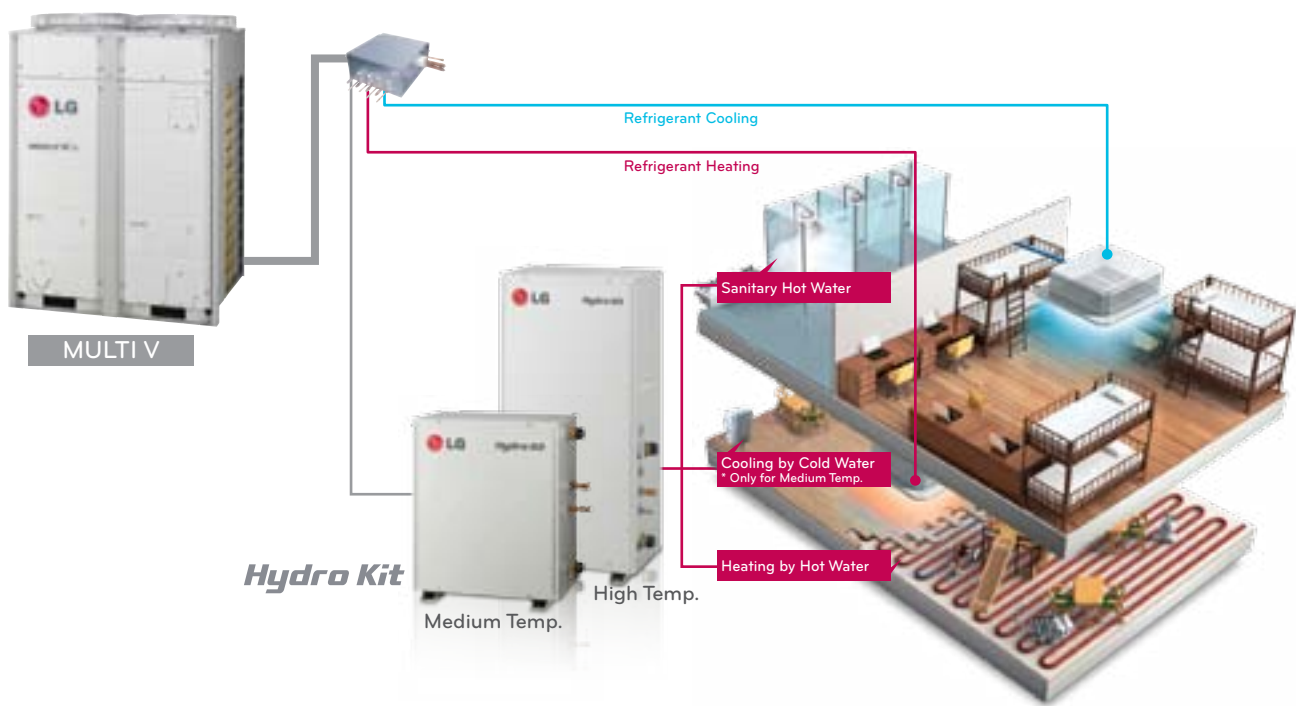
Hydro kit, utilizing MULTI V to provide floor heating and hot water supply as the total HVAC solution.

**88** Hydro Kit



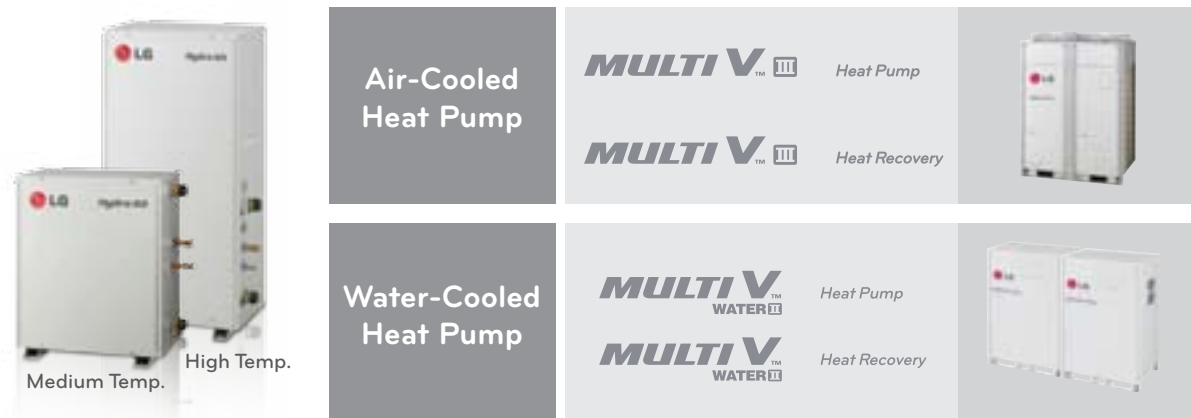
# HYDRO KIT

Hydro Kit is Eco-friendly and High-efficient. This total HVAC solution is available to Air-conditioning, floor heating, radiators and sanitary hot water supply. All these functions, utilizing a variety of MULTI V outdoor unit, minimize energy costs and CO2 emissions compared to boiler system.



## Variety of Outdoor Combination

A variety of heat pump includes Air-cooled, Water-cooled and Geo-Thermal source and outdoor unit can be combined according to installation condition of building or environment temperature.

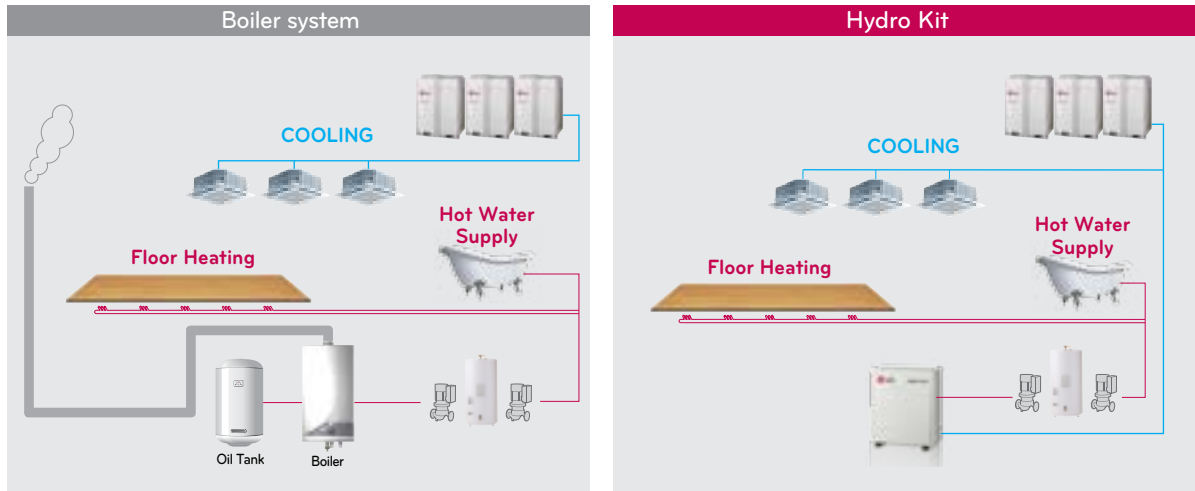


# HYDRO KIT BENEFIT

Provides sanitary hot water supply and floor heating efficiently through lower energy cost compared to a boiler and contribute to green energy environment through reduction of CO2 emission.

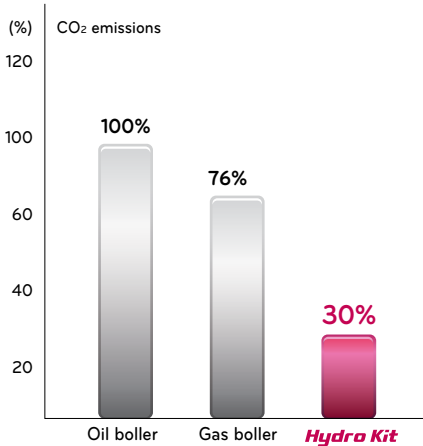
## Easy Installation

Unnecessary to duct for emitting gas, easy to install as compact and modular structure



## Eco-friendly Green Energy Solution

Green energy solution through reduction of CO2 emissions.

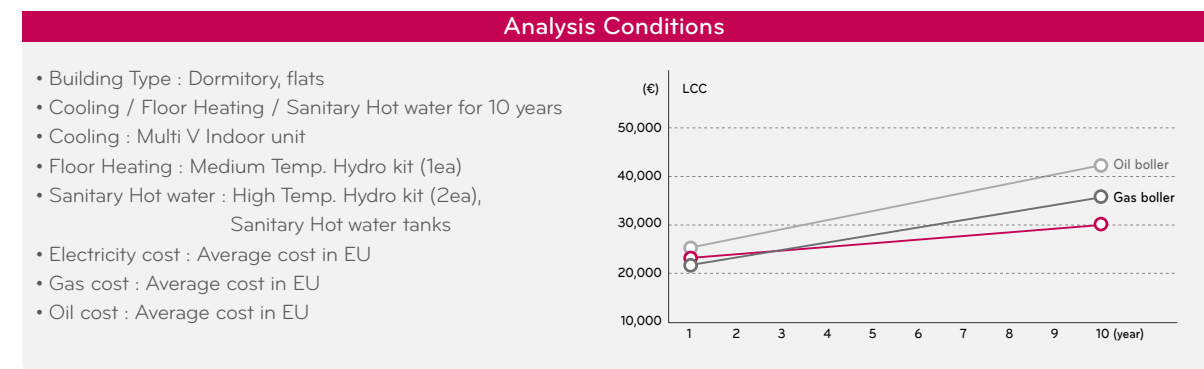
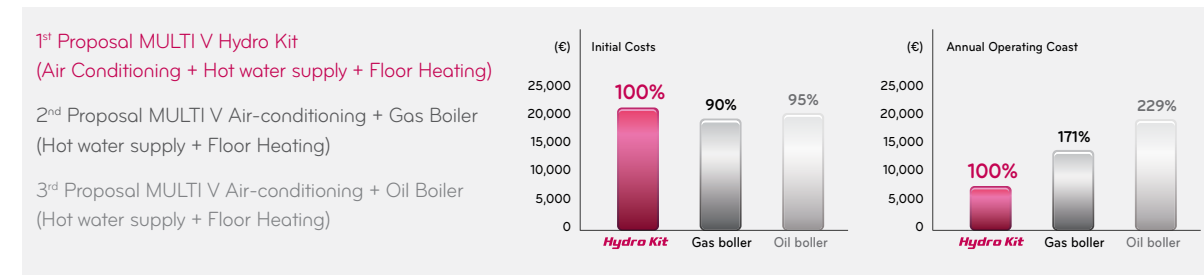


# ECONOMICS

High economic efficiency through lower energy cost compared to hot water system of boiler.

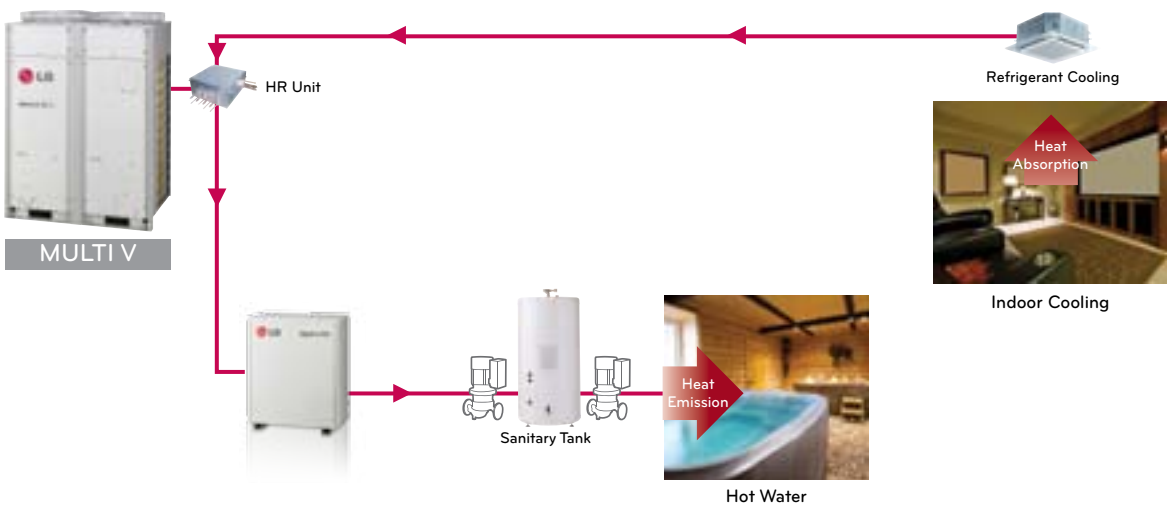
## High Economical Efficiency through Energy Saving

Possible to install with equivalent level of an initial cost as the boiler system and minimize energy costs by low-priced operating costs.



## Energy Saving through Heat Recovery

Energy costs can be saved by using wasted heat source from indoor to outdoor at cooling.



# HIGH TEMPERATURE OF HYDRO KIT

## High Temperature of Hydro Kit Concept

### High volume of Domestic hot water

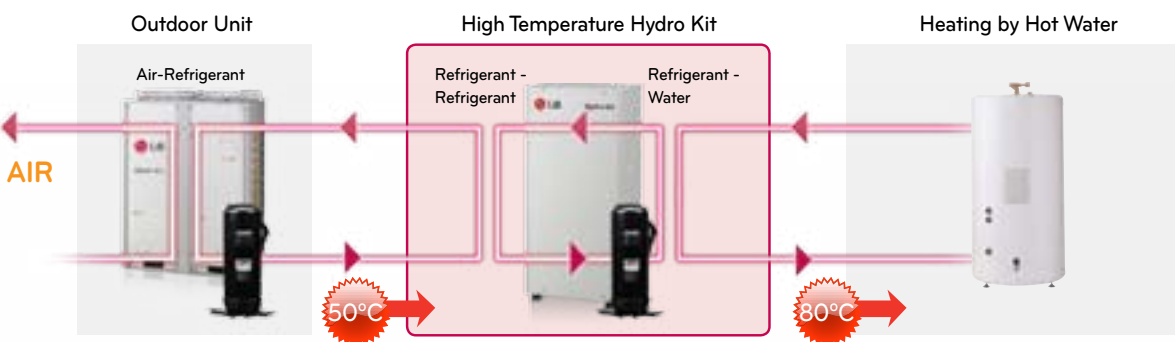
- Compared to lower temperature, storing high temperature water in a sanitary tank increases a lot the quantity of mixed water available for the user.

### Cascade R410A to R134a BLDC compressor technology

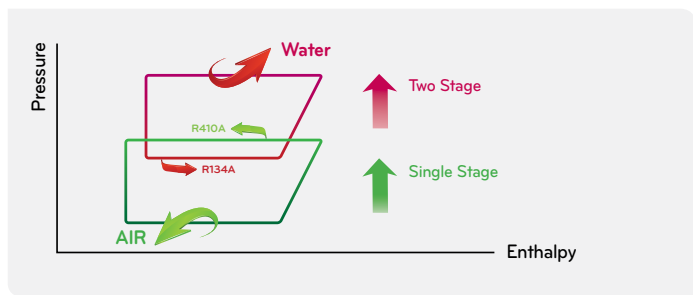
- Leaving water temperature up to 80°C



## High Temperature of Hydro Kit Cycle Diagram



### High Temperature Technical

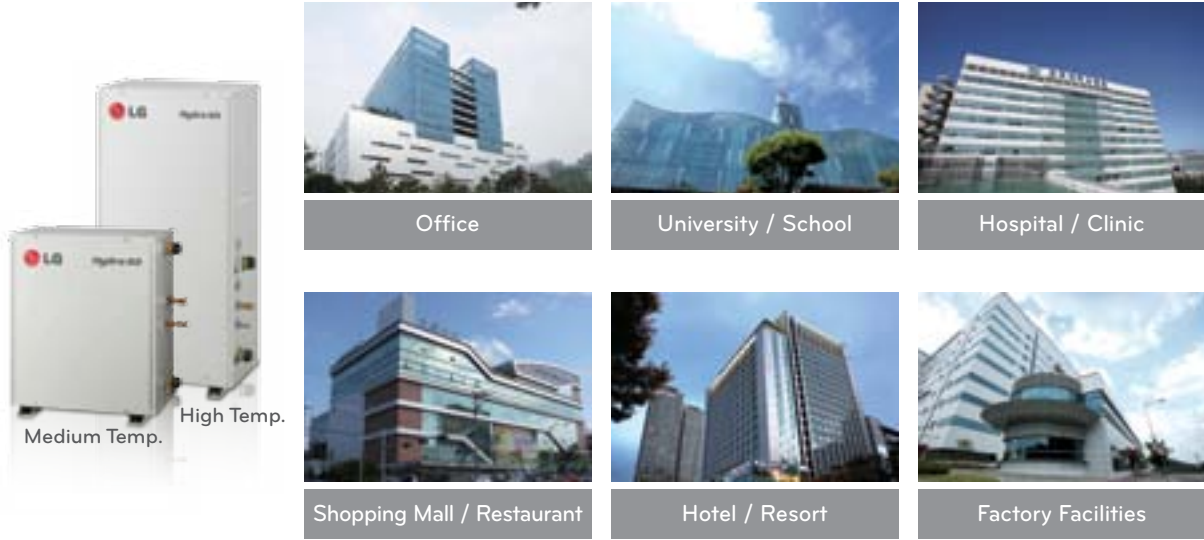




# APPLICATION

## Various Application

Applicable to a variety of facilities includes hospitals, residences and resorts that need water heating and domestic hot water supply.



## Hotel

Constant cooling & heating are possible at the same time during summer time provide hot water for bathroom using waste heat energy from indoor cooling by indoor unit.



## Office

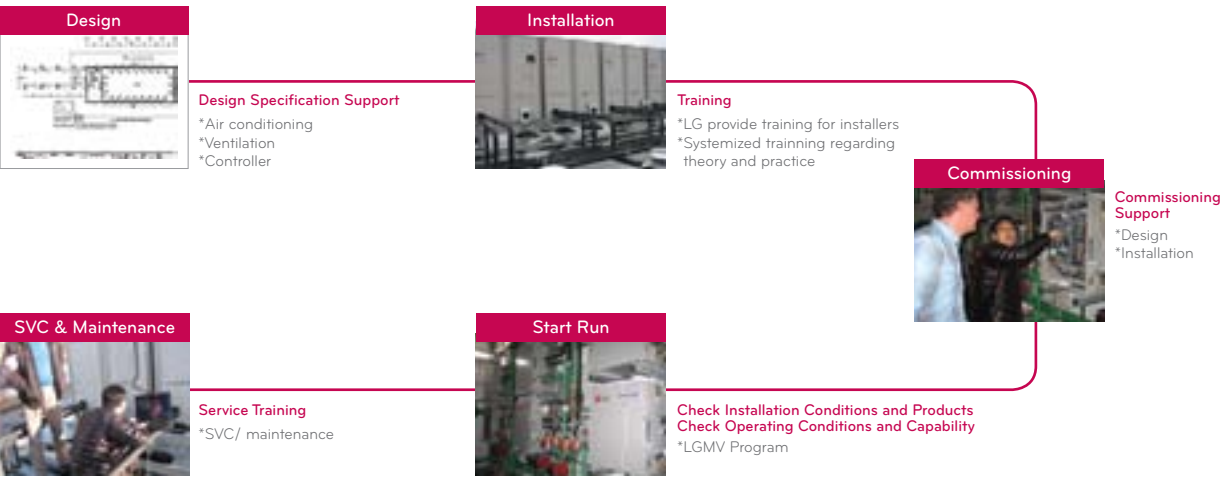
In the office while cooling HR unit makes sanitary tank to be warmed using waste energy, hot water can be supplied at all times.





# QUALITY CONTROL & SPECIFICATION

LG provides a perfect management from design to service & maintenance.

## Quality Control



## Specification

|                         |                            |                       |          |  |  |
|-------------------------|----------------------------|-----------------------|----------|---|---|
| Type                    |                            |                       |          | Hydro Kit (Medium Temp.)  | Hydro Kit (High Temp.)  |
| Model                   |                            |                       |          | ARNH10GK2A2   | ARNH08GK3A2   |
| Power Supply            |                            | Ø / V / Hz            |          | 1 / 220-240 / 50  | 1 / 220-240 / 50  |
| Capacity (Rated)        | Cooling                    | kW                    |          | 29.0  | -   |
| Capacity (Rated)        | Heating                    | kW                    |          | 32.0  | 25.0  |
| Input (Rated)           | Cooling                    | kW                    |          | 0.01  | -   |
|                         | Heating                    | kW                    |          | 0.01  | 5.0   |
| Casing                  |                            |                       |          | Painted Steel Plate   | Painted Steel Plate   |
| Dimensions              | Body                       | W x H x D             | mm       | 520 x 631 x 330   | 520 x 1,080 x 330   |
|                         |                            |                       | inch     | 20-15/32 x 24-27/32 x 13  | 20-15/32 x 42-17/32 x 13  |
| Net Weight              | Body                       | kg (lbs)              |          | 35.0 (77.2)   | 94.0 (207.2)  |
| Heat Exchanger          | Refrigerant to Water       | Type                  |          | Brazed Plate HEX  | Brazed Plate HEX  |
|                         |                            | Rated Water Flow      | L/min    | 46.0  | 36.0  |
|                         |                            | Head Loss             | kPa      | 25.0  | 20.0  |
|                         | Refrigerant to Refrigerant | Type                  |          | -   | Brazed Plate HEX  |
| Compressor              |                            | Type                  |          | -   | Twin Rotary Inverter  |
| Piping Connections      | Water Side                 | Inlet                 | inch     | Male PT 1   | Male PT 1   |
|                         |                            | Outlet                | inch     | Male PT 1   | Male PT 1   |
|                         | Refrigerant Side           | Liquid                | mm(inch) | Ø 9.52(3/8)   | Ø 9.52(3/8)   |
|                         |                            | Gas                   | mm(inch) | Ø 22.2(7/8)   | Ø 19.05(3/4)  |
| Drain Piping Connection |                            |                       | inch     | Male PT 1   | Male PT 1   |
| Sound Press Level       | Cooling                    | dB(A)                 |          | 26  | -   |
|                         | Heating                    | dB(A)                 |          | 26  | 43  |
| Power Supply Cable      |                            | No. x mm <sup>2</sup> |          | 3C x CV2.5  | 3C x CV4.0  |
| Communication cable     |                            | No. x mm <sup>2</sup> |          | 2C x CVV-SB 1.0-1.5   | 2C x CVV-SB 1.0-1.5   |
| Refrigerant             | Refrigerant to Refrigerant | Refrigerant name      |          | -   | R410A   |
|                         |                            | Control               |          | -   | Electronic Expansion Valve  |
|                         | Refrigerant to Water       | Refrigerant name      |          | R410A   | R134a   |
|                         |                            | Precharged Amount     | kg (lbs) | -   | 3.0 (6.6)   |
|                         |                            | Control               |          | EEV   | EEV   |

### \*Notes

Capacities are based on the following conditions:

- Cooling Temperature : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB, Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB, Water Inlet 23°C(73.4°F) / Outlet 18°C(64.4°F)
- Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB, Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB, \* Water Inlet 30°C(86°F) / Outlet 35°C(95°F), \*\* Water Inlet 55°C(131°F) / Outlet 65°C(149°F)
- Piping Length : Interconnected Pipe Length = 7.5m
- Difference Limit of Elevation (Outdoor ~ Indoor Unit) is Zero.

