



2012

MULTI VTM AIR CONDITIONING SYSTEM

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



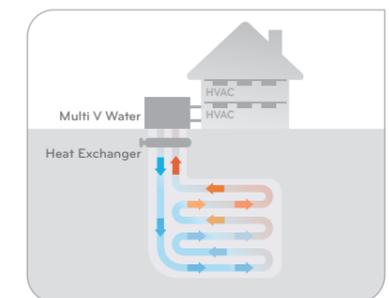
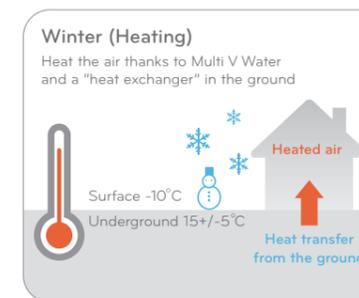
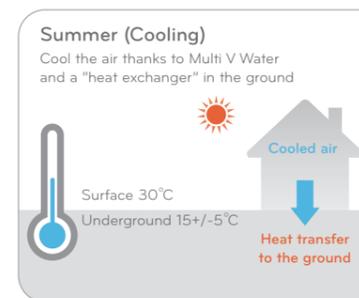
Major decisions in green management at LGE are made by the Eco-Design Committee; comprised of the heads of laboratories under the CTO, and supported by the Green Product Expert Committee, consisting of members working on R&D and management of green products, and the Green Marketing Council, in which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

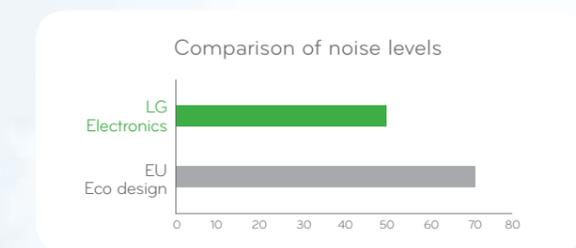
The rule of 20

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

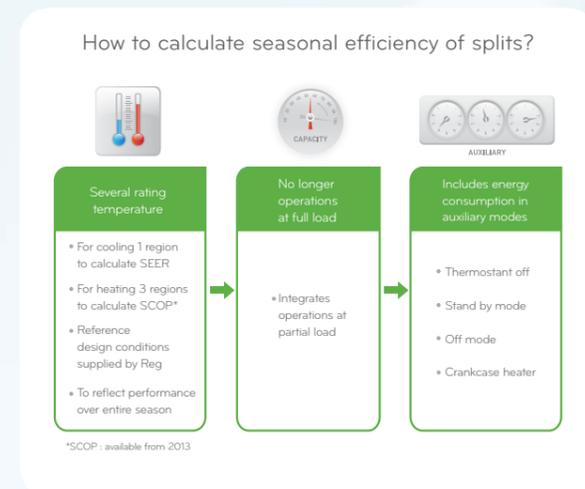
LG Electronics deploys products with environmentally-friendly features both in heating and cooling modes that go beyond the minimum requirements set by European legislation. With a rating of close to 4, LG Electronics products make the most of the energy they are using. No energy is wasted, while we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

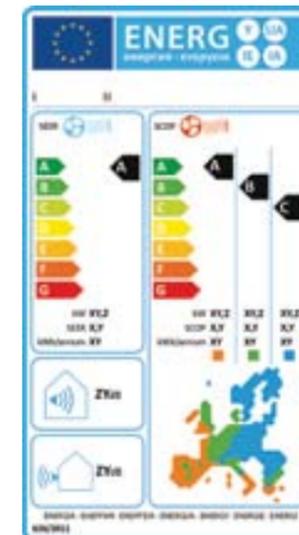
VRF Certification

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.

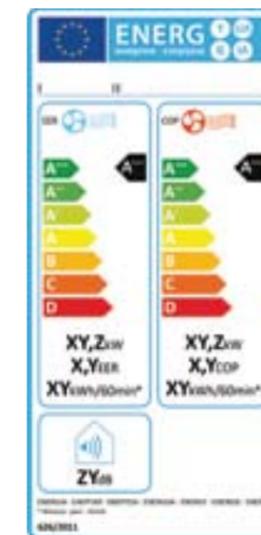
Energy Label

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.