\* Medium Temp. \*\* High Temp.

# **ecoV™** Energy Recovery Ventilator

**ecoV™** is an energy efficient ventilation system, which provides fresh air and removes contaminants effectively.

**98** ECO V

**102** ECO V DX





### High Efficiency Heat Exchanger

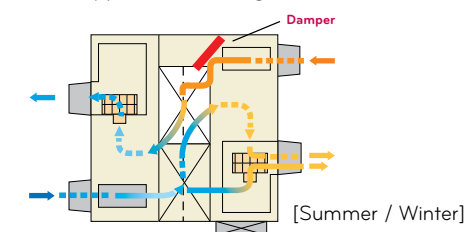
Efficiency and comfort is ensured by the high-efficiency energy recovery central core which recovers energy from the indoor air and transfers it to the fresh incoming air without mixing airstream.



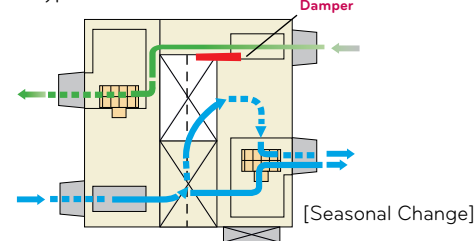
### Bypass Ventilation

ECO V automatically switches the ventilation mode (Enthalpy Heat Exchange Mode / Bypass Mode) according to the indoor/outdoor temperature.

#### • Enthalpy Heat Exchange Mode

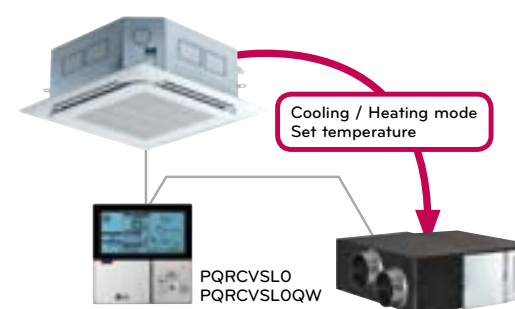


#### • Bypass Mode



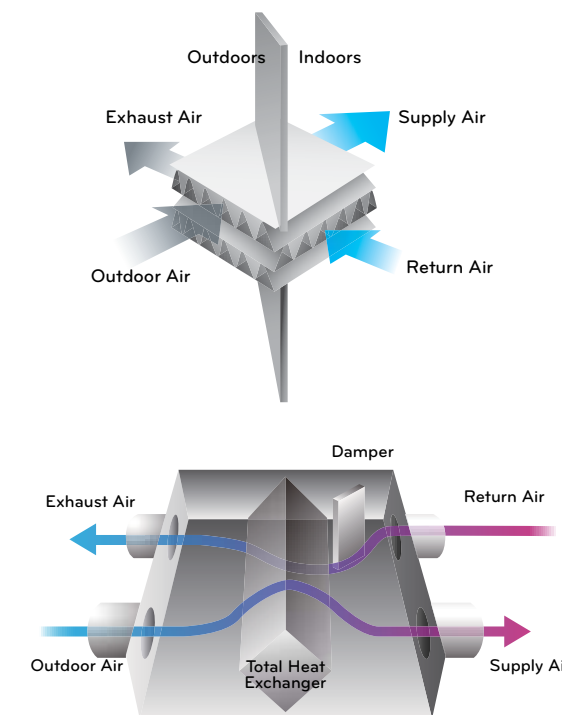
### Interlocking with Air Conditioning System

- ECO V can be interlocked with air conditioners and controlled individually.
- This function can be operated when the system is connected with remote controller.



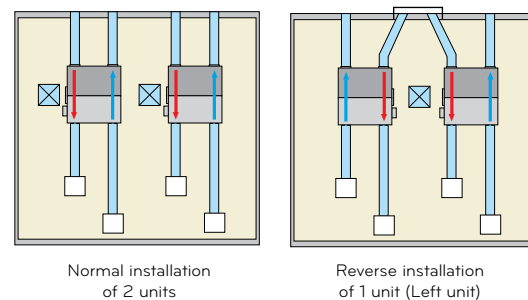
### Compulsory Exhausting System

Compulsory exhausting system using high static and efficient sirocco fan removes contaminants effectively from indoor air. Supply and exhaust air flows are completely divided in total heat exchanger, ECO V can filter out the impurities before supplying outdoor air and make indoor air fresh and healthy.

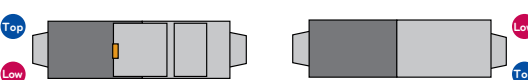


### Flexibility of Installation

It's possible to install ECO V upside down when you need only one inspection hole.

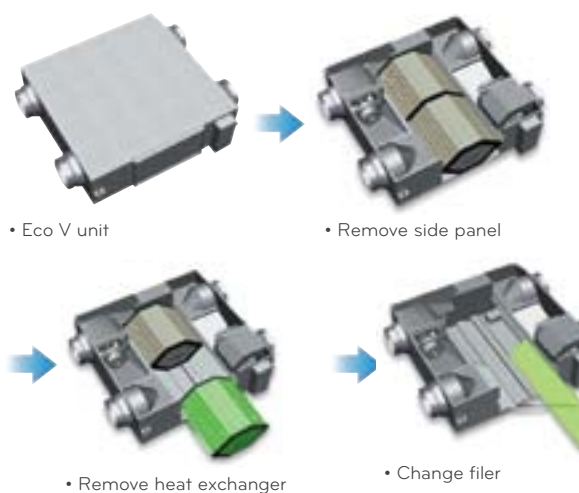


#### • Inspection hole



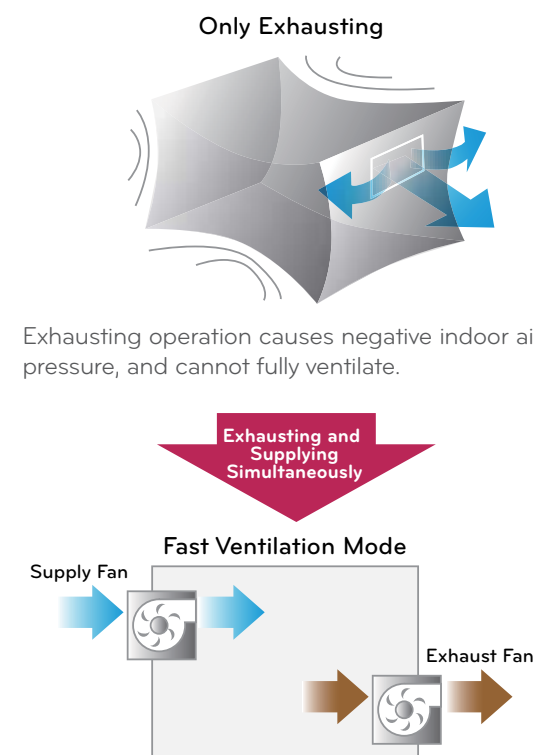
### Easy Cleaning and Changing Filter

It is easy and convenient to change and clean filter.



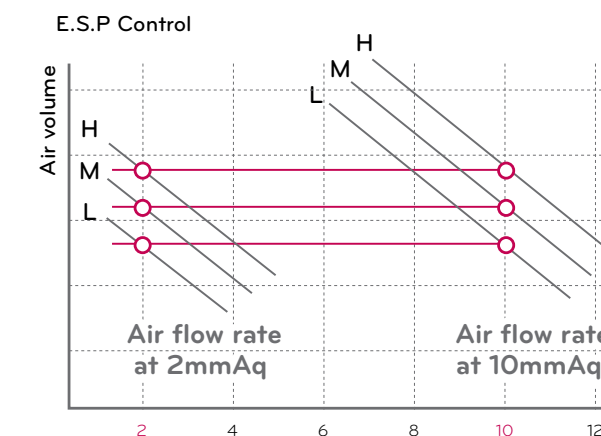
### Fast Ventilation Mode

Fast ventilation mode prevents the spread of contaminants under indoor negative pressure, and makes indoor air fresh and comfortable quickly.



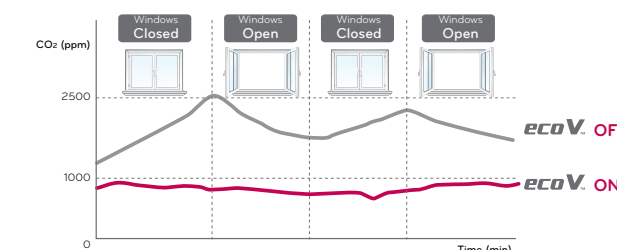
### E.Tuning (External Static Pressure Control)

Individual air volume control (Supply&Exhaust). Generally, when External Static pressure increases air volume decreases. But by controlling the RPM of BLDC Motor E.S.P is changeable. E.S.P. control provides required constant air volume irrespective of E.S.P. change. Desired E.S.P. can also be set through LCD wired remote. Setting of the desired E.S.P. gives required combination of E.S.P. and airflow. So, air volume is kept constant for various duct work system. All ECO V units feature BLDC Motor.



### CO2 Concentration Control

Using CO2 sensor, ECO V controls exhaust air flow automatically to keep indoor air fresh under settled CO2 concentration.





# LZ-H025GBA2 / LZ-H035GBA2 / LZ-H050GBA2

ECO V



LZ-H025GBA2  
LZ-H035GBA2

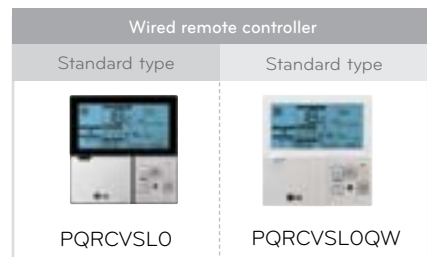


LZ-H050GBA2

## Specifications

| Model             | Unit                            | LZ-H025GBA2       | LZ-H035GBA2                   | LZ-H050GBA2                     |
|-------------------|---------------------------------|-------------------|-------------------------------|---------------------------------|
| Nominal Capacity  | CMH(CFM)                        | 250(147)          | 350(206)                      | 500(294)                        |
| Power Supply      | øV,Hz                           | 1, 220-240, 50-60 |                               |                                 |
| ECO V Mode        | Step                            | SH/H/L            | SUPER-HIGH / HIGH / LOW       |                                 |
|                   | Current                         | SH/H/L            | Amps                          | 1.04/0.97/0.7                   |
|                   | Power Input                     | SH/H/L            | W                             | 110/105/75                      |
|                   | Air Flow                        | SH/H/L            | CMH(CFM)                      | 250/250/150(147/147/88)         |
|                   | External Static Pressure        | SH/H/L            | Pa(In.wg)                     | 150/130/110(0.60/0.52/0.44)     |
|                   | Temperature Exchange Efficiency | SH/H/L            | %                             | 80/80/85                        |
|                   | Enthalpy Exchange Efficiency    | Heating(SH/H/L)   | %                             | 70/70/78                        |
|                   |                                 | Cooling(SH/H/L)   | %                             | 64/64/68                        |
|                   | Noise Level(Sound Level, 1.5m)  |                   | dBA                           | 32/28/21                        |
|                   | Step                            | SH/H/L            | -                             | SUPER-HIGH / HIGH / LOW         |
| Bypass Mode       | Current                         | SH/H/L            | Amps                          | 1.92/1.58/0.79                  |
|                   | Power Input                     | SH/H/L            | W                             | 230/220/85                      |
|                   | Air Flow                        | SH/H/L            | CMH(CFM)                      | 500/500/320(294/294/124)        |
|                   | External Static Pressure        | SH/H/L            | Pa(In.wg)                     | 150/100/50(0.60/0.40/0.2)       |
|                   | Noise Level(Sound Level, 1.5m)  | SH/H/L            | dBA                           | 34/32/25                        |
| Heat Exchanger    | Type                            | -                 | Crossflow                     |                                 |
| Weight            | kg(lb)                          |                   | 32(70.5)                      | 44(97)                          |
| Dimension         | WxHxD                           | mm(inch)          | 750x250x680(29.52x9.84x26.77) | 988x273x1,014(38.9x10.75x39.92) |
| Duct work         | Qty                             | EA                | 4                             |                                 |
|                   | Size(Ø)                         | mm(inch)          | Ø150(Ø5.91)                   | Ø200(Ø7.87)                     |
| Supply Air Fan    | Qty                             | EA                | 1                             |                                 |
|                   | Type                            | -                 | Direct-Drive                  |                                 |
| Exhaust Air Fan   | Qty                             | EA                | 1                             |                                 |
|                   | Type                            | -                 | Direct-Drive                  |                                 |
| Filters           | Qty                             | EA                | 2                             |                                 |
|                   | Type                            | -                 | Cleanable                     |                                 |
|                   | Size(WxHxD)                     | mm(inch)          | 600x10x150(23.62x0.39x5.91)   | 855x10x166(33.66x0.39x6.54)     |
| Remote Controller |                                 |                   | PQRCVSLO / PQRCVSLOQW         |                                 |
| Dry Contact       |                                 |                   | PQDSB / PQDSB1                |                                 |

- Notes:
- ECO V Mode - Enthalpy Heat Recovery Ventilation mode
  - Noise level :
    - The operating conditions are assumed to be standard.
    - Sound measured at 1.5m below the center the body.
    - Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.



# LZ-H080GBA2 / LZ-H100GBA2 LZ-H150GBA2 / LZ-H200GBA2

ECO V



LZ-H080GBA2  
LZ-H100GBA2

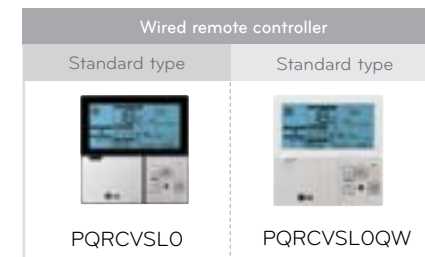


LZ-H150GBA2  
LZ-H200GBA2

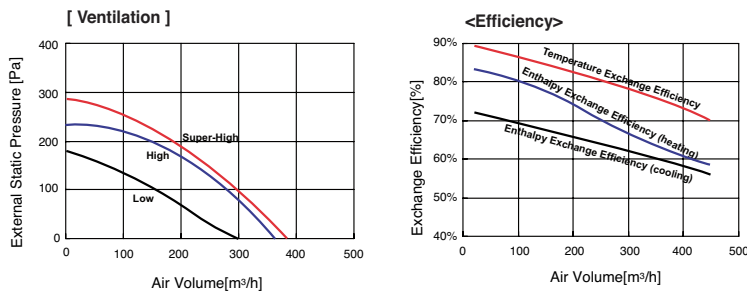
## Specifications

| Model                          |                                 | Unit            | LZ-H080GBA2       | LZ-H100GBA2                     | LZ-H150GBA2                | LZ-H200GBA2                     |                               |
|--------------------------------|---------------------------------|-----------------|-------------------|---------------------------------|----------------------------|---------------------------------|-------------------------------|
| Nominal Capacity               |                                 | CMH(CFM)        | 800(471)          | 1000(589)                       | 1500(883)                  | 2000(1177)                      |                               |
| Power Supply                   |                                 | øV/Hz           | 1, 220-240, 50-60 |                                 |                            |                                 |                               |
| ECO V Mode                     | Step                            | SH/H/L          | -                 | SUPER-HIGH / HIGH / LOW         |                            |                                 |                               |
|                                | Current                         | SH/H/L          | Amps              | 2.77/2.16/1.44                  | 3.41/2.91/1.76             | 5.6/5.4/2.9                     | 6.8/5.9/3.6                   |
|                                | Power Input                     | SH/H/L          | W                 | 360/370/165                     | 470/385/210                | 720/540/340                     | 930/770/420                   |
|                                | Air Flow                        | SH/H/L          | CMH(CFM)          | 800/800/660(471/471/388)        | 1000/1000/800(589/589/471) | 1500/1500/1200(883/883/706)     | 2000/2000/1600(1177/1177/942) |
|                                | External Static Pressure        | SH/H/L          | Pa(In.wg)         | 200/110/60(0.80/0.44/0.24)      | 160/90/50(0.64/0.36/0.20)  | 200/110/60(0.80/0.44/0.24)      | 160/90/50(0.64/0.36/0.20)     |
|                                | Temperature Exchange Efficiency | SH/H/L          | %                 | 79/79/82                        | 75/75/78                   | 79/79/82                        | 75/75/78                      |
|                                | Enthalpy Exchange Efficiency    | Heating(SH/H/L) | %                 | 70/70/75                        | 66/66/71                   | 70/70/75                        | 66/66/71                      |
|                                |                                 | Cooling(SH/H/L) | %                 | 65/65/70                        | 61/61/66                   | 65/65/70                        | 61/61/66                      |
| Noise Level(Sound Level, 1.5m) |                                 |                 | dBA               | 36/34/30                        | 37/35/31                   | 39/37/33                        | 39/37/33                      |
| Bypass Mode                    | Step                            | SH/H/L          | -                 | SUPER-HIGH / HIGH / LOW         |                            |                                 |                               |
|                                | Current                         | SH/H/L          | Amps              | 2.77/2.16/1.44                  | 3.41/2.91/1.76             | 5.6/5.4/2.9                     | 6.8/5.9/3.6                   |
|                                | Power Input                     | SH/H/L          | W                 | 360/370/165                     | 470/385/210                | 720/540/340                     | 930/770/420                   |
|                                | Air Flow                        | SH/H/L          | CMH(CFM)          | 800/800/660(471/471/388)        | 1000/1000/800(589/589/471) | 1500/1500/1200(883/883/706)     | 2000/2000/1600(1177/1177/942) |
|                                | External Static Pressure        | SH/H/L          | Pa(In.wg)         | 200/110/60(0.80/0.44/0.24)      | 160/90/50(0.64/0.36/0.20)  | 200/110/60(0.80/0.44/0.24)      | 160/90/50(0.64/0.36/0.20)     |
|                                | Noise Level(Sound Level, 1.5m)  |                 | SH/H/L            | dBA                             | 36/34/30                   | 37/35/31                        |                               |
| Heat Exchanger                 |                                 | Type            | -                 | Crossflow                       |                            |                                 |                               |
| Weight                         |                                 |                 | kg(lb)            | 60(132)                         |                            | 140(308)                        |                               |
| Dimension                      |                                 | WxHxD           | mm(inch)          | 1,062x365x1,140(41.9x14.4x44.9) |                            | 1,313x737x1,140(51.7x29.0x44.9) |                               |
| Duct work                      | Qty                             |                 | EA                | 4                               |                            | 4+2                             |                               |
|                                | Size(Ø)                         |                 | mm(inch)          | Ø250(Ø9.84)                     |                            | Ø250(Ø9.84)+Ø350(Ø13.77)        |                               |
| Supply Air Fan                 | Qty                             |                 | EA                | 1                               |                            | 2                               |                               |
|                                | Type                            |                 | -                 | Direct-Drive                    |                            |                                 |                               |
| Exhaust Air Fan                | Qty                             |                 | EA                | 1                               |                            | 2                               |                               |
|                                | Type                            |                 | -                 | Direct-Drive                    |                            |                                 |                               |
| Filters                        | Qty                             |                 | EA                | 2                               |                            | 4                               |                               |
|                                | Type                            |                 | -                 | Cleanable                       |                            |                                 |                               |
|                                | Size(WxHxD)                     |                 | mm(inch)          | 600x10x150(23.62x0.39x5.91)     |                            | 1056x10x212.5(41.57x0.39x8.37)  |                               |
| Remote Controller              |                                 |                 |                   | PQRCVSLO / PQRCVSLOQW           |                            |                                 |                               |
| Dry Contact                    |                                 |                 |                   | PQDSB / PQDSB1                  |                            |                                 |                               |

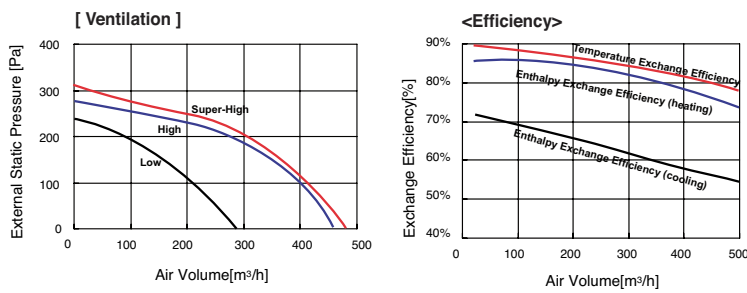
- Notes:
- ECO V Mode - Enthalpy Heat Recovery Ventilation mode
  - Noise level :
    - The operating conditions are assumed to be standard.
    - Sound measured at 1.5m below the center the body.
    - Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.