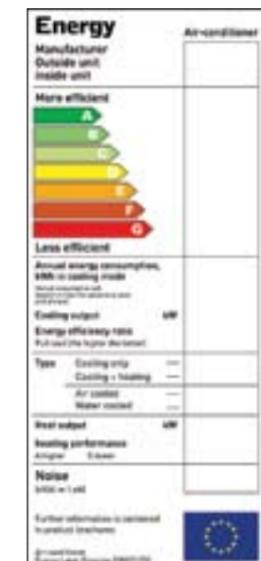
For split air conditioners below 12 kW that provide both heating and cooling, the energy label will indicate two energy classes-one for heating and one for cooling. Also displayed are capacity in kW, annual energy consumption and the seasonal performance ratio for heating and cooling.



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.

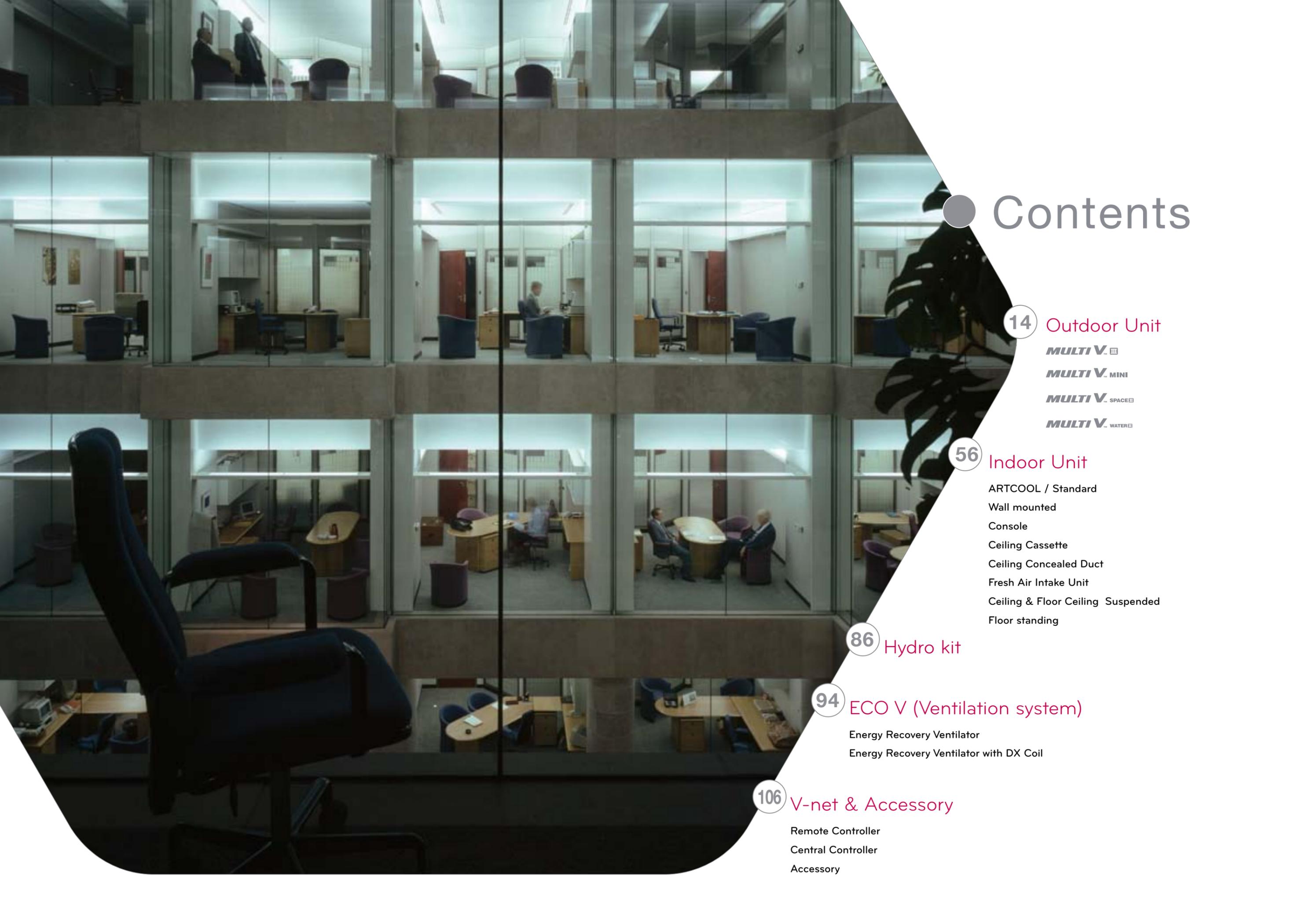


Current energy label will remain until 2012.



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





Contents

14 Outdoor Unit

MULTI V. III

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

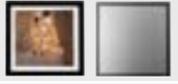
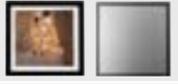
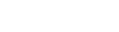
2012 **MULTI V™** Outdoor unit line up



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	
MULTI V™ III Heat Pump																																									
MULTI V™ III Heat Recovery																																									
MULTI V™ MINI *10, 220V *30, 380V																																									
MULTI V™ SPACE																																									
MULTI V™ WATER Heat Pump																																									
MULTI V™ WATER Heat Recovery																																									

2012 **MULTI V™** Indoor unit line up



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 		[Shaded]															
	Mirror 		[Shaded]				[Shaded]											
Standard			[Shaded]				[Shaded]											
Wall mounted			[Shaded]				[Shaded]											
Console			[Shaded]															