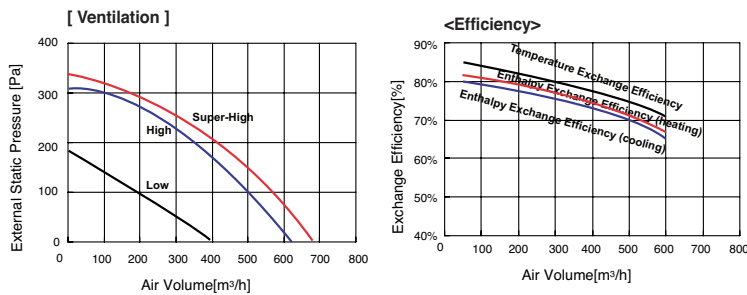
LZ-H025GBA2



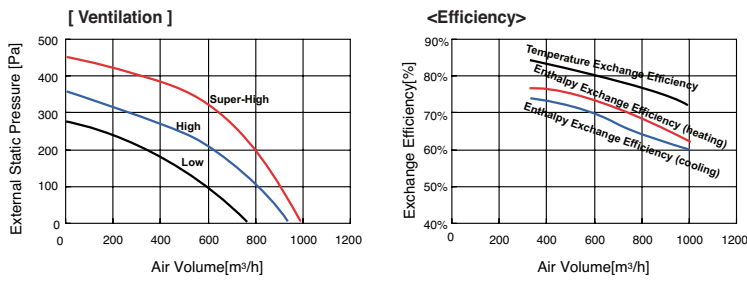
LZ-H035GBA2



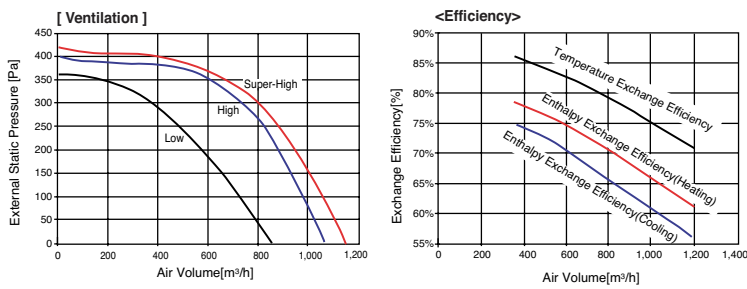
LZ-H050GBA2



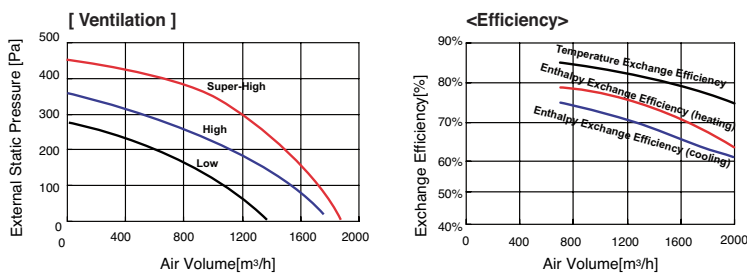
LZ-H080GBA2



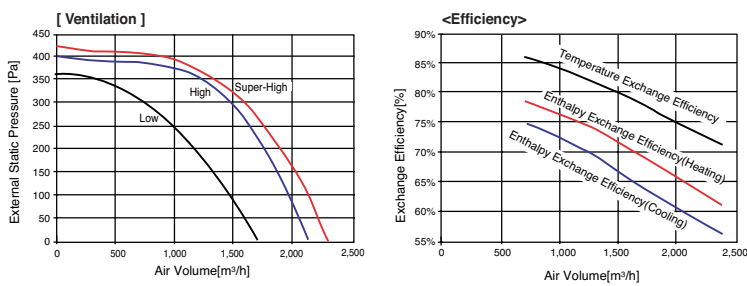
LZ-H100GBA2



LZ-H150GBA2



LZ-H200GBA2



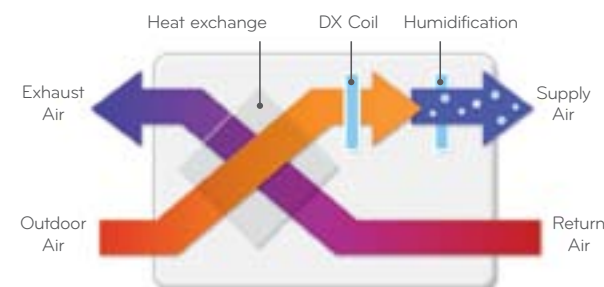
## Providing cool / Warm Fresh air

ECO V DX has some air conditioning functions. During hot season, it can transform outdoor warm air into cool air for indoors, and it can prevent cold draft in winter season by supplying warm air.



## Total Air conditioning Solution

ECO V DX can be used as Total Air Conditioning Solution. It can control condition of incoming air with DX coil and humidifier for making comfortable indoor air. In summer season, ECO V DX controls indoor air condition by cooling and dehumidifying incoming air. And in winter, it can provide warm and comfortable air by heating and humidifying incoming air.



## Interlocking with MULTI V

ECO V DX can be interlocked with MULTI V. It can be controlled individually by wired remote controller connected with MULTI V indoor units.



## LZ-H050GXH0 / LZ-H080GXH0 / LZ-H100GXH0 LZ-H050GXN0 / LZ-H080GXN0 / LZ-H100GXN0

### ECO V DX



## Specifications

| Model                           |                                 | Unit  | LZ-H050GXH0              | LZ-H080GXH0    | LZ-H100GXH0    | LZ-H050GXN0   | LZ-H080GXN0    | LZ-H100GXN0    |
|---------------------------------|---------------------------------|-------|--------------------------|----------------|----------------|---------------|----------------|----------------|
| Fresh air conditioning load     | Cooling                         | kW    | 4.93                     | 7.46           | 9.12           | 4.93          | 7.46           | 9.12           |
|                                 | Heating                         | kW    | 6.73                     | 9.80           | 11.72          | 6.73          | 9.80           | 11.72          |
| Temperature exchange efficiency | SH/H/L                          | %     | 86/86/87                 | 84/84/86       | 82/82/84       | 86/86/87      | 84/84/86       | 82/82/84       |
| Enthalpy exchange efficiency    | Cooling SH/H/L                  | %     | 68/68/69                 | 64/64/66       | 60/60/63       | 68/68/69      | 64/64/66       | 60/60/63       |
|                                 | Heating SH/H/L                  | %     | 76/76/77                 | 74/74/76       | 71/71/73       | 76/76/77      | 74/74/76       | 71/71/73       |
| Air flow rate                   | Heat exchange mode SH/H/L       | CMH   | 500/500/440              | 800/800/640    | 1000/1000/820  | 500/500/440   | 800/800/640    | 1000/1000/820  |
|                                 | Bypass mode SH/H/L              | CMH   | 500/500/440              | 800/800/640    | 1000/1000/820  | 500/500/440   | 800/800/640    | 1000/1000/820  |
| Fan                             | External static pressure SH/H/L | Pa    | 160/120/100              | 140/90/70      | 110/70/60      | 180/150/110   | 170/120/80     | 150/100/70     |
| Humidifier                      | System                          |       | Natural evaporating Type |                |                | -             |                |                |
|                                 | Amount                          | kg/h  | 2.7                      | 4              | 5.4            | -             |                |                |
|                                 | Feed water pressure             | MPa   | 0.02~0.49                | 0.02~0.49      | 0.02~0.49      | -             |                |                |
| Noise Level                     | Heat Exchange mode              | dB(A) | 38/36/33                 | 39/37/34       | 40/38/35       | 39/37/35      | 41/38/36       | 41/39/36       |
|                                 | Bypass mode                     | dB(A) | 39/37/34                 | 40/38/35       | 40/38/35       | 39/37/35      | 41/38/36       | 41/39/36       |
| Refrigerant                     |                                 |       | R410A                    |                |                |               |                |                |
| Power Supply                    |                                 | ØV,Hz | 1,220~240,50             |                |                |               |                |                |
| Power input (nominal)           | Heat exchange mode SH/H/L       | kW    | 0.25/0.2/0.15            | 0.42/0.35/0.25 | 0.48/0.42/0.27 | 0.25/0.2/0.15 | 0.42/0.35/0.25 | 0.48/0.42/0.27 |
|                                 | Bypass mode SH/H/L              | kW    | 0.25/0.2/0.15            | 0.42/0.35/0.25 | 0.48/0.42/0.27 | 0.25/0.2/0.15 | 0.42/0.35/0.25 | 0.48/0.42/0.27 |
| Nominal Running current (RLA)   | Heat exchange mode SH/H/L       | A     | 1.5/1.3/1                | 2.5/2/1.5      | 3.6/3.2/2.3    | 1.5/1.3/1     | 2.5/2/1.5      | 3.6/3.2/2.3    |
|                                 | Bypass mode SH/H/L              | A     | 1.5/1.3/1                | 2.5/2/1.5      | 3.6/3.2/2.3    | 1.5/1.3/1     | 2.5/2/1.5      | 3.6/3.2/2.3    |
| Dimensions                      | WxHxD                           | mm    | 365x1667x1140            |                |                |               |                |                |
| Weight (Net)                    | Liquid                          | kg    | 105                      |                |                | 98            |                |                |
| Pipe connections                | Gas                             | mm    | Ø6.35                    |                |                |               |                |                |
|                                 | Water                           | mm    | Ø12.7                    |                |                |               |                |                |
|                                 | Drain                           | mm    | Ø6.35                    |                |                | -             |                |                |
|                                 |                                 | mm    | Ø25.4                    |                |                |               |                |                |
| Connection duct diameter        |                                 | mm    | Ø250                     |                |                |               |                |                |
| Remote Controller               |                                 |       | PQRCVSLO / PQRCVSLOQW    |                |                |               |                |                |
| Dry Contact (1 contact point)   |                                 |       | PQDSB / PQDSB1           |                |                |               |                |                |
| Dry Contact (2 contact point)   |                                 |       | PQDSBC                   |                |                |               |                |                |










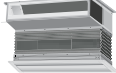






















### Notes:

- Noise level :
  - The operating conditions are assumed to be standard.
  - Sound measured at 1.5m below the center of the body.
  - Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of particular room in which the equipment is installed.

| Wired remote controller |               |
|-------------------------|---------------|
| Standard type           | Standard type |
|                         |               |
| PQRCVSLO                | PQRCVSLOQW    |



FUNCTION ICON





















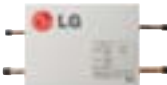

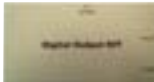
|  |   | Gallery   | Mirror  | Standard  | Wall mounted   | Console   | 4way<br>Cassette  |  | 2 way<br>Cassette   | 1 way<br>Cassette   | Low Static  | Built-in  | High Static   | Ceiling &<br>Floor  | Ceiling<br>Suspended  | Floor<br>Standing   |
|--|---|---|---|---|--|---|---|--|---|---|---|---|---|---|---|---|
|  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NEO Plasma<br>Air Purifying System                       |    | ●   | ●   | ●   | ●  |   | ●   |  | ●   | ●   |   |   |   |   |   |   |
| Jet Cool   |    | ●   | ●   | ●   | ●  | ●   | ●   |  | ●   | ●   |   |   |   | ●   | ●   |   |
| Healthy Dehumidification                                 |    | ●   | ●   | ●   | ●  | ●   | ●   |  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |
| Hot Start (Heat pump only)                               |    | ●   | ●   | ●   | ●  | ●   | ●   |  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |
| Child Lock Function<br>(Wired remote controller only)    |    | ●   | ●   | ●   | ●  | ●   | ●   |  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |
| Soft Dry Operation Mode                                  |    |   |   | ●   | ●  | ●   | ●   |  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |
| Low Standby Power  |  | ●   | ●   | ●   | ●  | ●   | ●   |  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |
| Group Control<br>(Wired remote controller only)          |  | ●   | ●   | ●   | ●  | ●   | ●   |  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |
| Auto Changeover<br>(MULTI V SYNC model only)             |  | ●   | ●   | ●   | ●  | ●   | ●   |  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |
| Auto Clean   |  | ●   | ●   | ●   | ●  |   |   |  | ●   | ●   |   |   |   |   |   |   |
| Sleep Mode<br>Auto Operation                             |  | ●   | ●   | ●   | ●  | ●   | ●   |  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |
| Auto Restart   |  | ●   | ●   | ●   | ●  | ●   | ●   |  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |
| 4-Way Air Deflection                                     |  |   |   |   |  |   | ●   |  | ●   | ●   |   |   |   |   |   |   |
| Swirl Swing  |  | ●   | ●   |   | ●  | ●   | ●   |  | ●   |   |   |   |   |   |   |   |
| Weekly Program<br>(Wired remote controller only)         |  | ●   | ●   | ●   | ●  | ●   | ●   |  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |
| Two Thermistor Control<br>(Wired remote controller only) |  | ●   | ●   | ●   | ●  | ●   | ●   |  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |
| Changable Panel  |  | ●   |   | ●   | ●  |   | ●   |  | ●   | ●   |   |   |   |   |   |   |
| Second Remote Control                                    |  | ●   | ●   | ●   | ●  | ●   | ●   |  | ●   | ●   | ●   | ●   | ●   | ●   | ●   | ●   |

**V-NET** & Accessory

110 Remote Controller    114 Central Controller    128 Accessory



LG Commercial Air Conditioners  
2012 **V-NET** Line-up

| Remote Controller  |   |  | Central Controller   |   | Central Controller  |   |   |   | Electronic Accessory  |  |
|--|---|--|--|---|---|---|---|---|---|--|
| Wired Remote Controller  |   |  | Wireless Remote Controller   | Simple Controller   | AC Smart II, Option Kit & 128 Units Expansion Kit   | ACP & AC Manager  | Building Network Unit   | AHU Application Kit   | PI 485 & DO Kit   | PDI,<br>Dry Contact,<br>Variable Water Flow Control Kit,<br>Independent Power Module,<br>CO2 Sensor,<br>Cool/Heat Selector,<br>Suction Grille / Canvas,<br>Auto Elevation Grille,<br>Plasma Kit,<br>Ventilation Kit (Fresh Kit) for New Cassette,<br>Cassette Cover,<br>Air Guide,<br>Refrigerant charging Kit,<br>Drain Pan,<br>Stopper Valves,<br>Heat Recovery Unit,<br>Y Branch and Header Branch,<br>Piping Accessory |
| Standard   | Deluxe  | Simple   |  |   |   |   |   |   |   |  |
| <div></div> <p>PQRCVSLO</p> <div></div> <p>PQRCVSLOQW</p> | <div></div> <p>PQRCUDSO<br/>(White)</p> <div></div> <p>PQRCUDSOB<br/>(Blue)</p> <div></div> <p>PQRCUDSOS<br/>(Silver)</p> | <div></div> <p>PQRCVCLOQ<br/>(Black/Simple)</p> <div></div> <p>PQRCVCLOQW<br/>(White/Simple)</p> <div></div> <p>PQRCHCAOQ<br/>(Black/Simple for Hotel)</p> <div></div> <p>PQRCHCAOQW<br/>(White/Simple for Hotel)</p> | <div></div> <p>PQWRHDFO</p> | <div></div> <p>AC EZ<br/>PQCSZ250SO</p> | <div></div> <p>AC Smart II<br/>PQCSW320A1E</p> <div></div> <p>Option Kit<br/>PQCSE341AO<br/>PQCSE342AO</p> <div></div> <p>Expansion Kit<br/>PQCSE440UO</p> | <div></div> <p>PQCPA11AOE<br/>(Without IO)<br/>PQCPB11AOE<br/>(With IO)<br/>PQCSS520AOE<br/>(AC Manager)</p> | <div></div> <p>PQNFB16A1<br/>(LONWORKS®)</p> <div></div> <p>PQNFB17B0<br/>(BACnet/Modbus)</p> | <div></div> <p>Comm. kit<br/>PRCKAO</p> <div></div> <p>EEV kit<br/>PRLK048AO</p> <div></div> <p>Control kit<br/>PRCKD20E<br/>PRCKD40E</p> <div></div> <p>Expansion kit<br/>PATX13AOE<br/>PATX20AOE<br/>PATX25AOE<br/>PATX35AOE<br/>PATX50AOE</p> | <div></div> <p>PI 485<br/>PMNFP14A1<br/>PMNFP14AO<br/>PHNFP14AO<br/>PSNFP14AO</p> <div></div> <p>DO Kit<br/>PQNFP00TO</p> |  |

Outdoor Unit\_MULTI V series

Indoor Unit\_MULTI V series

Hydro Kit

eco V.

V-NET & Accessory



PQRCVSL0 / PQRCVSL0QW

Standard Wired Remote Controller

Providing easy control of one or a group of indoor units to various applications.



PQRCVSL0  
(Black)



PQRCVSL0QW  
(White)

For Air conditioner FEATURES

| PQRCVSL0 / PQRCVSL0QW                                       |  |
|---|--|
| Operating mode  | On/Off / Fan speed / Mode / Temp.          |
| Max. no. of indoor units                                    | 16 indoor units                            |
| On / Off LED  | ✓  |
| Room temp.  | ✓  |
| Fan / Plasma / Swirl / Heater                               | ✓  |
| Vane control(Louver direction) / Auto swing / Fan auto      | ✓  |
| E.S.P function  | ✓  |
| Reservation   | On/Off / Weekly / Simple / Sleep / Holiday |
| Timer function  | ✓  |
| Child lock  | ✓  |
| Electric failure compensation                               | Max 3 hours                                |
| Wireless remocon receiver                                   | ✓  |
| Main/Sub setting of indoor units<br>(For override function) | ★  |
| 2 Controllers to 1 indoor unit                              | ★  |
| Group and central control at the same time                  | ★  |
| Ventilation mode setting                                    | ☆  |
| Rapid ventilation   | ☆  |
| Power saving ventilation                                    | ☆  |
| Size(mm)  | 120 x 120 x 15                             |
| Backlight Unit  | ★  |

★ Applicable for MULTI V II and III series.  
☆ Applicable for ECO V II series.  
※ Terminal Block included. (Applied to models produced since '10 Nov.)  
※ Compatible with SCAC models connected to wired remote controllers.  
※ Refer to each model PDB for applicable models.

PQRCUDS0 / PQRCUDS0B / PQRCUDS0S

Deluxe Wired Remote Controller

Touch screen with a premium design for excellence in appealing interiors.



PQRCUDS0  
(White)



PQRCUDS0B  
(Blue)



PQRCUDS0S  
(Silver)

FEATURES

| PQRCUDS0 / PQRCUDS0B / PQRCUDS0S            |                                   |
|---|-----------------------------------|
| Operating mode                              | On/Off / Fan speed / Mode / Temp. |
| Touch screen / LCD back.light               | ✓                                 |
| Room temp                                   | ✓                                 |
| Fan / Plasma / Swirl / Heater               | ✓                                 |
| Vane control(Louver direction) / Auto swing | ✓                                 |
| E.S.P function                              | ✓                                 |
| Reservation                                 | Weekly / Simple                   |
| Timer function                              | ✓                                 |
| Child lock                                  | ✓                                 |

※Refer to each model PDB for applicable models.

PQRCVCL0Q(Black) / PQRCVCL0QW(White)  
PQRCHCA0Q(Black) / PQRCHCA0QW(White)

Simple Wired Remote Controller

A simple way to control office or hotel applications in a compact design.



FEATURES

|                | PQRCVCL0Q / PQRCVCL0QW                      | PQRCHCA0Q / PQRCHCA0QW                |
|----------------|---|---------------------------------------|
| Operation mode | On/Off / Fan speed / Mode / Temp.           | On/Off / Fan speed / Temp.            |
| Room temp      | ✓   | ✓                                     |
| Child lock     | ✓   | ✓                                     |
| Mode change    | Cooling / Heating / Fan / Dehumidify / Auto | Only changeable by central controller |
| Back Light     | ✓   | ✓                                     |

※Compatible with SCAC models connected to wired remote controllers.  
※Refer to each model PDB for applicable models.

PQWRHDF0

Wireless Remote Controller

Wireless control to operate air conditioners more conveniently.



FEATURES

|   | PQWRHDF0                         |
|---|----------------------------------|
| Operating mode  | On/Off / Fan speed / Mode / Temp |
| Room temperature checking                                     | ✓                                |
| Chaos swing / Jet cool  | ✓                                |
| On/Off timer  | ✓                                |
| Sleep mode auto   | ✓                                |
| Main / Sub setting of indoor units<br>(For override function) | ★                                |

★Applicable for MULTI V II and III series.  
※Refer to each model PDB for applicable models.

MODEL NAME & APPLICABLE MODELS

|          | Type | CST, SRAC, CVT, Duct, Floor Standing |
|----------|------|--------------------------------------|
| PQWRHDF0 | H/P  | ✓                                    |

※Combination with other remote controllers for various indoor units.

PQCSZ250S0

AC EZ

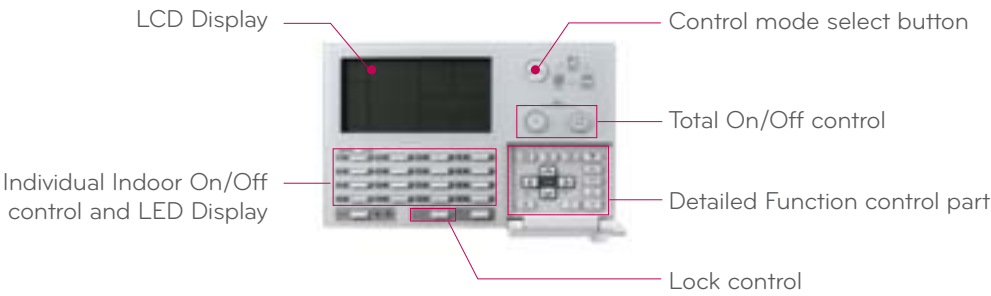
In addition to On/Off control, more functions such as operation mode, fan speed, and scheduling can be run and monitored.



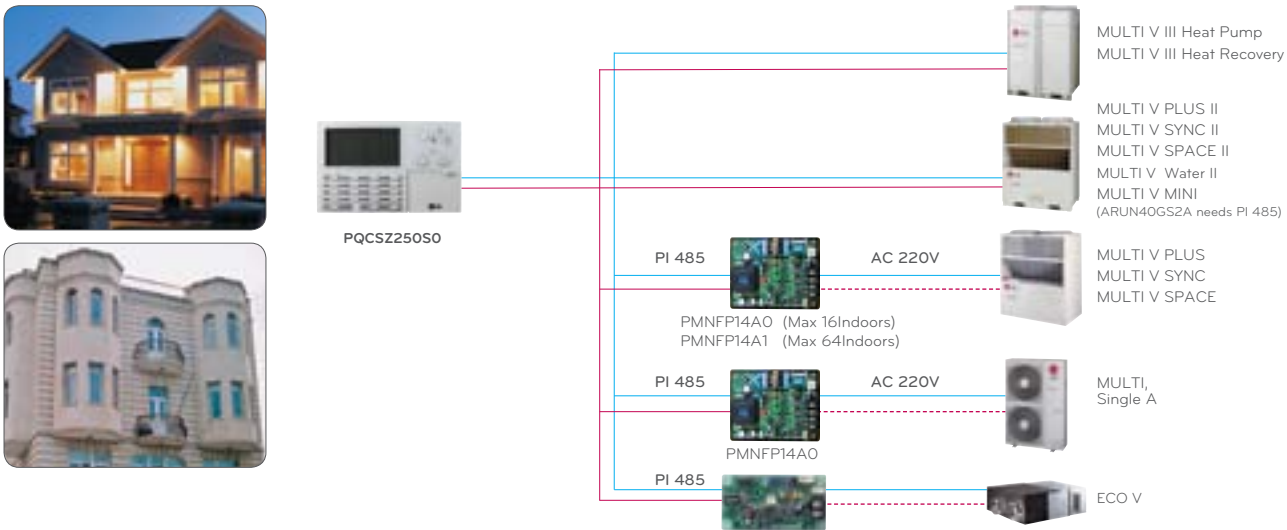
FEATURES (For LGAP applied models)

|                                       | PQCSZ50S0   |
|---------------------------------------|---|
| Max. Indoor unit to control           | 32 Indoor Units                                   |
| Individual Control                    | On/Off / Operation Mode / Fan Speed / Temp        |
| Lock function                         | Central   |
| Mode change                           | Cooling / Heating / Fan / Dehumidification / Auto |
| Schedule                              | 8 event schedule/day                              |
| Ventilation control                   | On/Off / Ventilation Mode / Rapid Ventilation     |
| Display(All Indoor status indication) | Operation, Set temp, Room Temp, Schedule          |
| Dimension(mm)                         | 190x120x17  |
| Power(V)                              | DC 12V  |

NAME AND DESCRIPTION OF THE SYSTEM



COMBINATION



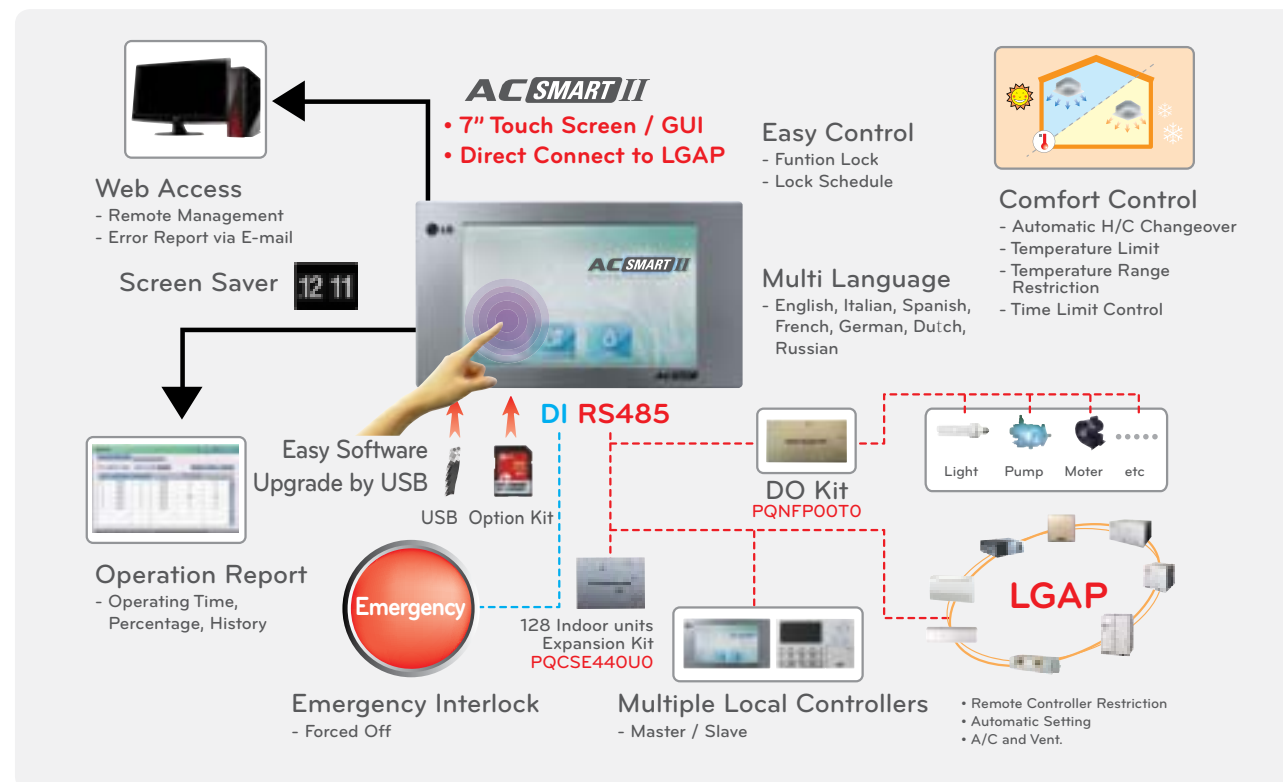
# AC Smart II : PQCSW320A1E 128 Units Expansion Kit : PQCSE440U0 Option Kit : PQCSE341A0 / PQCSE342A0

## AC SMART II Option Kit & 128 Units Expansion Kit

Interactive interface with attractive LCD touch screen for control of 64 up to 128 indoor units via PC and web access.



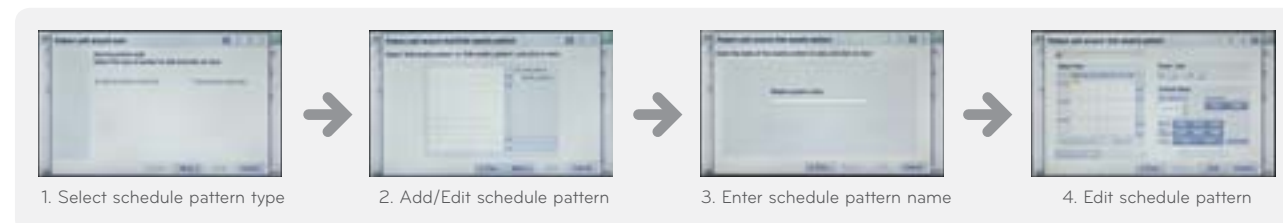
### AC Smart II (For LGAP applied models)



### FEATURES

#### Schedule Wizard Function

Schedule pattern wizard is the process of configuring the operation of the unit in weekly or daily pattern. The pattern created through the schedule pattern wizard can be applied to the group as a schedule through schedule wizard to be described in the next section.



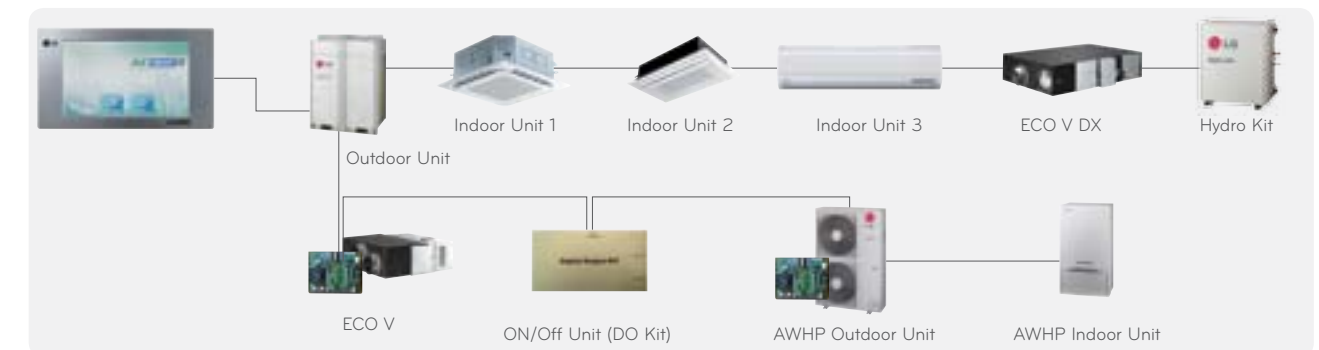
#### New GUI

It is more easy to use and control the products.



#### AWHP / ECO V DX unit control

It is possible to control the unit (Indoor unit, ventilator, On/Off, AWHP, ECO V DX) and register the units.



#### Option Kit control

AC Smart II additionally provides various convenient option functions for the users to use. (You must purchase Option Kit separately.)



#### AC Smart II Option Kit model name : PQCSE341A0 / PQCSE342A0

##### • Description

AC Smart II additionally provides various convenient option functions for the users to use. These additional functions are provided in SD card format. When the user inserts the SD card to the main unit of the AC Smart II, the option function can be activated and used.

##### • Option Function

- Web schedule + Power consumption statistics function (PQCSE342A0)
- Web schedule function (PQCSE341A0)

##### • Web based schedule setting function

By using the web server function of AC SMART II, you can set and apply the schedule of AC SMART II even from remote locations. The administrator can manage the schedule of AC SMART II through the network free from location and reduce any unnecessary operations of the unit by using the schedule functions.

##### • Power consumption statistics function

You can view the power consumption information of the air conditioner. The power consumption is provided in various methods including total usage, usage by period, monthly/daily usage etc. By using the statistics information, the administrator can effectively analyze and manage the energy usage. To use the power consumption statistics function, the PDI and watt-meter to measure the power consumption must be connected to AC SMART II.



PQCPA11A0E(Without IO)  
PQCPB11A0E(With IO)



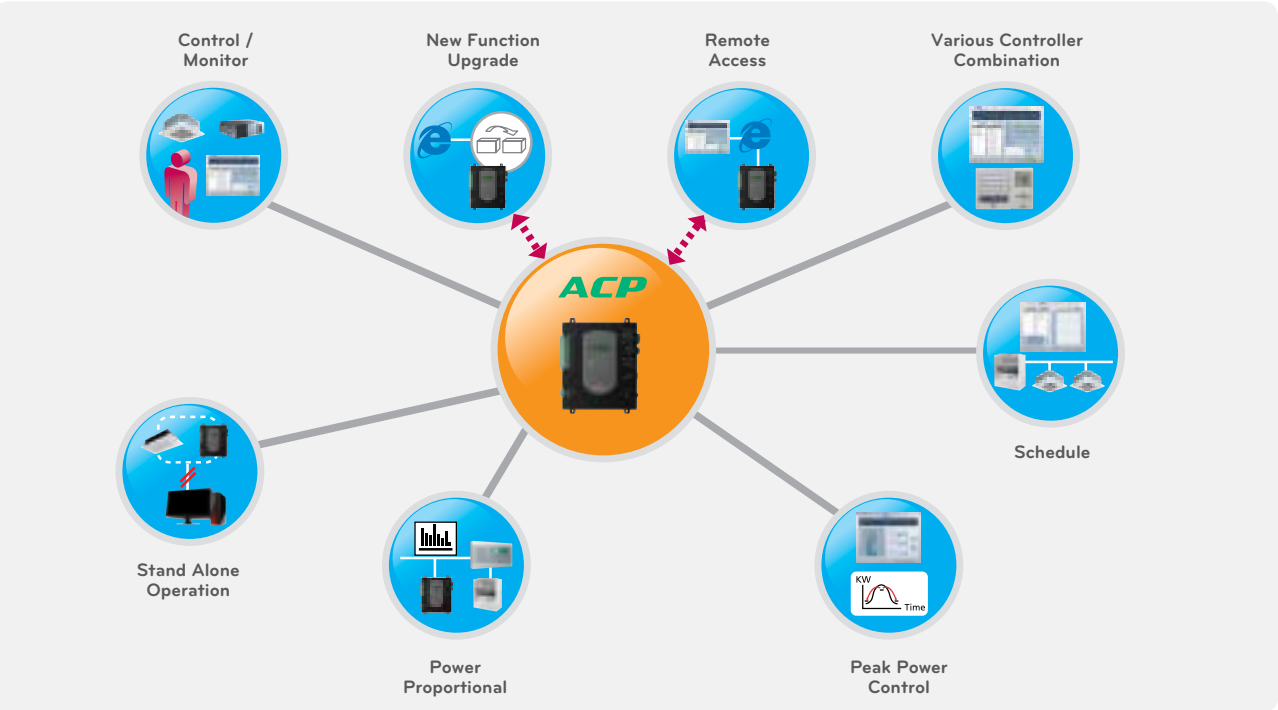
With its Linux based web server, users can control up to 256 indoor units or 128 ECO V units for functions such as temperature setting, schedule, peak, power control, etc.



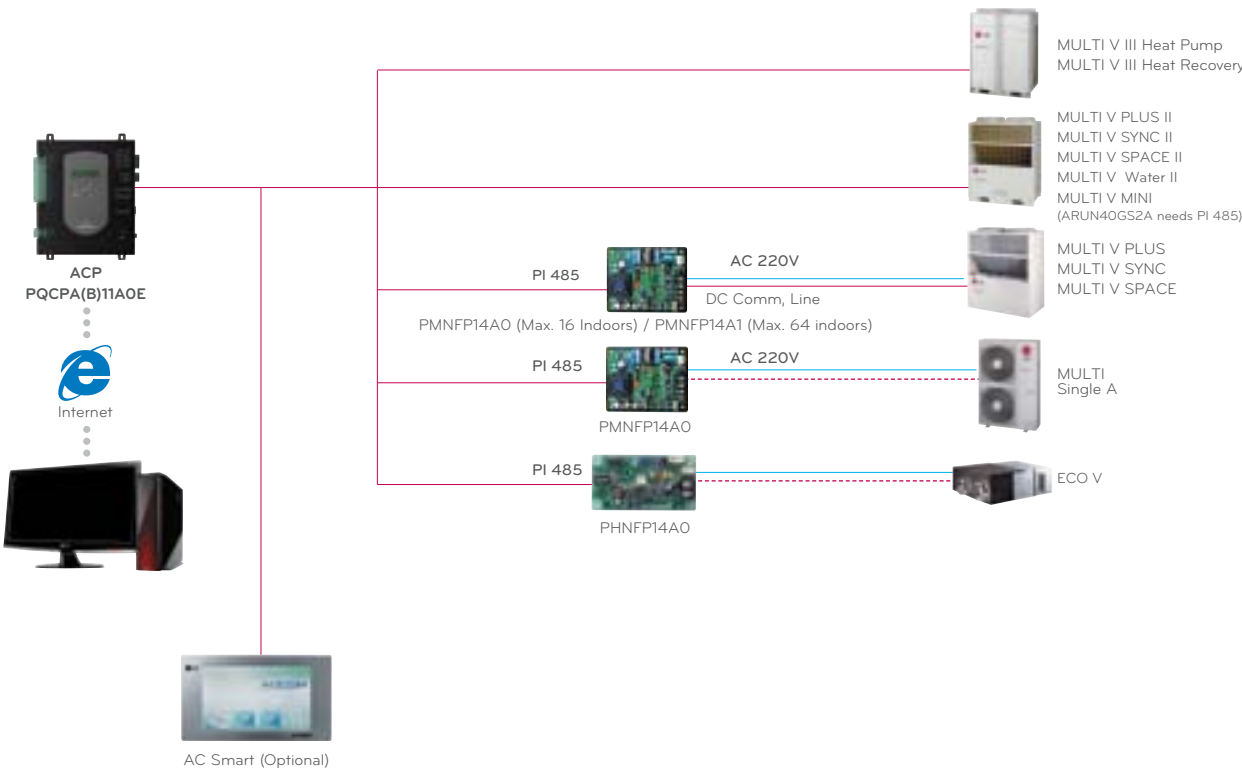
FEATURES (For LGAP applied models)

| PQCPA(B)11A0E                 |                    |
|-------------------------------|--------------------|
| Max.no. of indoor units       | 256 indoor units   |
| Control / Monitoring          | ✓                  |
| Schedule management           | ✓                  |
| Lock function                 | Temperature        |
| Temperature range restriction | 18°C ~ 30°C        |
| Temperature limit function    | ✓(AC Manager only) |
| Auto Changeover function      | ✓(AC Manager only) |
| History function              | Error history      |
| Peak control                  | ✓                  |
| PDI monitoring                | Need of PDI        |
| Interlocking function         | -                  |
| Printing function             | -                  |
| Auto Address Setting Function | -                  |
| Statistics function           | ✓                  |
| Time limit function           | -                  |
| ECO V DX Control              | ✓                  |
| Peak Priority funtion         | -                  |
| Cycle Data Monitoring         | -                  |

ACP (For LGAP applied models)



COMBINATION



PQCSS520A0E

ACMANAGER

Provides efficient control and monitoring system for up to 4,096 indoor units by connecting 16 ACPs.



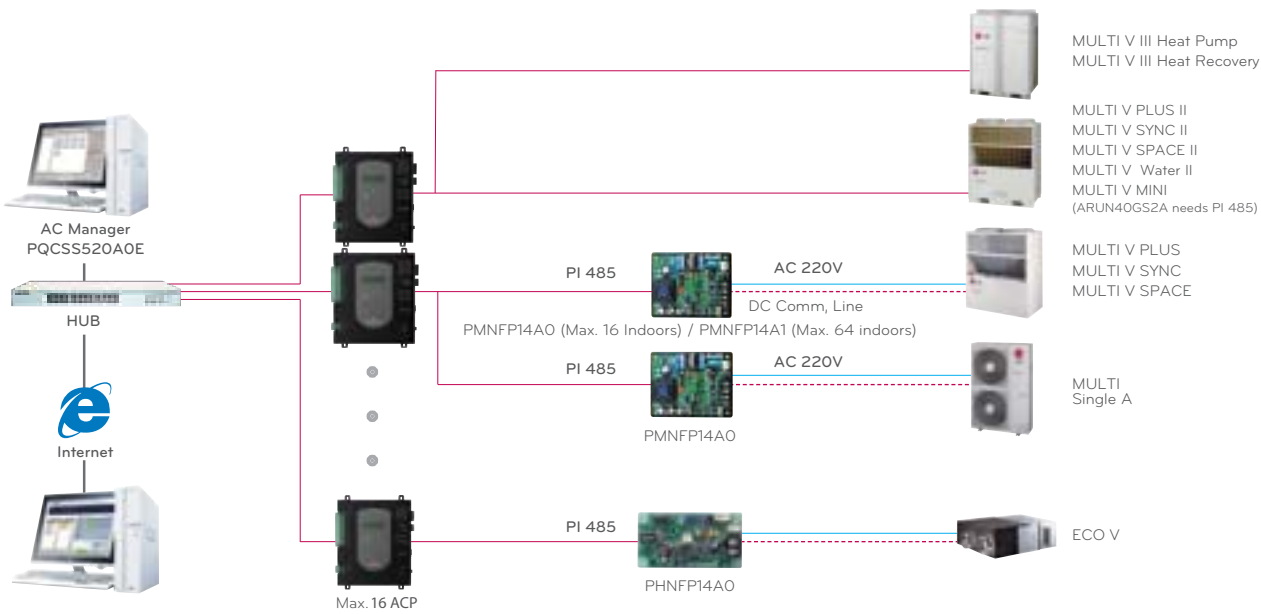
FEATURES

| PQCPA(B)11A0E+PQCSS520A0E     |                            |
|-------------------------------|----------------------------|
| Max.no. of indoor units       | 4,096 indoor units(16 ACP) |
| Control / Monitoring          | ✓                          |
| Schedule management           | ✓                          |
| Lock function                 | Mode/Temp/Fan speed/Total  |
| Temperature range restriction | ✓                          |
| Temperature limit function    | ✓                          |
| Auto Changeover function      | ✓                          |
| History function              | Monitoring & Error history |
| Peak control                  | ✓                          |
| PDI monitoring                | Need of PDI                |
| Printing function             | ✓                          |
| Statistics function           | ✓                          |
| Time limit function           | -                          |
| ECO V DX Control              | -                          |
| Peak Priority function        | -                          |
| Cycle Data Monitoring         | -                          |
| Interlocking function         | Only PQCPB11A0E            |
| AHU Control Function          | -                          |
| AWHP                          | -                          |
| DO Kit                        | -                          |

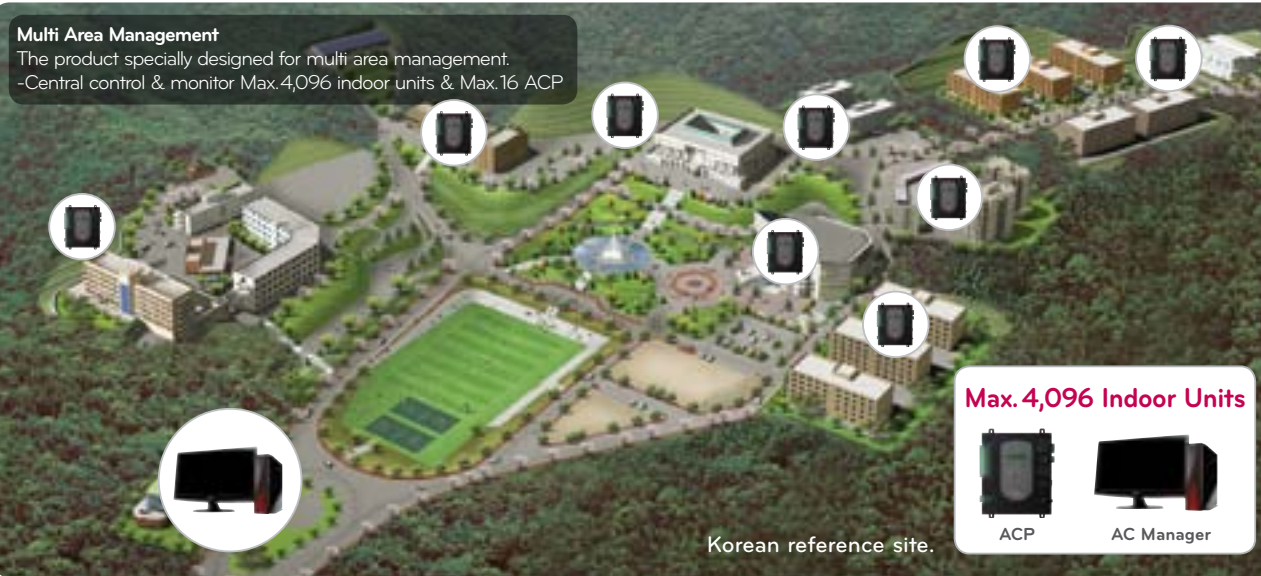
ACP & AC MANAGER



COMBINATION AC MANAGER (Installation with ACP)