Ceiling Cassette	4way Cassette (570x570) 		[Shaded]				[Shaded]											
	4way Cassette (840x840) 						[Shaded]		[Shaded]		[Shaded]							
	2 way Cassette 						[Shaded]											
	1 way Cassette 		[Shaded]				[Shaded]											
Ceiling Concealed Duct	Low Static 		[Shaded]				[Shaded]											
	Built-in 		[Shaded]				[Shaded]											
	High Static 		[Shaded]				[Shaded]		[Shaded]		[Shaded]		[Shaded]		[Shaded]			
Fresh Air Intake Unit													[Shaded]		[Shaded]			
Ceiling & Floor			[Shaded]															
Ceiling Suspended							[Shaded]		[Shaded]		[Shaded]		[Shaded]					
Floor Standing	With Case 		[Shaded]				[Shaded]											
	Without Case 		[Shaded]				[Shaded]											

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 III** 54 **MULTI V™ WATER III**



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

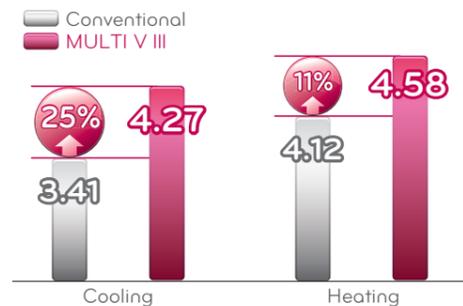
*BLDC : The LG inverter air conditioner comes with a BLDC compressor that uses a strong neodymium magnet. Its compressor thus has improved efficiency compared with the AC inverter.

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

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

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

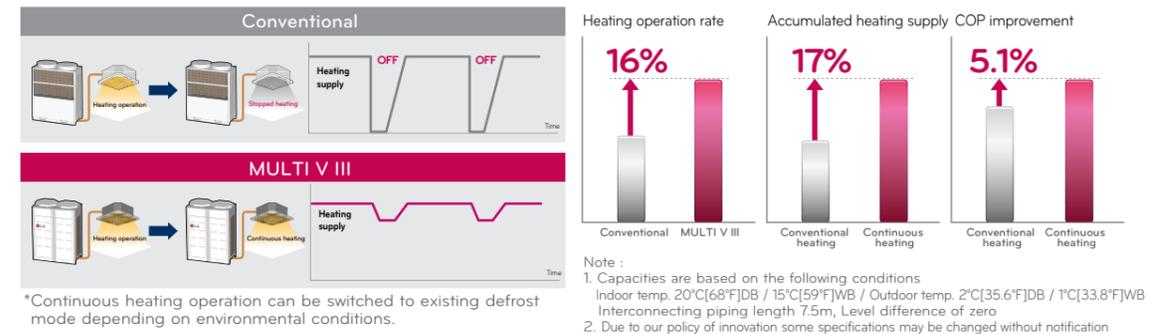
As MULTI V III has high efficiency parts, advanced inverter control technology and optimal cycle control technology, the system's unified performance has been improved. Based on these advanced technologies, the product provides customers value through high efficiency and energy savings.