ACP & AC MANAGER APPLICATION



# PQNFB16A1

## BNU-LW Gateway (Building Network Unit- LONWORKS®)



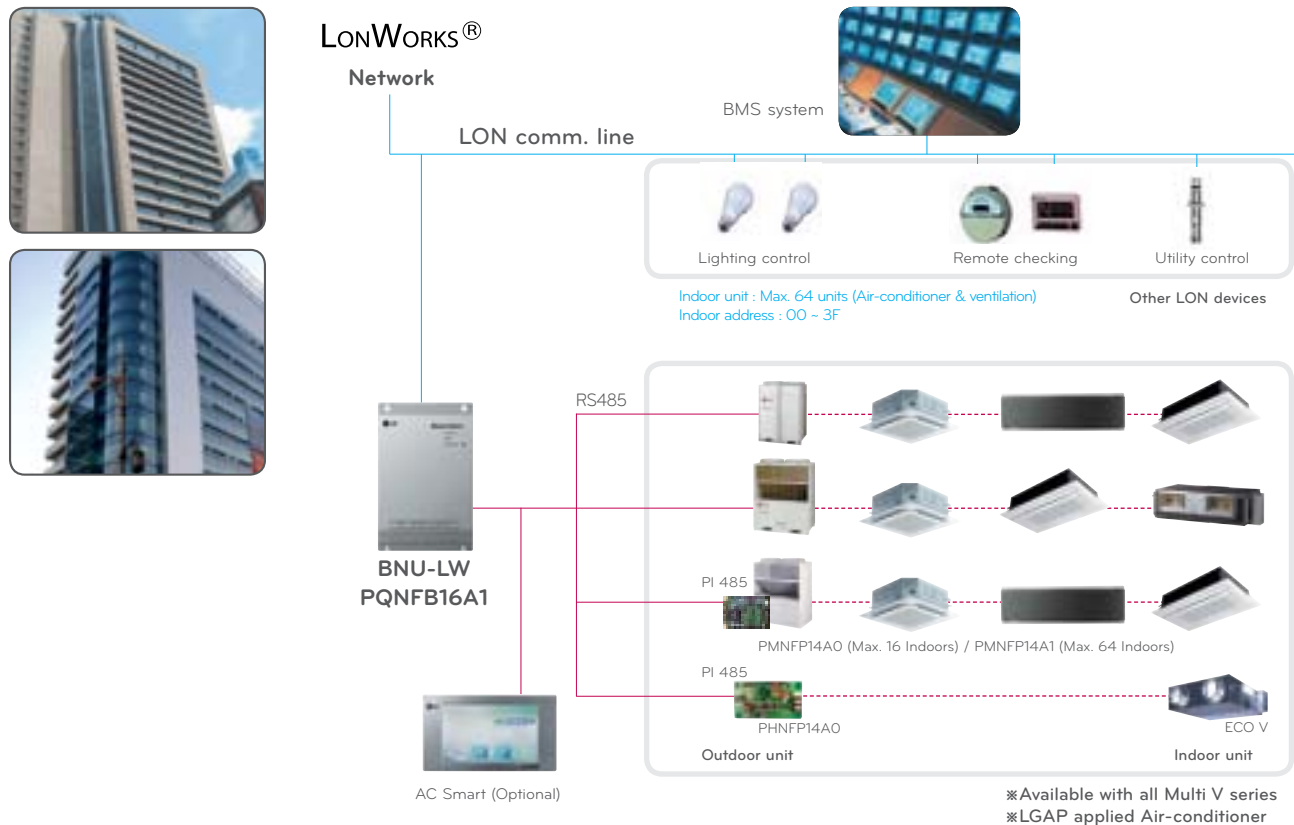
- Easy interface between BMS and LG Air-conditioner
- LonMark certified
  - Independence of BMS under the standard BMS
    - Operation system based on LNS( LONWORKS® Network Service)

### FEATURES (For LGAP applied models)

- Connection to LONWORKS® using LONTALK protocol and LG Air-conditioner protocol
- Process ability
  - 64 units (A/C, ECO V)
  - Valid address for each unit : 0x00 ~ 0x3F
- Self installation verification function using internet (Web server included)
  - Setting gateway
  - Diagnosis of communication status on LG Air-conditioner network
- Connection to remote total management system (LG system)
- LonMark International certified.

| Controlling                             | Monitoring items                              |
|---|---|
| On/Off command                          | On/Off status report                          |
| Operation mode setting                  | Operation mode status report                  |
| Fan Speed setting                       | Fan Speed status report                       |
| Lock setting                            | Lock status report                            |
| Air flow setting                        | Air flow status report                        |
| Set temp. setting                       | Set temp. status report                       |
| User mode setting (for only ventilator) | Current Space temp. status report             |
|   | Error status report                           |
|   | User mode status report (for only ventilator) |

### COMBINATION



# PQNFB17B0

## BNU-BN Gateway (Building Network Unit- BACnet )



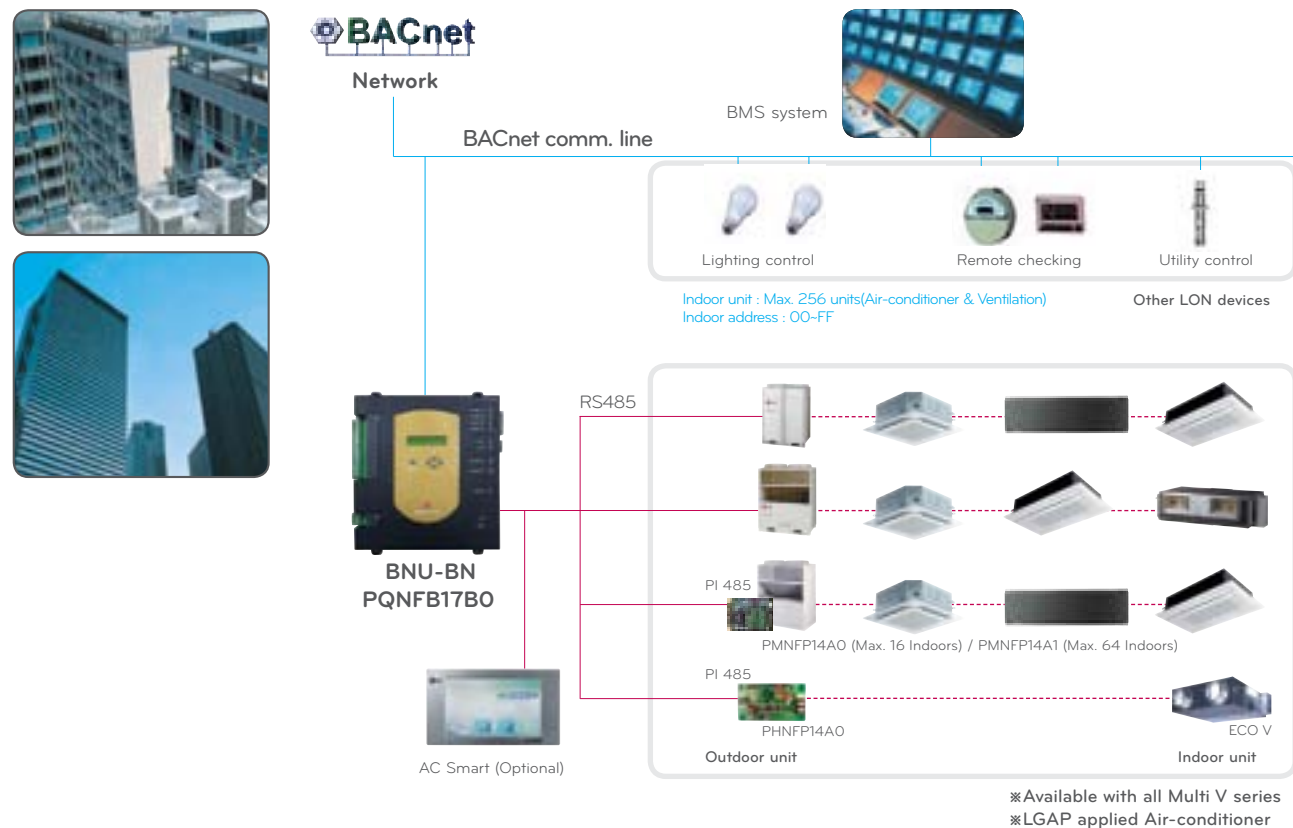
- Easy interface between BMS and LG Air-conditioner
- BTL certified
  - Independence of BMS under the standard BMS.
    - Operation system based on BACnet Service.

### FEATURES (For LGAP applied models)

- Through embedded web control function in BACnet one can access the airconditioner and external devices through internet.
- It can control 256 indoor units. (A/C, ECO V or ECO V DX)
- External devices such as fire alarm, motion detector can be connected to gateway and their function can be interlinked with airconditioner operation.
- Tested by an official BACnet Testing Laboratory for BTL Mark.
- Support Modbus-TCP Protocol between BMS and BACnet gateway.

| Controlling                               | Monitoring items                                |
|---|---|
| On/Off command                            | On/Off status report                            |
| Operation mode setting                    | Operation mode status report                    |
| Fan Speed setting                         | Fan Speed status report                         |
| Lock setting                              | Lock status report                              |
| Air flow setting                          | Air flow status report                          |
| Set temp. setting                         | Set temp. status report                         |
| User mode setting (for only ventilator)   | Current Space temp. status report               |
|   | Error status report                             |
|   | User mode status report (for only ventilator)   |
|   | Accumulator power distribution status report    |
| Upper limit temp. setting                 | Upper limit temp. status report                 |
| Low limit temp. setting                   | Low limit temp. status report                   |
| Mode lock setting                         | Mode lock status report                         |
| AC operation mode setting (ECO V DX only) | AC operation mode status report (ECO V DX only) |
| AC On/Off command (ECO V DX only)         | AC On/Off status report (ECO V DX only)         |

### COMBINATION





# PRCKA0 / PRLK048A0

## AHU Comm. kit & EEV kit

To connect air handling unit for mid & large space and supply fresh air.  
Connectable capacity is from 28 kbtu/h ~96kbtu/h.

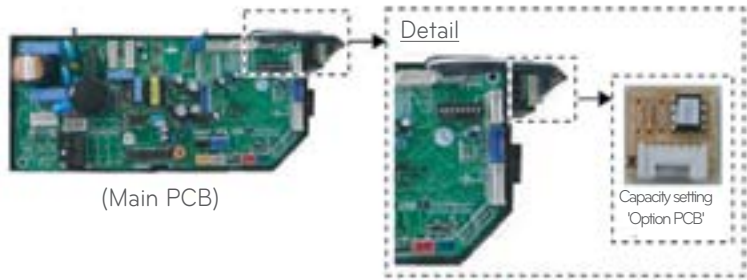


### SPECIFICATION

| Model Name |           | Weight(kg) |       | Dimension(mm) |     |     | POWER                  |
|------------|-----------|------------|-------|---------------|-----|-----|------------------------|
|            |           | NET        | Gross | W             | H   | D   |                        |
| Comm.Kit   | PRCKA0    | 2.2        | 3.6   | 280           | 135 | 280 | 220~240V, 50/60Hz, 1Ph |
| EEV Kit    | PRLK048A0 | 3.1        | 3.6   | 404           | 83  | 217 |                        |

### SELECTION OF EVAPORATOR

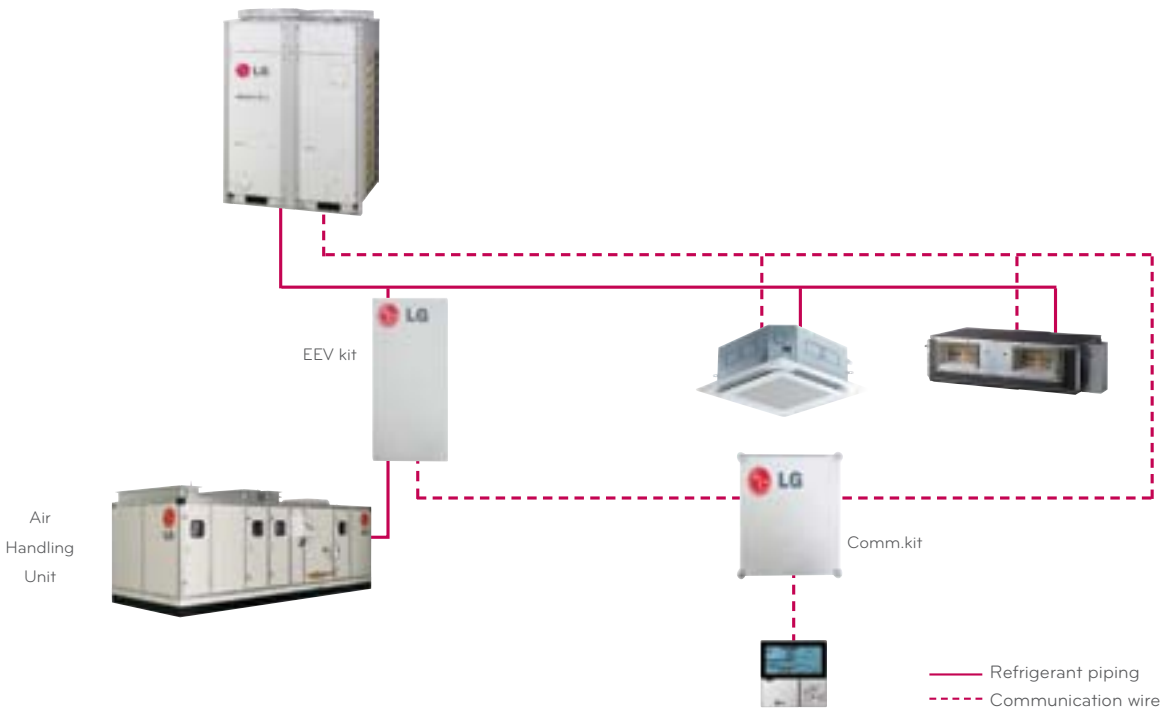
- When selecting evaporator, change 'Option PCB' in Control kit according to below table (Basic 'Option PCB' is for 36k Btu/h)



| Option PCB P/No | Capacity (Btu/h) | Standard heat exchanger Volume(10 <sup>-3</sup> × m <sup>3</sup> ) | Maximum heat exchanger capacity(kW) | Air flow rate (CMM) |
|-----------------|------------------|--|-------------------------------------|---------------------|
| EBR52358907     | 28k              | 5.8  | 8.6                                 | 22~26               |
| EBR52358908     | 36k              | 9.8  | 11.0                                | 25~32               |
| EBR52358909     | 42k              | 20.9   | 13.8                                | 31~35               |
| EBR52358910     | 48k              | 20.9   | 15.4                                | 33~45               |
| EBR52358911     | 76k              | 40.4   | 22.2                                | 50~64               |
| EBR52358912     | 96k              | 53.8   | 28.1                                | 64~72               |

※ Saturated Suction Temperature (SST) = 6°C, SH (Superheat) = 5K, Air Temperature = 27°C DB / 19°C WB.

### WIRING DIAGRAM



PRCKD20E / PRCKD40E

AHU Control kit

AHU have functions such as cooling, heating, humidification, air cleansing and ventilation to provide various solutions.



SPECIFICATION

| Model Name  |          | Weight(kg) |       | Dimension(mm) |     |     | POWER                   | Model Feature  |
|-------------|----------|------------|-------|---------------|-----|-----|-------------------------|--|
|             |          | NET        | Gross | W             | H   | D   |                         |  |
| Control Kit | PRCKD20E | 43.5       | 48    | 600           | 750 | 285 | 220~240V, 50/ 60Hz, 1Ph | • AHU Controller<br>• ODU Comm. PCB<br>• Sensor Power Supply |
|             | PRCKD40E |            |       |               |     |     |                         | 1~4 Set ODU Combine<br>5~8 Set ODU Combine                   |

PATX13A0E / PATX20A0E /  
PATX25A0E / PATX35A0E / PATX50A0E

AHU Expansion kit

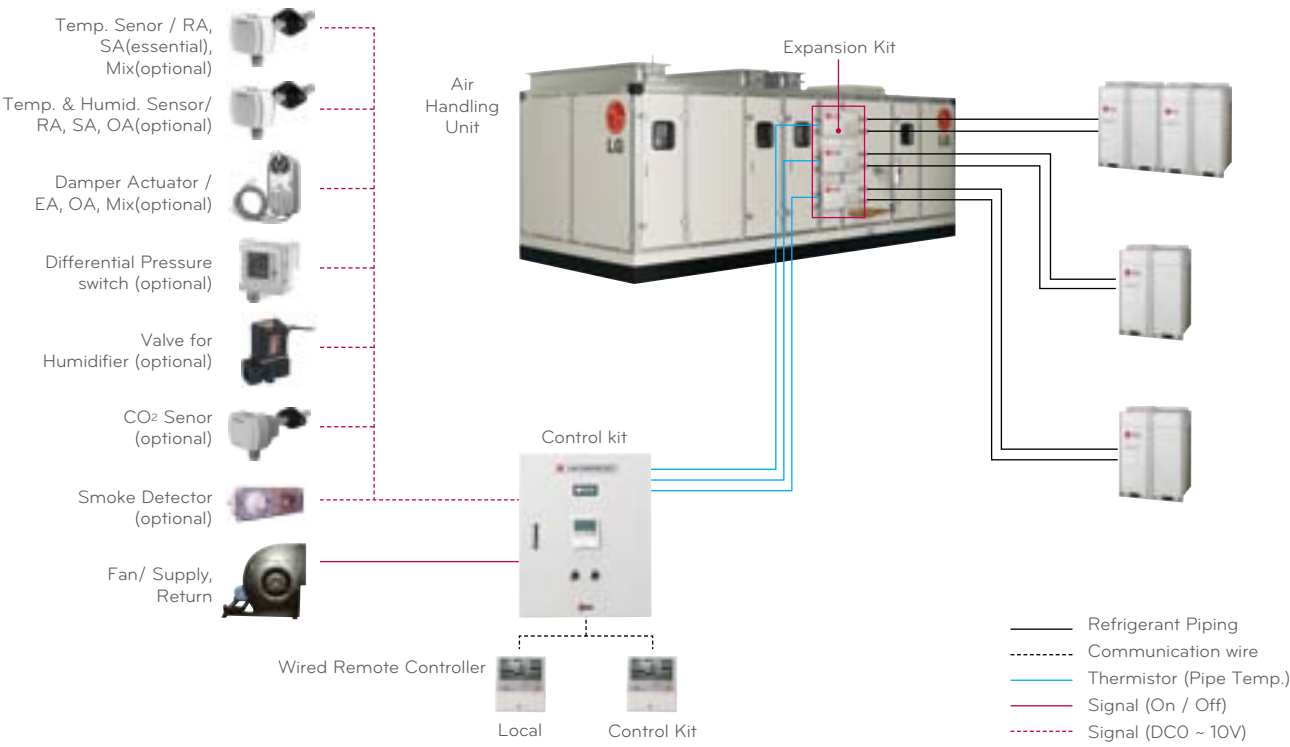
AHU have functions such as cooling, heating, humidification, air cleansing and ventilation to provide various solutions.



SPECIFICATION

| Model Name  |           | Weight(kg) |       | Dimension(mm) |     |     | Model Feature                       |
|-------------|-----------|------------|-------|---------------|-----|-----|-------------------------------------|
|             |           | NET        | Gross | W             | H   | D   |                                     |
| Control Kit | PATX13A0E | 5.6        | 6.9   | 238           | 169 | 491 | • ODU Capacity : 8~16HP(23~46kW)    |
|             | PATX20A0E | 5.8        | 7.1   |               |     |     | • ODU Capacity : 18~26HP(52~75kW)   |
|             | PATX25A0E | 6.0        | 7.3   |               |     |     | • ODU Capacity : 28~36HP(82~104kW)  |
|             | PATX35A0E | 6.2        | 7.5   |               |     |     | • ODU Capacity : 38~46HP(110~133kW) |
|             | PATX50A0E | 8.5        | 10.0  | 291           | 192 | 561 | • ODU Capacity : 48~56HP(139~163kW) |

1.4 SYSTEM LAYOUT



PMNFP14A1 / PMNFP14A0  
PHNFP14A0 / PSNFP14A0

## PI 485

PI 485 converts the air conditioner's protocol to the RS485 protocol for central controller.



## PI 485 LINE-UP



- Model name : PMNFP14AO
  - Power : Single phase AC 220V 50/60Hz
- ※ For outdoor unit. (16 units)



- Model name : PMNFP14A1
  - Power : Single phase AC 220V 50/60Hz
- ※ For outdoor unit. (64 units)



- Model name : PHNFP14AO
  - Power : Connected with the indoor units
- ※ For indoor unit without outdoor PCB communication. (Duct, Convertible, ECO V)



- Model name : PSNFP14A0
  - Power : Connected with the indoor units
- ※ For indoor unit without outdoor PCB communication. (RAC, P00AH, Cassette)
- ※ Provided with a case to be installed on the exterior.

\* MULTI V II & III series don't need any other PI 485 because MULTI V II & III series have PI 485 in its outdoor unit PCB.

PQNFP00T0

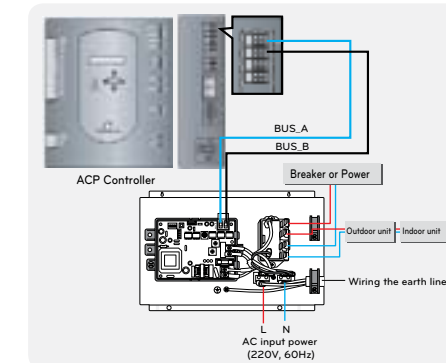
## DO Kit

Connected between ACP (AC Smart) and external devices,  
which can turn On/Off devices such as light, pump, motor, etc.



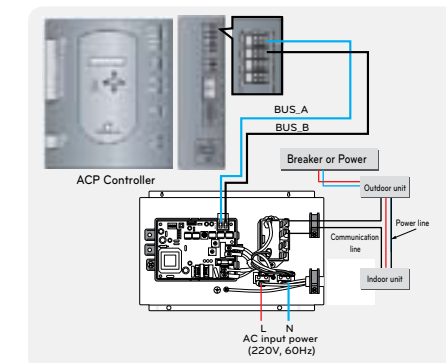
## WIRING DIAGRAM

**When the product input is less or equal to 25A**  
(The air conditioner is controlled by turning On/Off the power supply line of the product.)



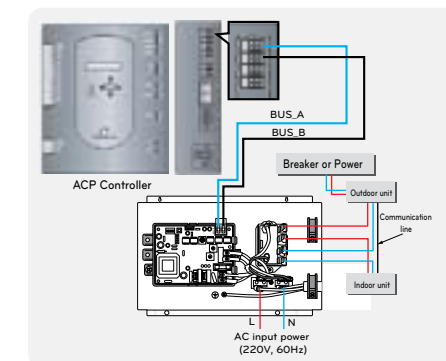
1. Pull out the power or shut down the breaker.
2. Connect the power line from the breaker to the additional relay cable.
3. Connect to the outdoor unit power line and the additional relay cable.
4. Finish the connected area with the insulating tape.

**When the product input is greater or equal to 25A**  
(The air conditioner is controlled by turning On/Off the indoor/outdoor communication line.)



1. Pull out the power or shut down the breaker.
2. Cut the indoor/outdoor unit communication line.
3. Connect the cut communication line to the additional relay cable as shown at the figure.
4. Finish the connected area with the insulating tape.

**When the product input is greater than or equal to 25A**  
(The air conditioner is controlled by turning On/Off the indoor/outdoor communication line.)



1. Pull out the power or shut down the breaker.
2. Cut the indoor/outdoor unit communication line.
3. Connect the cut communication line to the additional relay cable as shown at the figure.
4. Finish the connected area with the insulating tape.



# PQNUD1S00

## PDI (Power Distribution Indicator)

For the multi indoor units connected to an outdoor unit, the individual unit's and total system power consumption can be displayed on the device. This system can also be connected to a remote metering system.



### OVERVIEW

- This device displays the power consumed for each indoor air conditioner unit that shares an outdoor unit.
- The power consumed by each indoor unit connected with the joint power line is indicated on the device.
- The information of the power distributed can be sent on a real-time basis through the remote metering system.



- 1 LCD indication window
- 2 Key operation section
- 3 Label indicating the locations of each indoor unit

### FEATURES

- Accumulated total power consumption indicated
- Accumulated/Current power consumption of each indoor unit indicated.
- Accumulated power consumption by month indicated
- Max. connectable no. of indoor units : 64 indoor units
- 1 PDI per 1 outdoor unit
- Power failure-proof function : Data back up on EEPROM even if power turns off
- Connectable to PC based central controller
- Simple connection with the remote metering system (RS485 approach)
- Power distribution indication formula

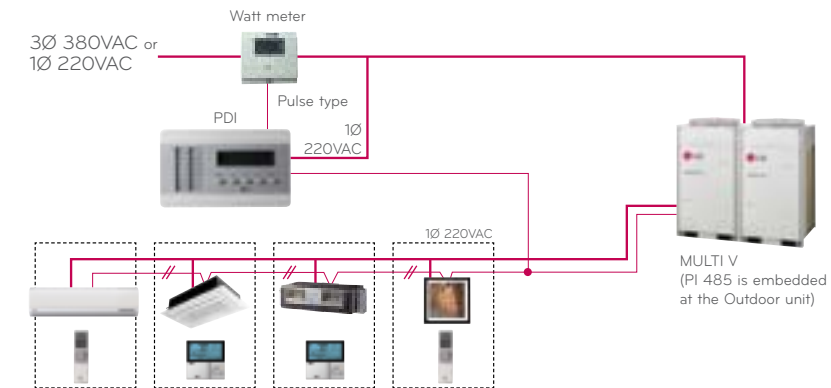
$$\text{Power used per room} = \frac{\text{Total power consumed for an external unit}}{\text{weight by room}} \times \frac{\text{weight by room}}{\text{total weight}}$$

\* Weight by room: Weight calculated based on the temperature set by room, mode and operating time.

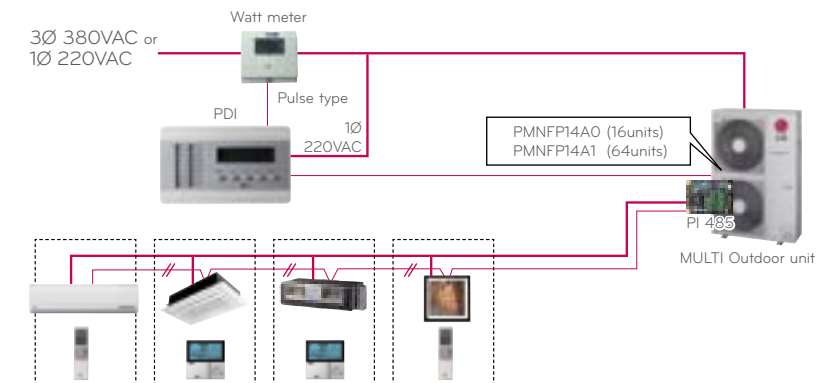
### WIRING DIAGRAM

#### Independent operation of PDI

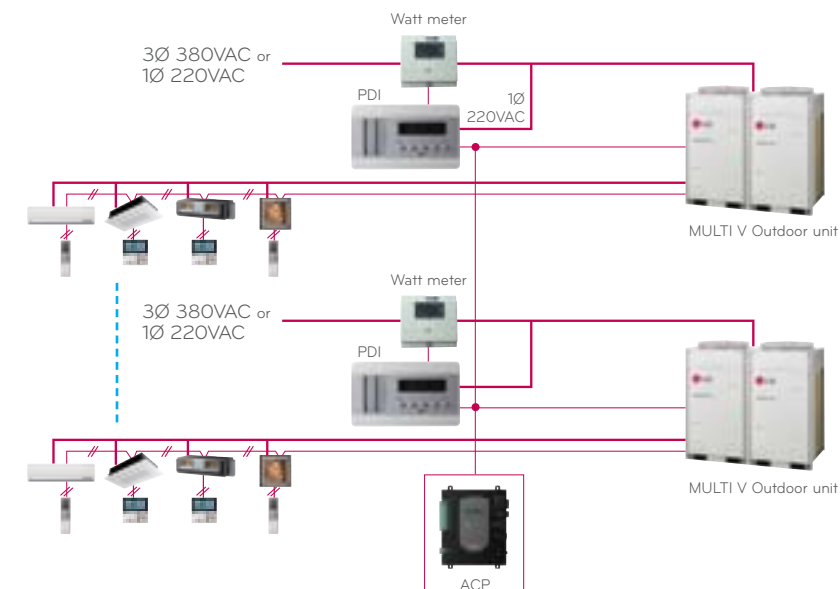
- MULTI V PLUS II / MULTI V SYNC II / MULTI V III / MULTI V WATER II / MULTI V SPACE / MULTI V MINI



#### • MULTI



#### • Operation with other central controller



# PQDSA(1) / PQDSB(1) / PQDSBC

## Dry Contact

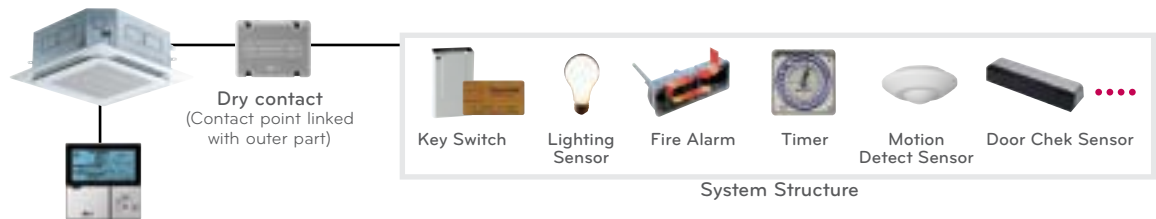
Connected between an indoor unit and external devices to control various functions.



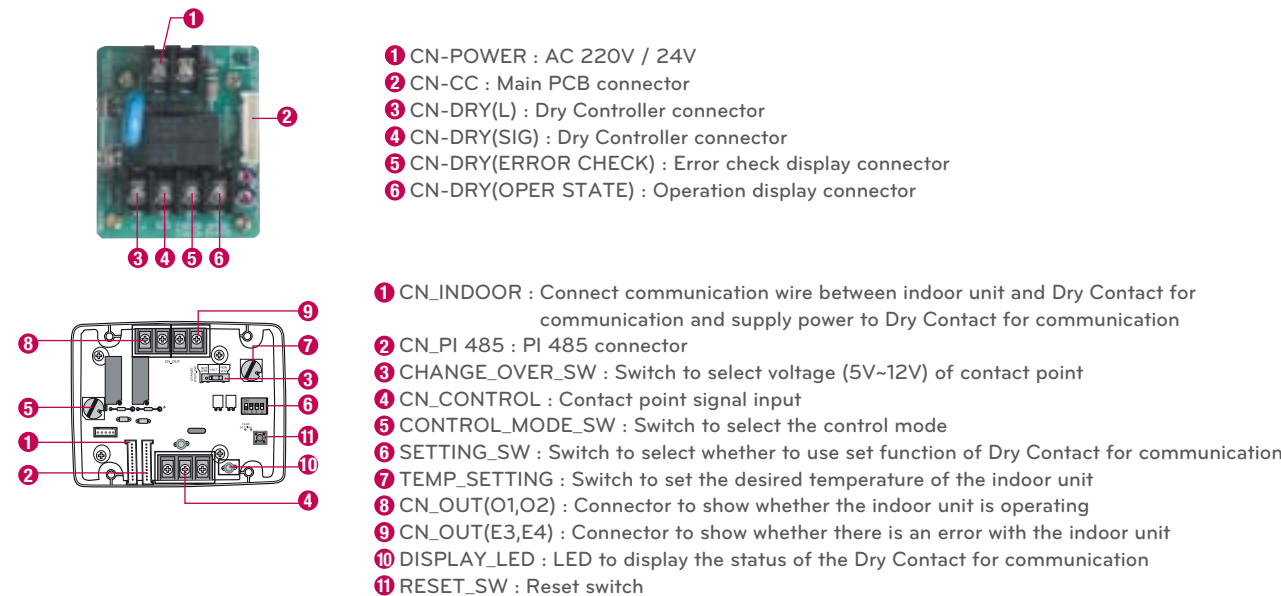
### SPECIFICATION

| Model Name                  | PQDSA/ PQDSB                      | PQDSA1/ PQDSB1                   | PQDSBC                         |
|-----------------------------|-----------------------------------|----------------------------------|--------------------------------|
| Contact point               | 1 Control point                   | 1 Control point                  | 2 Control points               |
| Power input                 | AC 220V from outside power source | AC 24V from outside power source | DC 5V&12V from indoor unit PCB |
| Voltage / Non voltage input | -                                 | -                                | ✓                              |
| On/Off control              | ✓                                 | ✓                                | ✓                              |
| Lock / Unlock               | -                                 | -                                | ✓                              |
| Fan speed setting           | -                                 | -                                | ✓                              |
| Thermo off                  | -                                 | -                                | ✓                              |
| Energy saving               | -                                 | -                                | ✓                              |
| Temperature setting         | -                                 | -                                | ✓                              |
| Error monitoring            | ✓                                 | ✓                                | ✓                              |
| Operation monitoring        | ✓                                 | ✓                                | ✓                              |

※Refer to each model PDB for applicable models.  
 ※With case model : PQDSB(1), PQDSBC / Without case model : PQDSA(1)



### PARTS DESCRIPTION



# PQDSBNGCM1

## Dry Contact

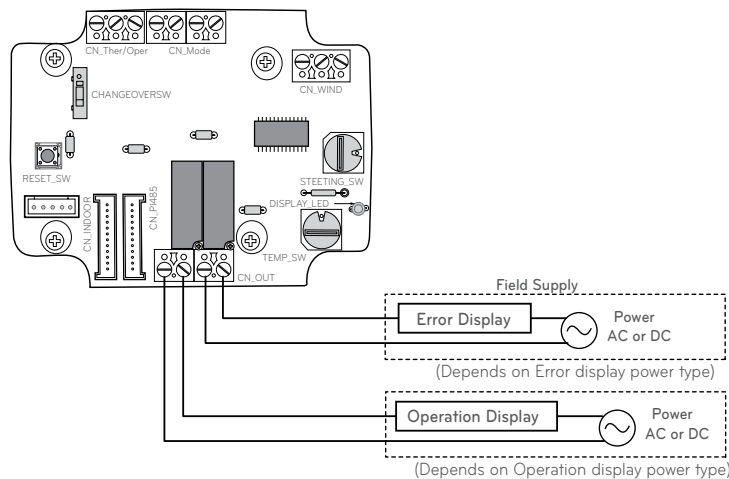
Connected between an indoor unit and external devices to control various functions.



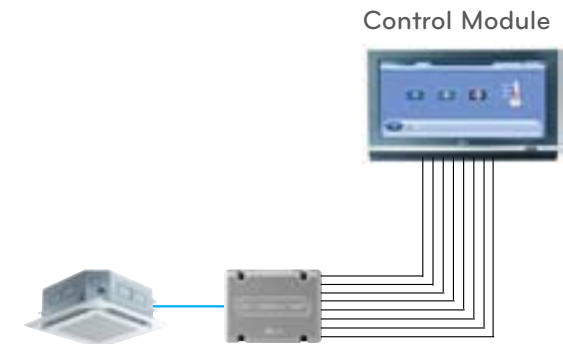
### FEATURES

| Model Name                  | PQDSBNGCM1                   |
|-----------------------------|------------------------------|
| Dimensions                  | 105 x 78 x 35 mm             |
| Contact Point               | 8 contact point              |
| Voltage / Non voltage input | ✓                            |
| On/Off control              | ✓                            |
| Mode control                | ✓(Cool, Heat, Fan)           |
| Fan Speed Setting           | ✓(Low, Middle, High)         |
| Thermo off                  | ✓                            |
| Error Monitoring            | ✓                            |
| Operation monitoring        | ✓                            |
| Contact (output)            | 2 contact (operating, error) |
| Rotary switch 1             | Operating set temp selection |
| Rotary switch 2             | Operating logic selection    |

### Indoor unit monitoring



### STRUCTURE



# PQDSBCGCD0

## Dry Contact

Connected between an indoor unit and external devices to control various functions.

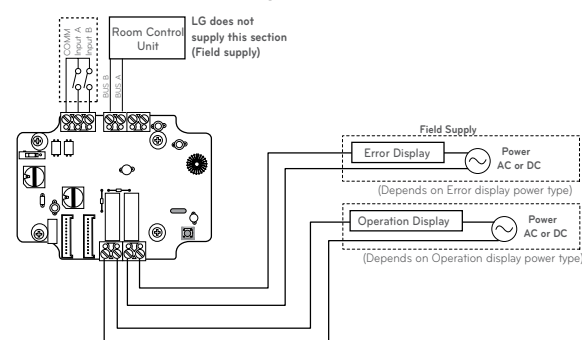


## SPECIFICATION

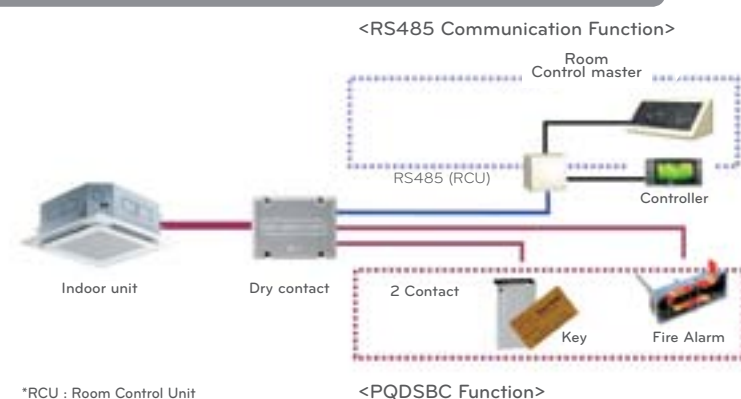
- 1) Model name : PQDSBCGCD0
- 2) Specification
  - Dimensions(mm) : 105x78x35
  - Applied Model : MULTI V Plus II & MULTI V III
  - Function
    - Contact Point : 2 contact point (operation depends on the Control Mode\_SW setting)
    - PI 485 Communication Mode Input : LGAP 485 Communication
    - Voltage/Non Voltage Input
    - Error Monitoring Output
    - Operation Monitoring Output
- 3) Description
 

The product is especially designed for interface with other controller using dry contact communication or RS485 communication

## Indoor unit monitoring



## STRUCTURE



# PQDSBCDVM0

## ODU Dry Contact

Dry contact for demand control.



## FEATURES

- 1) Model name : PQDSBCDVM0
- 2) Specification
  - Applied Model : MULTI V III
  - Function :
    - Demand control (3 contact signal)
    - Demand control (Co-work with DDC)
    - ODU fan low speed control (Night low noise operation)
    - All Off
    - Error Output (Display)
- 3) Description
 

The product is especially designed for demand control.

## STRUCTURE

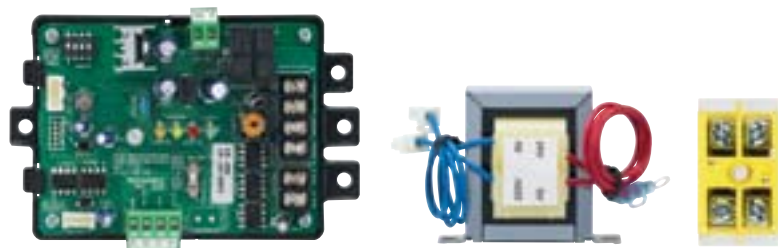




# PRVCO

## Variable Water Flow Control Kit

Accessory developed for controlling the water flow in variable valve composure.

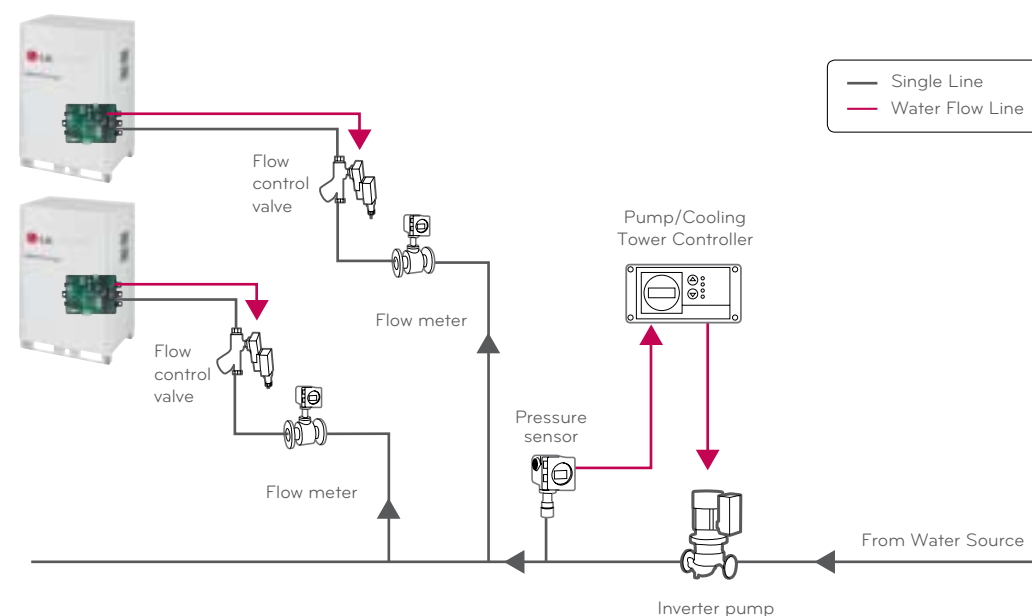


### FEATURES

- 1) Model name : PRVCO
- 2) Specification
  - Applied Model : MULTI V Water
  - Function
    - Water pump valve control (0~10V)
    - Minimum voltage setting available
    - Operation, error output (display)
- 3) Description
 

The product is especially designed to control water pump valve in MULTI V Water system.

### STRUCTURE



- Flow control valve : Regulates the flow or pressure of a fluid, normally responding to signals generated by independent devices.
- Flow Meter : Measures mass flow rate of a fluid traveling through a tube. (The mass flow rate is the mass of the fluid traveling past a fixed point per unit time.)
- Pressure Sensor : Measures the pressure.

# PRIP0

## Independent Power Module

EEV full close function in case of power cut-off of indoor units.

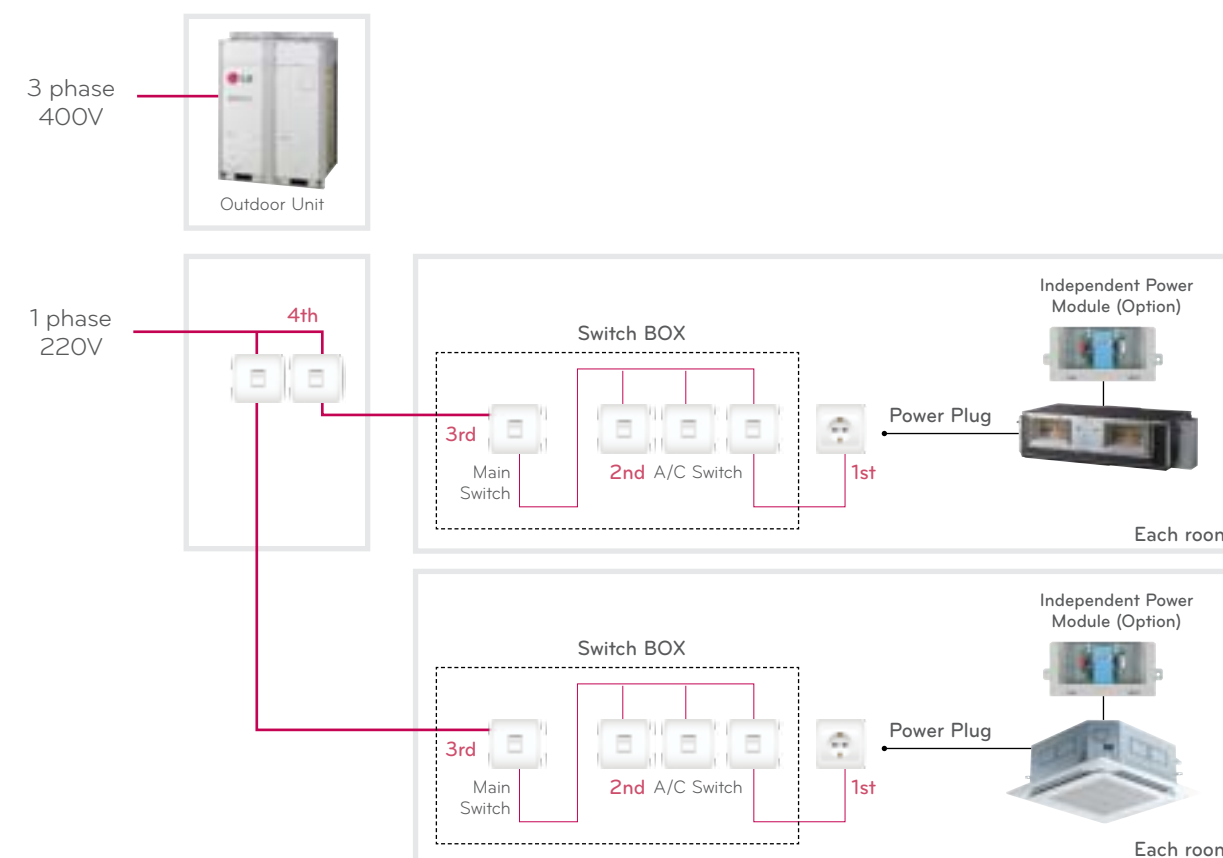


### SPECIFICATION

- 1) Model name : PRIP0
- 2) Specification
  - Applied Model : MULTI V Indoor
  - Function
    - Supply Voltage : DV12V  $\pm$  5%
    - Indoor EEV full close at power cut-off
- 3) Description
 

The product is specially designed to close the Indoor EEV at power cut-off.