- 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.
- Sine wave inverter control**
Improved the efficiency of the compressor motor by using the sine wave DC inverter control technology.
- Cyclone sub-cooling circuit**
Improved the cooling capability by using a cyclone sub-cooling circuit.
- Newly designed propeller fan**
Achieved optimal heat exchange by using high air volume and low noise fan.
- LG BLDC inverter fan motor**
Improved efficiency by using high efficiency BLDC inverter motor, compared to the AC motor.
- 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.
- Wide louver fins for the heat exchanger**
Improved efficiency by using wide louver fins with an increased heating area.
- HiPOR™ (High Pressure Oil Return)**
Improved the system's COP by 5%



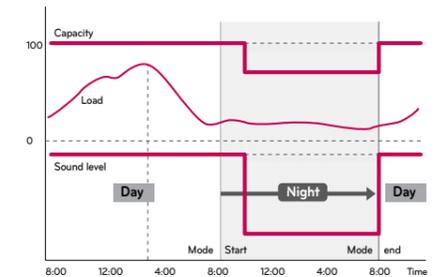
Continuous heating operation*

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

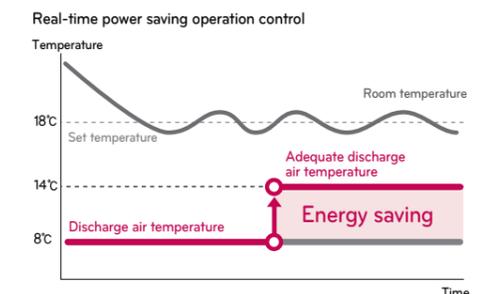
The text is wrong because the same than "Continuous heating operation". Replace by the text about Night silent operation, see catalogue 2011.



Real-time smart operation

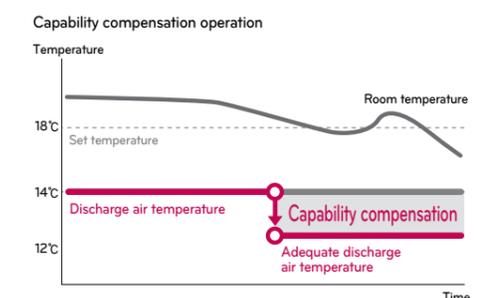
Real-time power saving operation

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

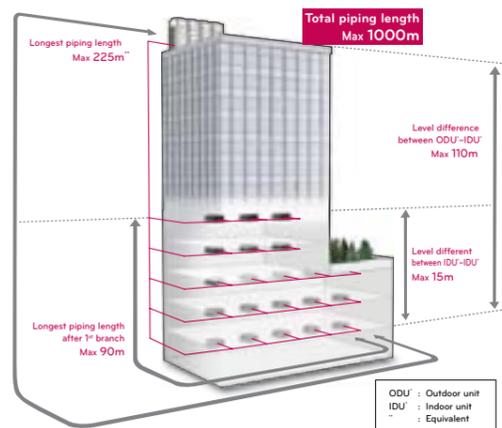
During the heating or cooling operation, the product automatically decides the operation status and performs the capability compensation operation on indoor units if required.