### APPLICATION SCENE



# PES-C0RV0

## CO<sub>2</sub> Sensor

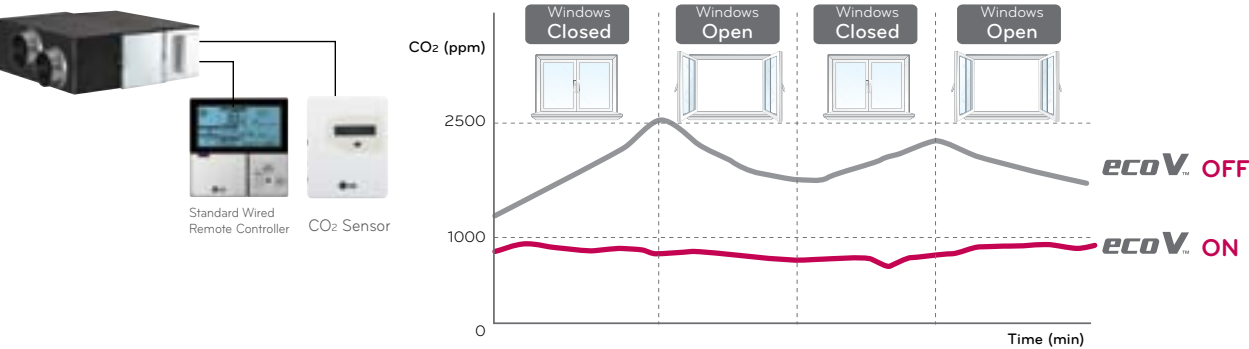
CO<sub>2</sub> concentration sensor in ventilation system.



### SPECIFICATION

- 1) Model name : PES-CORVO
- 2) Specification
  - Applied Model : ECO V
  - Function
    - Supply Voltage : DV12V ± 5%
    - Output : 0~5V (Linear output, 1~2,000 ppm CO<sub>2</sub>)
    - Accuracy : 30 ppm ± 5% of reading
- 3) Description
  - The product is especially designed to detect CO<sub>2</sub> concentration in ECO V system.

### STRUCTURE



# PRDSBM

## Cool/Heat Selector

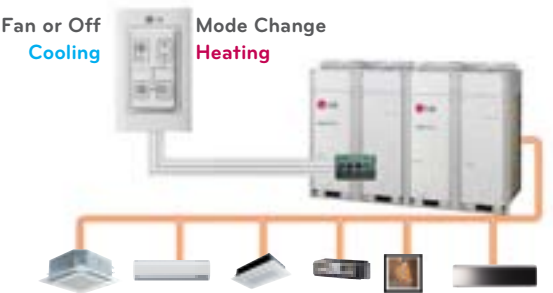
Users can select cooling, heating, or fan mode to prevent cooling and heating mixing errors during seasonal changes.



### FEATURES

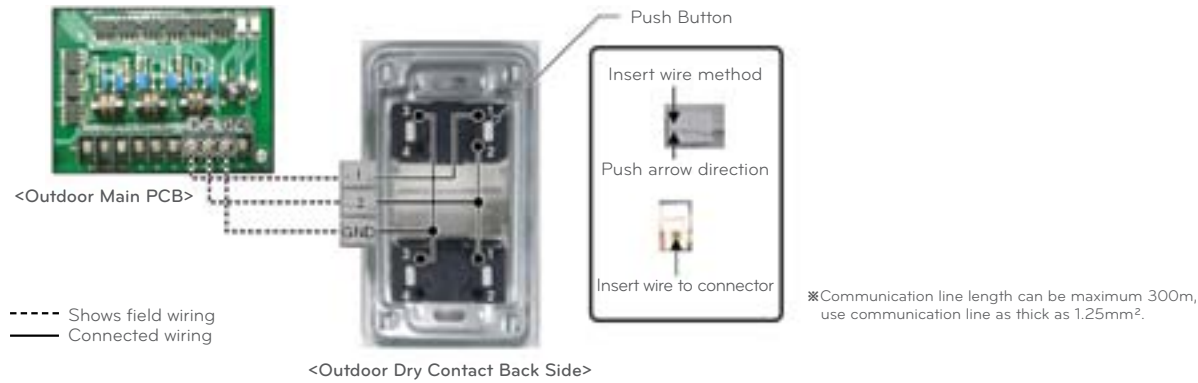
- Indoor unit control without central controller
- Select operation mode : Cooling, Heating, Fan mode
- Mode lock for cooling & heating mixing error-proof during the change of season.

### MODELS APPLIED



### WIRING DIAGRAM

- Connect terminals (①, ②, GND) on the back side of the outdoor dry contact to terminals (①, ②, GND) of outdoor as show below.



### Outdoor Unit setting

1. Set Dip S/W based on DIP S/W setting table.  
(Refer to outdoor installation manual or PDB)
2. You should push the black button to select the mode  
"0" : No use "1" : Cooling/Heating/Fan lock mode "2" : Cooling/Heating/All Off mode
3. Push the red button to confirm the setting until the blinking stops.
4. After setting, set Dip S/W Off.

# PBSGB30 / PBSGB40 / PBSC30 / PBSC40

## Suction Grille / Canvas

High flexibility for a wide variety of applications.



### FEATURES

- High external static pressure facilitates unit use with flexible ducts of varying lengths.
- When using suction panel, unit requires only 270mm of ceiling space.
- Blends unobtrusively with any interior decoration.

### MODELS APLLIED

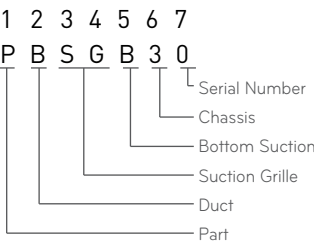
- Ceiling concealed duct \_ Built-in type (refer PDB for applicable model)

### ACCESSORY MODEL NAME

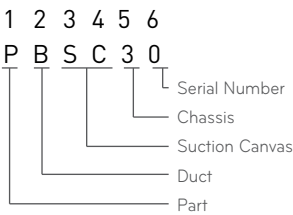
| Type   | Model Name | Capacity (Btu/h) |    |     |     |     |      |
|--------|------------|------------------|----|-----|-----|-----|------|
|        |            | 7K               | 9K | 12K | 15K | 18K | 24 K |
| Grille | PBSGB30    | ✓                | ✓  | ✓   | ✓   | -   | -    |
|        | PBSGB40    | -                | -  | -   | -   | ✓   | ✓    |
| Canvas | PBSC30     | ✓                | ✓  | ✓   | ✓   | -   | -    |
|        | PBSC40     | -                | -  | -   | -   | ✓   | ✓    |

### DETAILS OF MODEL NAME

For the suction grille :



For the suction canvas :



### PARTS INCLUDED

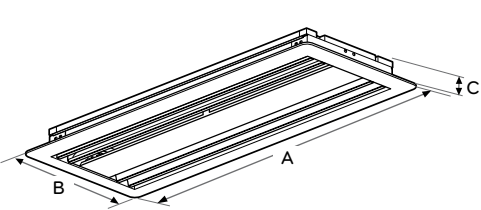
For the suction grille :

- Suction panel with air filter (1EA)
- Suction panel fix bolt M5x18 (4EA)
- Installation manual (1EA)

For the suction canvas :

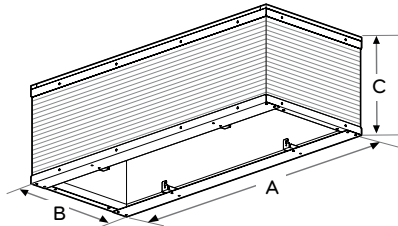
- Air suction canvas (1EA)
- Screws for air suction canvas (4EA)
- Adjusting chain (4EA)
- Screws for adjusting chain (8EA)
- Installation manual (1EA)

### DIMENSION



(Unit : mm)

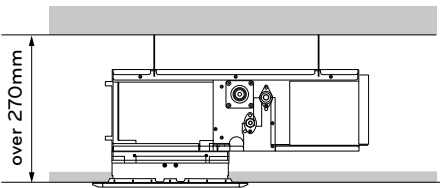
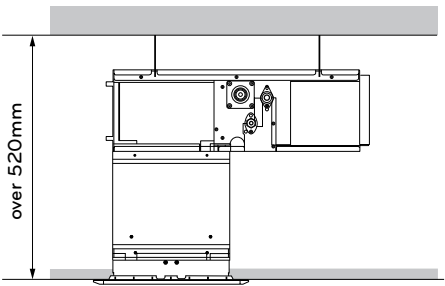
|         | A    | B   | C  |
|---------|------|-----|----|
| PBSGB30 | 910  | 359 | 56 |
| PBSGB40 | 1188 | 359 | 56 |



(Unit : mm)

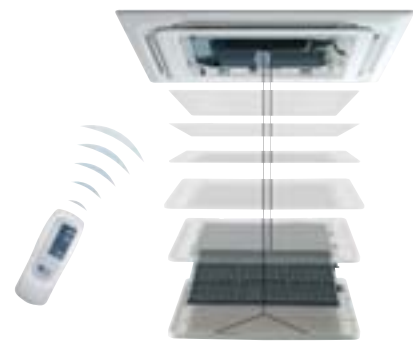
|        | A    | B   | C      |
|--------|------|-----|--------|
| PBSC30 | 821  | 274 | 42-250 |
| PBSC40 | 1100 | 274 | 42-250 |

### APPLICATION



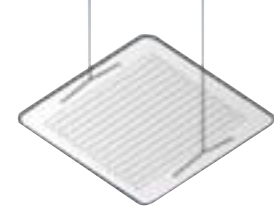
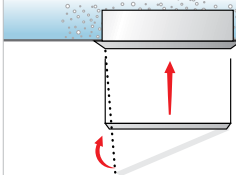
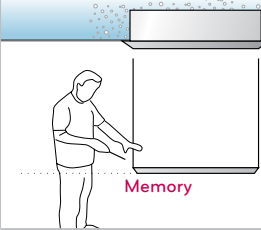
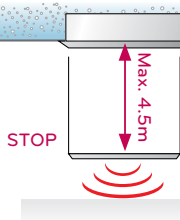


PTEGM0



Auto Elevation Grille  
Easy filter cleaning with elevation grille.

FEATURES

| 4-Point Support Structure  | Auto Horizontal Control  | Memory for user's access level  | Auto Bottom Detection  |
|--|--|---|--|
|  |  |  |  |

MODELS APPLIED TO

- 4 Way cassette - Single, MULTI V (refer PDB for applicable models)

DETAILS OF MODEL NAME

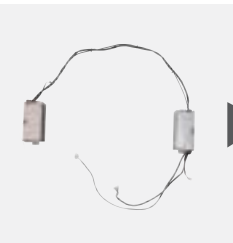

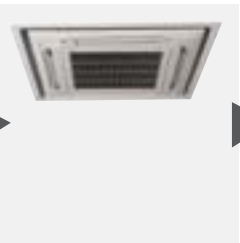
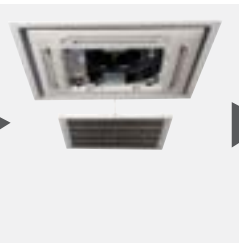
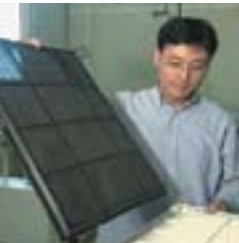
1 2 3 4 5 6  
P T E G M 0

Serial No.  
Chassis  
Elevation Grille Kit  
Ceiling Cassette  
Part

PARTS SUPPLIED

- Inlet Grille (1EA)
- Auto elevation grille kit (1EA)
- Wireless Remote Controller (1EA)
- Screws (4EA)
- Installation manual (1EA)

APPLICATION

|   |   |   |  |   |
|---|---|---|--|---|
|  |  |  |  |  |
| • Auto elevation grille kit   | • Install the kit inside indoor unit  | • Install the front panel and the Inlet grille                                      | • Operate the auto elevation grille by the wireless remote controller                | • Easy maintenance  |

PTPKM0 / PTPKQ0

Plasma Kit  
Air purifying filter to prevent from dust and allergy.



FEATURES

- It can remove microscopic contaminants and dust and house mites, pollen, pet fur to help prevent allergic diseases like asthma.

MODELS APPLIED

- 4Way cassette - Single, MULTI V (refer PDB for applicable models)

ACCESSORY MODEL NAME

1 2 3 4 5 6  
P T P K M 0

Serial No.  
Chassis  
Plasma Kit  
Ceiling Cassette  
Part

PARTS SUPPLIED

- Plasma Kit (1EA)
- Screws
- Installation Manual (1EA)

PTVK410 / PTVK420 / PTVK430

Ventilation Kit (Fresh Kit) for New Cassette  
Fresh air can be supplied from outside through this ventilation kit.



PTVK410



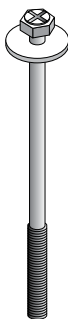
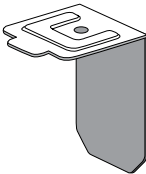
PTVK420



PTVK430

FEATURES

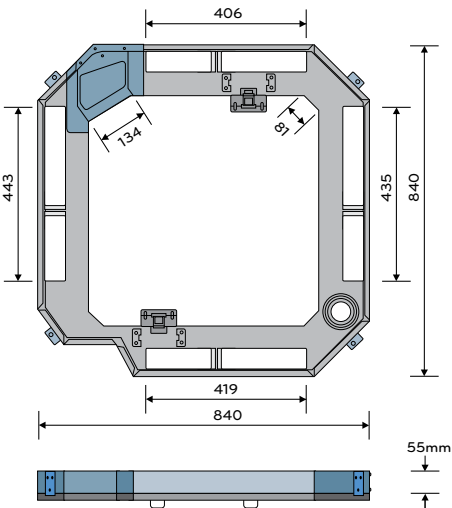
- Installation Bracket
- Bolt
- Screw
- Installation manual



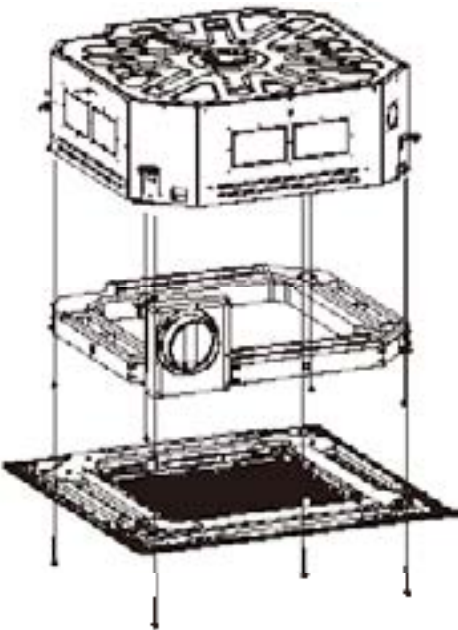
MODELS APPLIED TO

- Ceiling Cassette - 4Way (TP, TN, TM)

DIMENSION



ASSEMBLY DIAGRAM



PTDCD / PTDCD1 / PTDCM / PTDCQ

Cassette Cover  
Air purifying filter to prevent from dust and allergy.



FEATURES

- Specially designed for indoor unit.
- Covers the side area of cassette.
- Gives elegant looks.
- Light weight.
- Suitable when false ceiling is unavailable.

MODELS APPLIED TO

- Ceiling cassette - 4Way (TD, TD1, TH, TP, TN, TM, TQ, TR)

PARTS SUPPLIED

- Cover A (4EA), Cover B (4EA)
- Cover C (4EA), Cover D (4EA)
- Screws
- Installation Manual (1EA)

ACCESSORY MODEL NAME

| Model Name | Front Panel                        |       | Weight(kg) |       | Dimension(mm) |       |     |
|------------|------------------------------------|-------|------------|-------|---------------|-------|-----|
|            |                                    |       | NET        | Gross | W             | H     | D   |
| PTDCD      | PT-CD0, PT-CD1, PT-HD0, PT-HD1     |       | 5.0        | 7.8   | 1,158         | 1,158 | 305 |
| PTDCD1     | PT-CDA1, PT-CDC1, PT-HDA1, PT-HDC1 |       | 5.0        | 7.8   | 1,083         | 1,083 | 305 |
| PTDCM      | PT-UMC                             | TP/TN | 5.9        | 8.8   | 1,157         | 1,157 | 268 |
|            |                                    | TN    | 5.9        | 8.8   | 1,157         | 1,157 | 310 |
| PTDCQ      | PT-UQC                             | TR    | 5.0        | 7.2   | 907           | 907   | 268 |
|            |                                    | TQ    | 5.0        | 7.2   | 907           | 907   | 310 |

PQAGA / PRAGX\*SO

Air Guide

Easy air discharge at odd places



MULTI V Plus II



MULTI V III

FEATURES

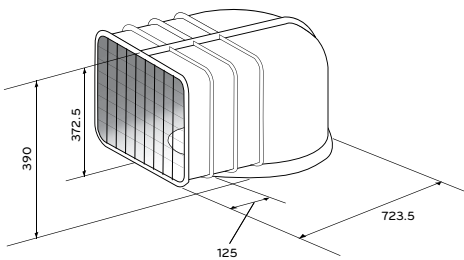
- Converts vertical discharge into horizontal discharge.
- Designed for outdoor discharge air.
- Direction of air discharge can be changed by simple installation.
- Installation flexibility

MODELS APPLIED TO

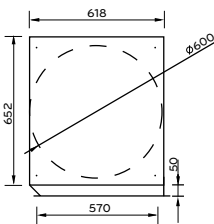
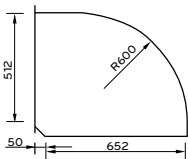
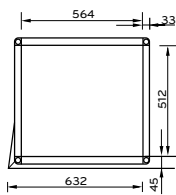
- MULTI V type, MULTI V Plus II type, MULTI V III (UX2, UX3)

DIMENSION

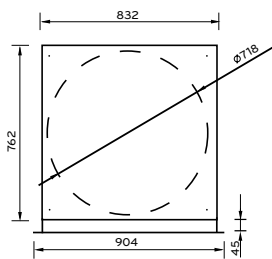
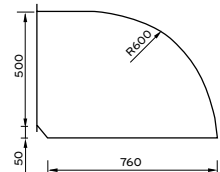
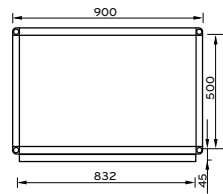
MULTI V Plus II



MULTI V III (UX3)



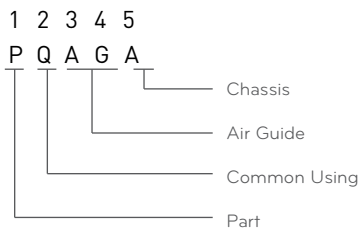
MULTI V III (UX2)



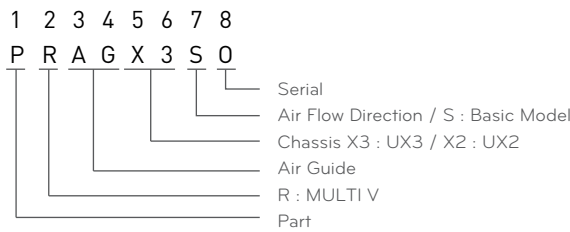
| Model Name | Gross Weight | Met Weight |
|------------|--------------|------------|
| PQAGA      | 6kg          | 5kg        |
| PRAGX2SO   | 22.5kg       | 12.3kg     |
| PRAGX3SO   | 17kg         | 9.4kg      |

DETAILS OF MODEL NAME

MULTI V Plus II



MULTI V III



APPLICATION



MULTI V Plus II



MULTI V Plus II



MULTI V III (UX2)



MULTI V III (UX3)



PRAC1

Refrigerant charging Kit

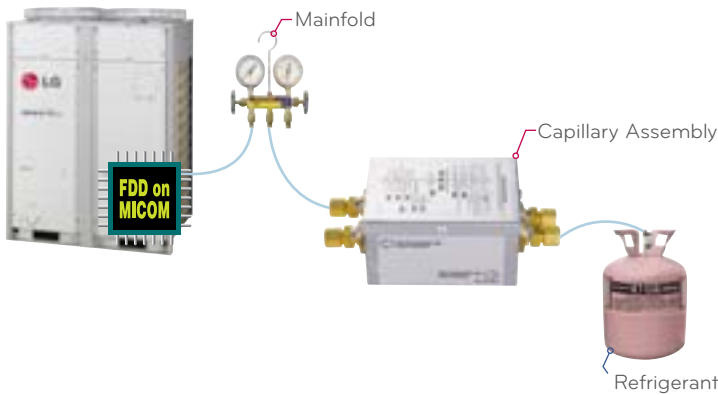
To recharge refrigerant after a pump down or when refrigerant is either insufficient or excessive.



PROCEDURE

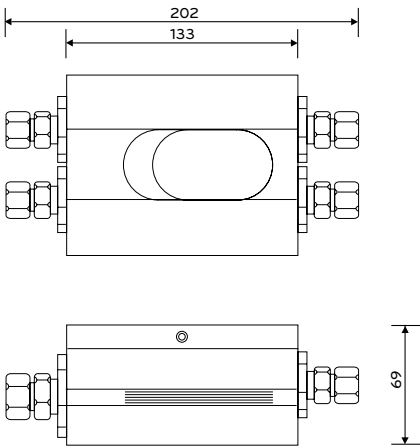
- Arrange manifold, capillary assembly, refrigerant vessel and scale
- Connect manifold to the gas pipe service valve of outdoor unit as shown in the figure.
- Connect manifold and capillary tube. Use designated capillary assembly only.  
If designated capillary assembly isn't used, the system may get damaged.
- Connect capillary and refrigerant vessel.
- Purge hose and manifold.
- After "568" is displayed, open the valve and charge the refrigerant

MODELS APPLIED TO



\* Fault Detect & Diagnosis

DIMENSION



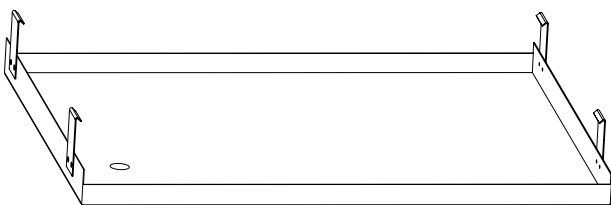
ERROR CONTENTS ABOUT AUTO REFRIGERANT CHARGING FUNCTION

- "329" : Temperature Range Error (In case that indoor unit or outdoor unit is out of range)
- "339" : Low Pressure Descent Error (In case the system runs at low pressure limit for over 10 minutes)
- "349" : Rapid refrigerant inflow (In case the liquid refrigerant flows in because of not using designated capillary assembly)
- "359" : Instability Error (In case the high/low pressure target doesn't get satisfied for some time after the starting operation)

PRODX20 / PRODX30

Drain Pan

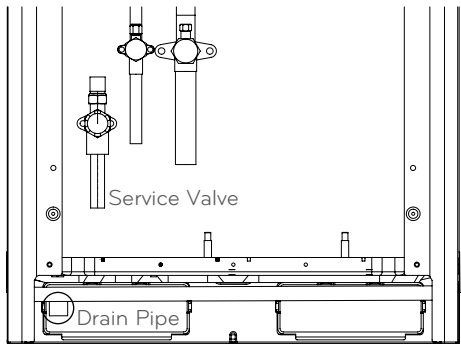
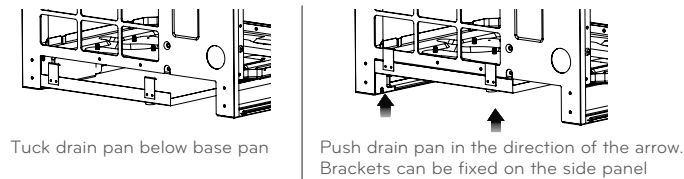
Installed to drain water from a MULTI V III outdoor unit.



USAGE

This unit can be applied for outdoor unit's drain

INSTALLATION



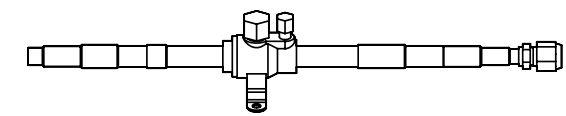
- ※In case of the installation of drain pan, drain pipe should be located below the SVC valve.
- This unit does not cover water drops of the outside product
  - Connect drain hose to drain pipe for drain condensate

MODEL NAME

| Model   | L      | Remark |
|---------|--------|--------|
| PRODX20 | 920mm  | UX2    |
| PRODX30 | 1240mm | UX3    |

PRVT120 under 1/2 (inch)  
PRVT780 under 7/8 (inch) / PRVT980 under 9/8 (inch)

Stopper Valves



FEATURES

|         | Spec  |
|---------|---|
| PRVT120 | <div><div>Input →</div><div>→ Output(indoor unit)</div></div> |
| PRVT780 | <div><div>Input →</div><div>→ Output(indoor unit)</div></div> |
| PRVT980 | <div><div>Input →</div><div>→ Output(indoor unit)</div></div> |

USAGE

- This unit can be applied for the additional indoor unit's installation.
- This unit can be applied for each indoor unit's service

INSTALLATION

1. Cut inlet side of the connector, and weld the pipe

2. In case of the installation of additional indoor unit, outlet side connector should be cut according to installation pipe.

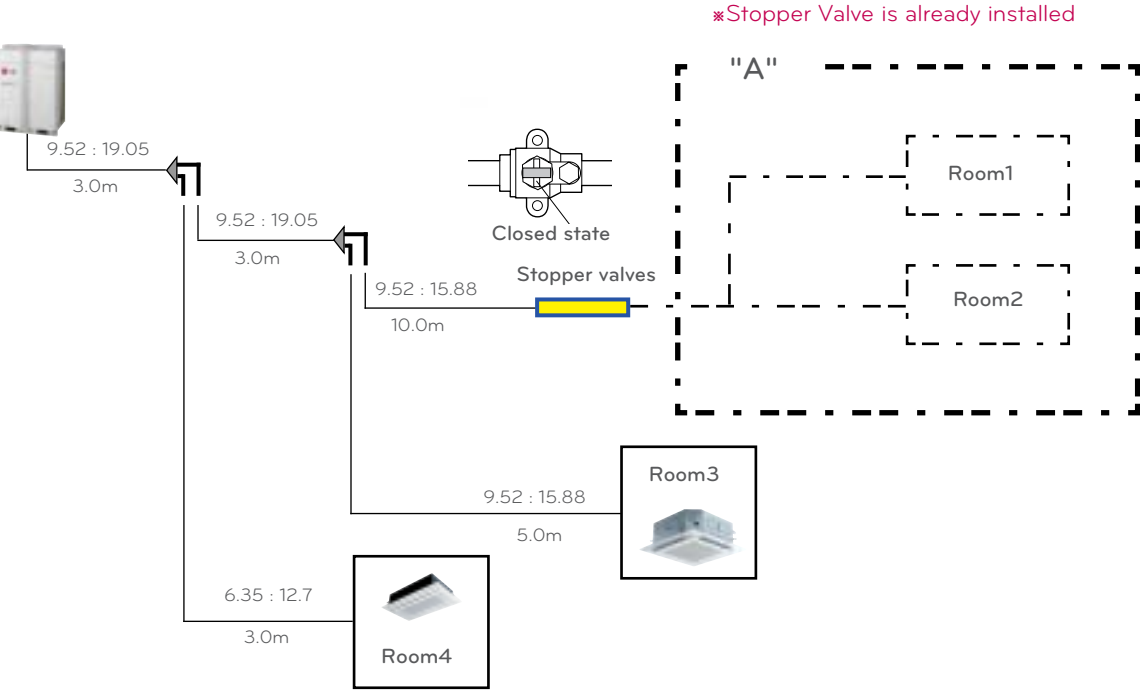
3. In case of installation of stopper valve, flare part should be facing towards additional indoor unit.

4. In case of installation of additional indoor unit, SVC valve should be in closed state

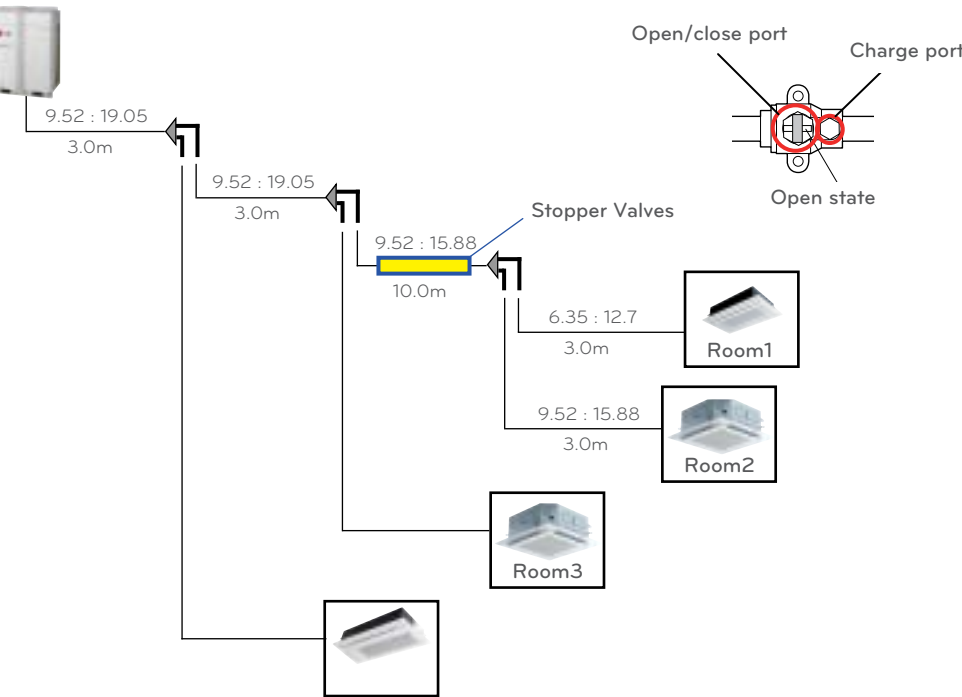
- When welding, service valve should be wrapped by wet cloth.

SPECIFICATION

case1  
(room3, 4 is used. room1, 2 need to install indoor unit)

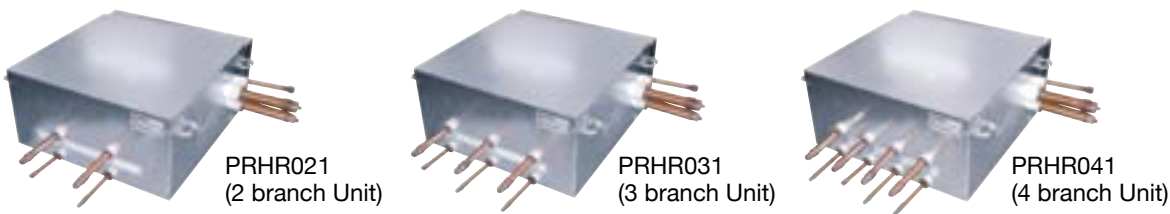


- In case of installation of additional indoor unit, refrigerant of used indoor unit must be discharged.(Room3 & Room4)
- If stopper valve is already installed, you can install additional indoor unit without refrigerant loss from the entire system.
- After installation of additional indoor unit, you just need refrigerant charging for "A" section.
- Then, open the Stopper Valve.



PRHR021 / PRHR031 / PRHR041

Heat Recovery Unit



FEATURES

- Max. 32 indoor units can be connected by module design. (Max 8 indoor units per branch)
- Due to the automatic search algorithm for piping detection, easy installation
- Subcooling cycle in HR unit makes the system efficiency maximum.

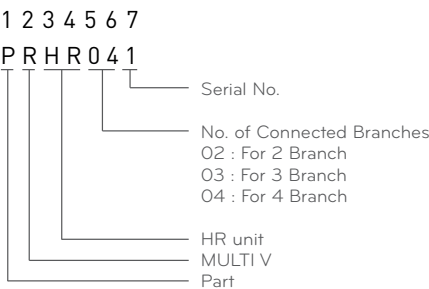
MODELS APPLIED TO



ACCESSORY MODEL NAME AND SPECIFICATION

|   |              |               |          | PRHR021          | PRHR031          | PRHR041          |
|---|--------------|---------------|----------|------------------|------------------|------------------|
| Number of branch  |              | EA            |          | 2                | 3                | 4                |
| Max. connectable capacity of indoor units (Per branch/unit) |              | kW            |          | 14.4/28.8        | 14.4/43.2        | 14.4/57.6        |
| Max. number of connectable indoor units per branch          |              | EA            |          | 8                | 8                | 8                |
| Nominal Input   | Cooling      | kW            |          | 0.026            | 0.040            | 0.040            |
|   | Heating      | kW            |          | 0.026            | 0.040            | 0.040            |
| Net. Weight   |              | kg            |          | 18               | 20               | 22               |
| Dimensions(WxHxD)   |              | mm            |          | 801x218x617      | 801x218x617      | 801x218x617      |
| Piping connections  | Indoor Unit  | Liquid        | mm(inch) | 9.52(3/8)        | 9.52(3/8)        | 9.52(3/8)        |
|   |              | Gas           | mm(inch) | 15.88(5/8)       | 15.88(5/8)       | 15.88(5/8)       |
|   | Outdoor Unit | Liquid        | mm(inch) | 9.52(3/8)        | 15.88(5/8)       | 15.88(5/8)       |
|   |              | Low pressure  | mm(inch) | 22.2(7/8)        | 28.58(11/8)      | 28.58(11/8)      |
|   |              | High Pressure | mm(inch) | 19.05(3/4)       | 22.2(7/8)        | 22.2(7/8)        |
|   |              |               |          |                  |                  |                  |
| Power Supply  |              | ø /V/Hz       |          | 1 / 220-240 / 50 | 1 / 220-240 / 50 | 1 / 220-240 / 50 |

DETAILS OF MODEL NAME




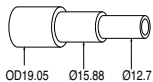
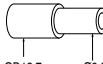
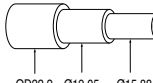
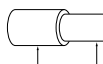
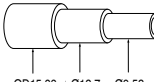
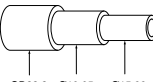
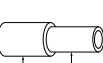
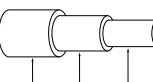
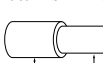


DIMENSION

- HR unit (1EA)
- Hanging bolts M10 or M8 (4EA)
- Nut M8 or M10 (8EA)
- Flat washers M10 (8EA)
- Reducers

REDUCERS FOR INDOOR UNIT AND HR UNIT

(Unit : mm)

| Models              |                 | Liquid pipe  | High pressure  | Low pressure  |
|---------------------|-----------------|--|--|---|
| Indoor unit reducer |                 | <br>OD9.52 OD6.35         |  | <br>OD15.88 OD12.7   |
| HR unit reducer     | PRHR021         | <br>OD9.52 OD6.35         | <br>OD19.05 OD15.88 OD12.7<br><br>OD12.7 OD9.52  | <br>OD22.2 OD19.05 OD15.88<br><br>OD15.88 OD12.7  |
|                     |                 |  |  |   |
|                     | PRHR031/PRHR041 | <br>OD15.88 OD12.7 OD9.52 | <br>OD22.2 OD19.05 OD15.88<br><br>OD15.88 OD12.7 | <br>OD28.58 OD22.2 OD19.05<br><br>OD19.05 OD15.88 |
|                     |                 |  |  |   |

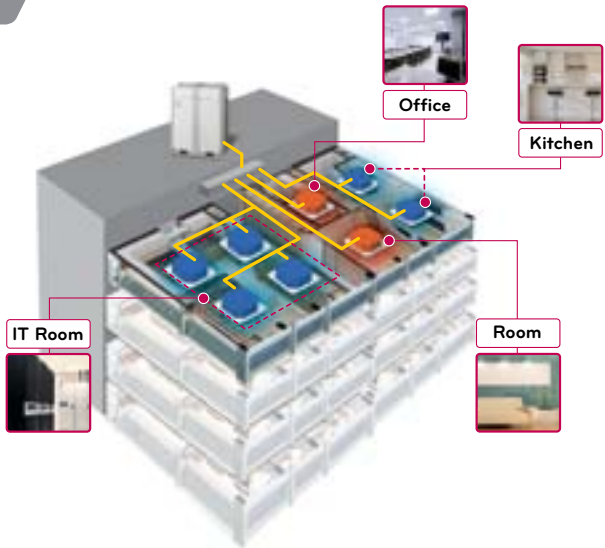
INSTALLATION



CONVENIENT FREE ZONING

MULTI V III Heat recovery provides flexible control over individual zones for the user's convenience.

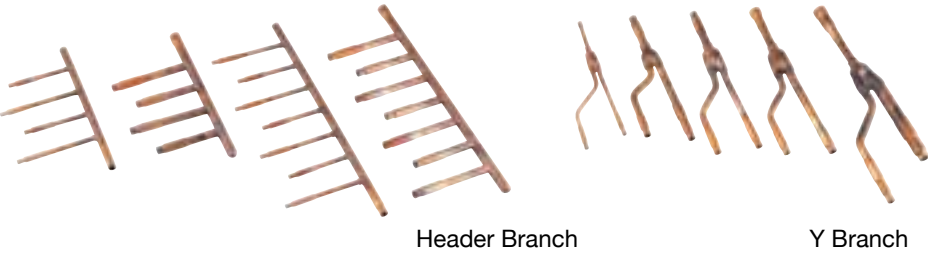
- Individual Control
  - Perfect individual control over spaces ventilation needed
- Zone Control
  - Max. of 8 indoor units can be connected for one branch
  - Max. of 32 indoor units can be connected for one HR unit
  - Same operational model can be operated by indoor units with zone control function installed
- Combination of Individual and Zoning Installations
  - Flexible Piping Design





# Header Branch / Y Branch

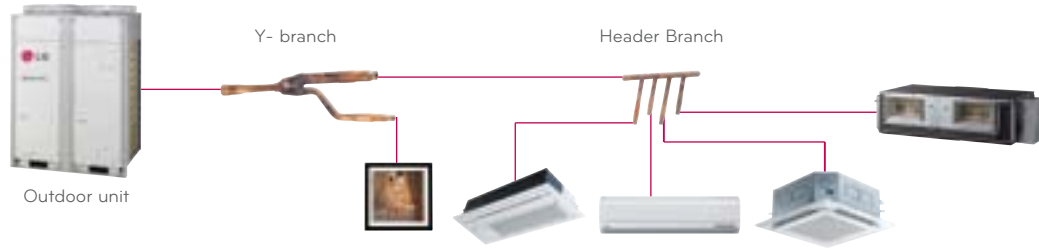
Y Branch and Header Branch (**MULTI V™**)  
For refrigerant distribution of indoor units.



## FEATURES

- Various Y-branch pipe of different capacities make MULTI V installation much easier.
- Y-branch and header branch for both gas and liquid are provided.
- Insulation material is also provided for covering the branches.

## PIPING DIAGRAM



## MODELS APPLIED TO

- **MULTI V™ PLUS**

• **MULTI V™ PLUS**  
III

• **MULTI V™ III**  
Heat Pump
- **MULTI V™ SPACE**

• **MULTI V™ SYNC**  
III

• **MULTI V™ III**  
Heat Recovery
- **MULTI V™ SYNC**

• **MULTI V™ SPACE**  
III
- **MULTI V™ MINI**

• **MULTI V™ WATER**  
III

## ACCESSORY MODEL NAME

### Header Branch

• R410A

| Models                                 | Gas pipe  |  | Liquid pipe |  |
|--|-----------|--|-------------|--|
|  | Unit : mm |  | Unit : mm   |  |
| 4 branch / ARBL054<br>(under 22.4kW)   |           |  |             |  |
| 7 branch / ARBL057<br>(under 22.4kW)   |           |  |             |  |
| 4 branch / ARBL104<br>(under 44.8kW)   |           |  |             |  |
| 7 branch / ARBL107<br>(under 44.8kW)   |           |  |             |  |
| 10 branch / ARBL1010<br>(under 44.8kW) |           |  |             |  |
| 10 branch / ARBL2010<br>(under 95.2kW) |           |  |             |  |

# PIPING ACCESSORY

• R410A / **MULTI V** Heat Pump

(Unit : mm)

| 2 Outdoor Units |                       |             |
|-----------------|-----------------------|-------------|
| Models          | Low Pressure Gas pipe | Liquid pipe |
| ARCNN21         |                       |             |

| 3 Outdoor Units |                       |             |
|-----------------|-----------------------|-------------|
| Models          | Low Pressure Gas pipe | Liquid pipe |
| ARCNN31         |                       |             |

| 4 Outdoor Units |                       |             |
|-----------------|-----------------------|-------------|
| Models          | Low Pressure Gas pipe | Liquid pipe |
| ARCNN41         |                       |             |

• R410A / **MULTI V** PLUS **MULTI V** SPACE **MULTI V** MINI **MULTI V** WATER Heat Pump

(Unit : mm)

| Models                       | Gas pipe | Liquid pipe |
|------------------------------|----------|-------------|
| ARBLN01621<br>(under 22.4kW) |          |             |
| ARBLN03321<br>(under 44.8kW) |          |             |

• R410A / **MULTI V** Heat Recovery

(Unit : mm)

| 2 Outdoor Units |                       |             |                        |
|-----------------|-----------------------|-------------|------------------------|
| Models          | Low Pressure Gas pipe | Liquid pipe | High Pressure Gas pipe |
| ARCNB21         |                       |             |                        |

| 2 Outdoor Units |                       |             |                        |
|-----------------|-----------------------|-------------|------------------------|
| Models          | Low Pressure Gas pipe | Liquid pipe | High Pressure Gas pipe |
| ARCNB31         |                       |             |                        |

| 4 Outdoor Units |                       |             |                        |
|-----------------|-----------------------|-------------|------------------------|
| Models          | Low Pressure Gas pipe | Liquid pipe | High Pressure Gas pipe |
| ARCNB41         |                       |             |                        |

• R410A / **MULTI V** PLUS **MULTI V** PLUS **MULTI V** Heat Pump

(Unit : mm)

| Models                       | Gas pipe | Liquid pipe |
|------------------------------|----------|-------------|
| ARBLN07121<br>(under 95.2kW) |          |             |
| ARBLN14521<br>(under 168kW)  |          |             |
| ARBLN23220<br>(over 168kW)   |          |             |

• R410A / **MULTI V** SYNC **MULTI V** SYNC **MULTI V** Heat Recovery **MULTI V** WATER Heat Recovery

(Unit : mm)

| Models                       | Low Pressure Gas pipe | Liquid pipe | High Pressure Gas pipe |
|------------------------------|-----------------------|-------------|------------------------|
| ARBLB01621<br>(under 22.4kW) |                       |             |                        |
| ARBLB03321<br>(under 44.8kW) |                       |             |                        |
| ARBLB07121<br>(under 95.2kW) |                       |             |                        |
| ARBLB14521<br>(under 168kW)  |                       |             |                        |
| ARBLB23220<br>(over 168kW)   |                       |             |                        |



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