Extended piping length and elevation

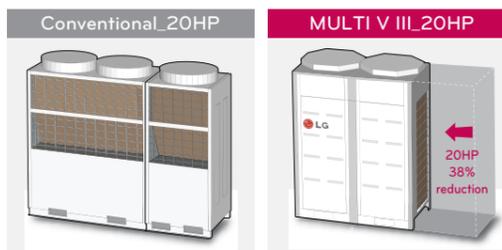
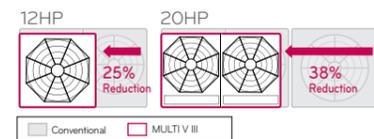
Because of the product's use of inverter control technology and sub-cooling control circuit technology, it is possible to design a system with longer piping length and world-class elevation difference. With this product, since a cooling and heating system can be designed more flexibly in a high-rise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

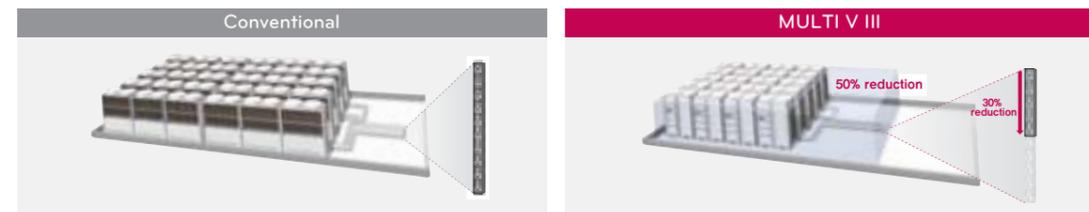
- | | |
|----------------------------------|--|
| Installation space saving | Single pipe |
| - Optimal space utilization | - Easy to design |
| | - Cooling and heating for an extensive space |
| | - Installation cost savings |



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.

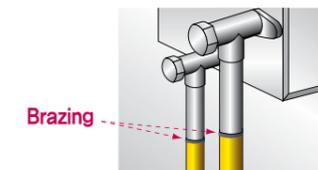
R410A Refrigerant

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.

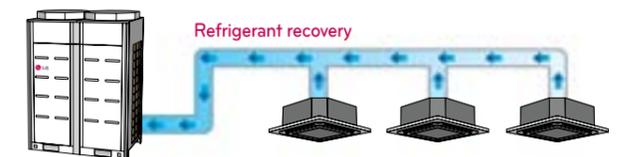


Auto leakage detection

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



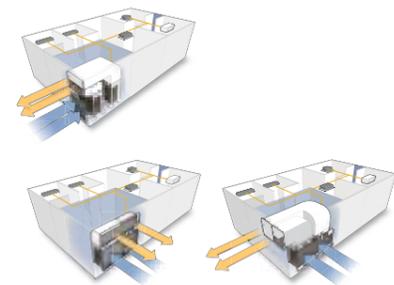
Octagonal grill air flow resistance reduction

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

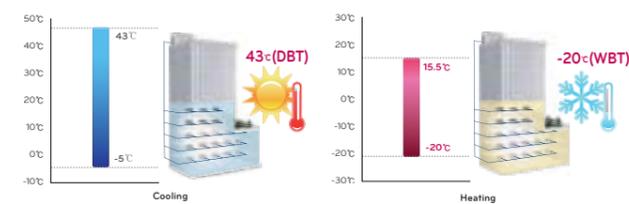


No stacking of high temperature air occurs due to powerful discharge of air currents even within a high-rise building



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

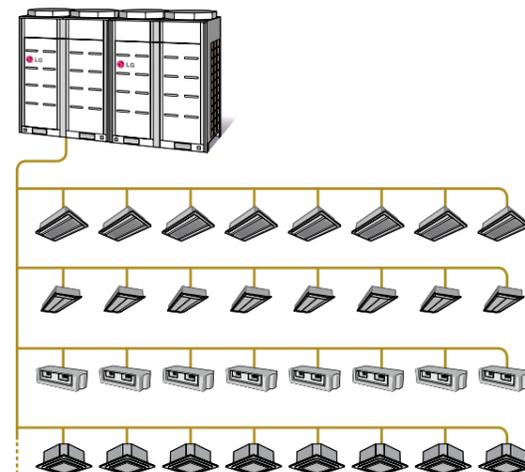
Since up to 64 indoor units can be connected and there are 13 types of 71 different indoor models that can be connected, a variety of designs tailored for individual construction usage can be made. Up to 200% efficiency can be achieved with different combinations.

Connectable Indoor unit Capacity Up to Max 200%	Connectable Indoor unit Number Up to 64	Various Indoor units 13 types, 71 models
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* 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.

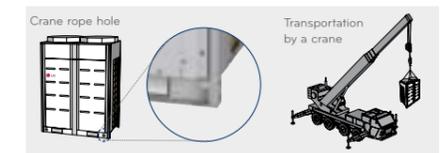
Fast and safe transportation by a forklift

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.



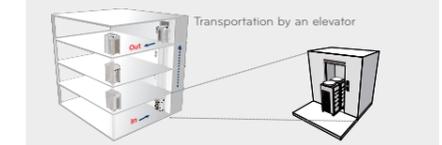
Safety design for crane use

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



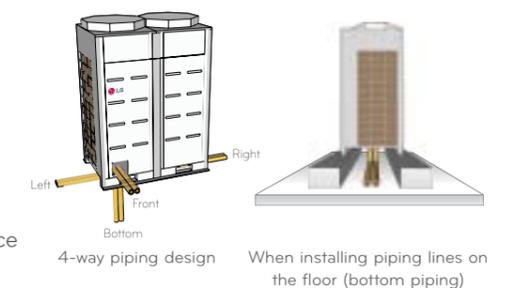
Compact product design allowing transportation by an elevator

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



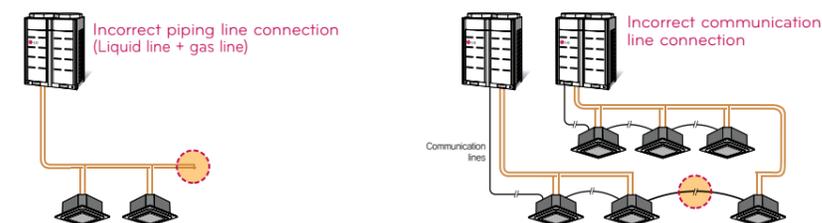
Free 4-way piping connection

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.



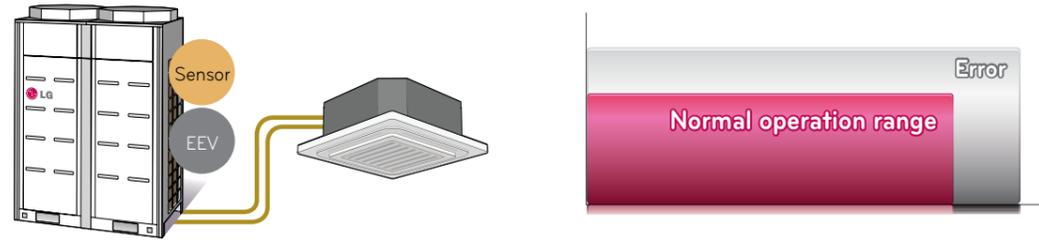
Automatic detection for incorrect connections

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.



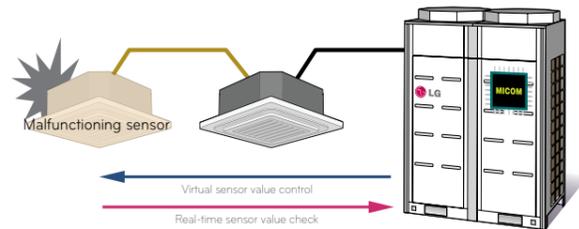
Real-time fault prediction function

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.



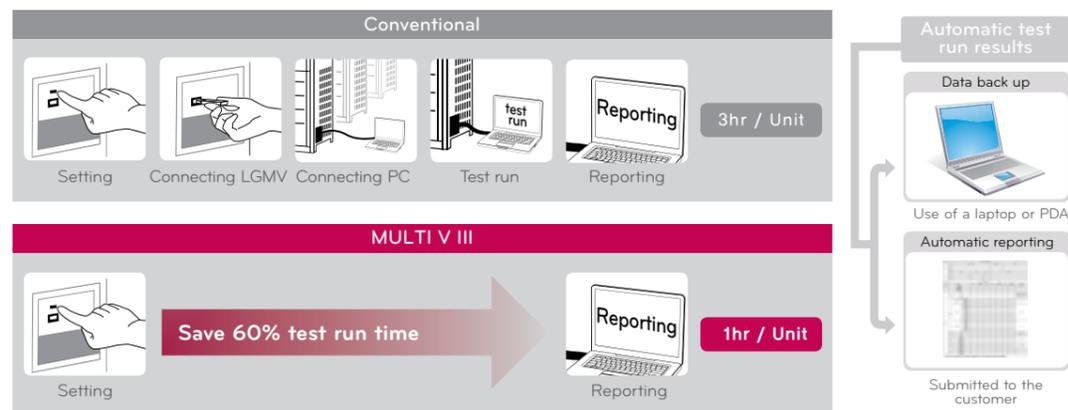
New virtual sensor back-up function

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.



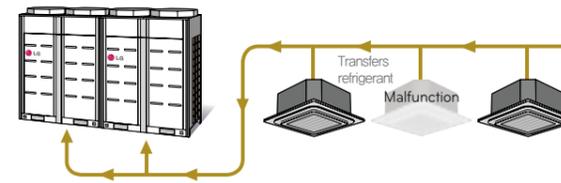
Automatic test run reduce test run time by more than 60% compared to the test run in an conventional product, and provides safe, reliable and convenient test run with various data backup functions. Since any general installation worker, not just a highly trained engineer, can perform a test run, the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

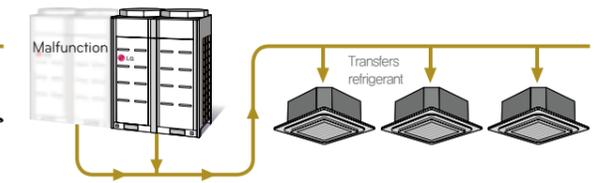
PUMP DOWN

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.



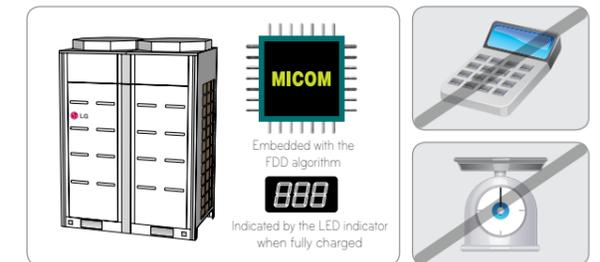
PUMP OUT

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



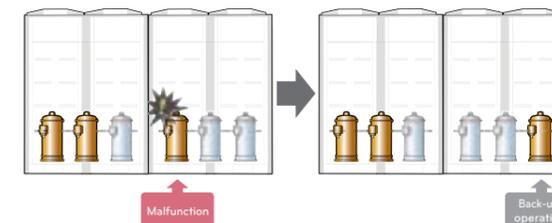
Automatic refrigerant charging function

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.

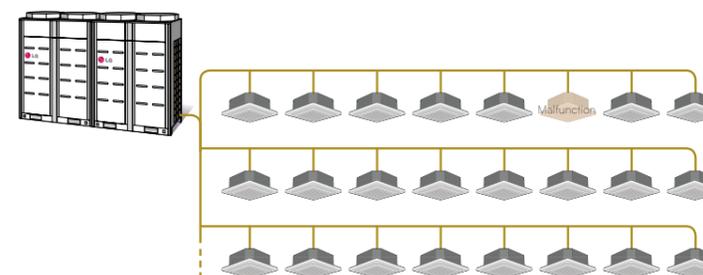


Automatic emergency back-up function

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

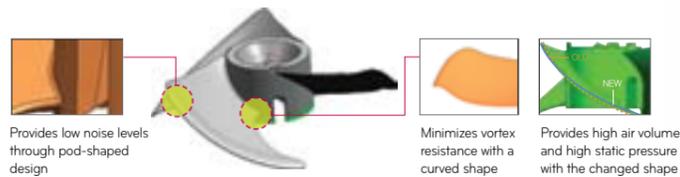
The product is equipped with highly efficient BLDC motor. The BLDC motor power consumption has been reduced and output has been improved, compared to the normal induction motor.

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)

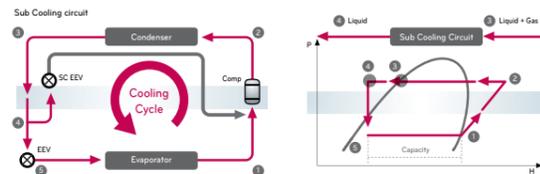
The Super Aero fan is a large air volume and high static pressure fan, and at the same time it produces low levels of noise.



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.

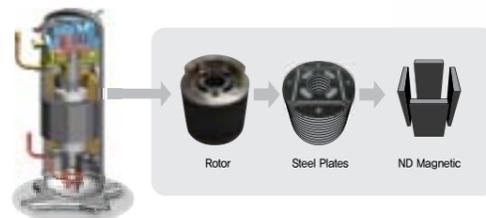
※ Sub-cooling circuit control: Extracts part of the refrigerant of the SC circuit equipped in the liquid line exit of an outdoor unit and expands that extracted refrigerant using the SC EEV to make low temperature refrigerant, and then performs heat exchange in the system using that low temperature to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

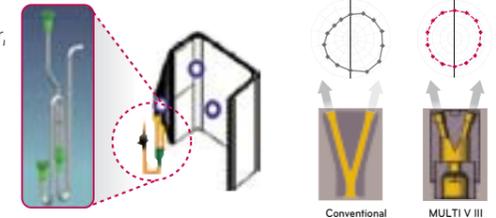


In addition, because the LG BLDC inverter compressor has the back pressure structure in which the interior of the compressor is maintained at a high pressure, the compression efficiency is improved. The compressor is also a high pressure type that makes oil lubrication smoother. Compared to the conventional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

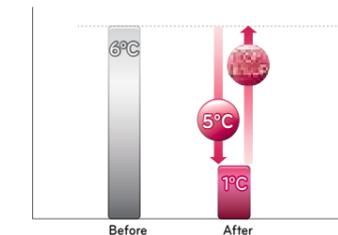
It is the most suitable scroll inverter compressor for the VRF system and acts as the core to MULTI V III its outstanding performance and high reliability.

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.



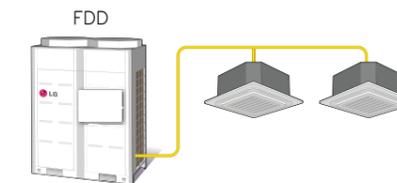
Standard Deviation of T_{out}



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.

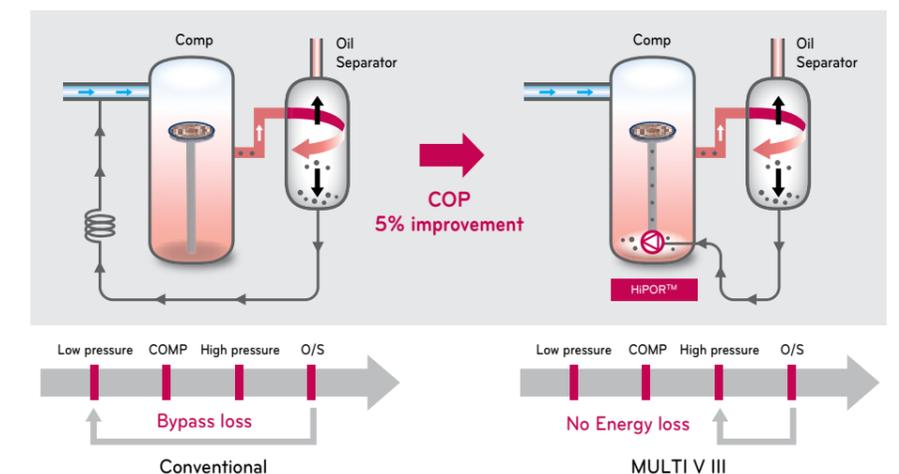


※ New & Improved function
1. Automatic test run
2. Refrigerant amount check
3. Real-time diagnosis (refrigerant and parts)
4. Real-time back-up (compressor and sensors)



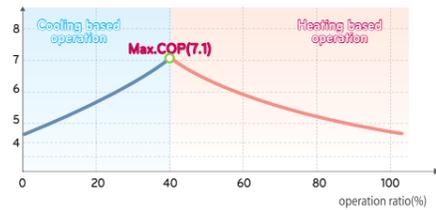
7 New oil management technology (HiPOR™)

HiPOR™ 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.

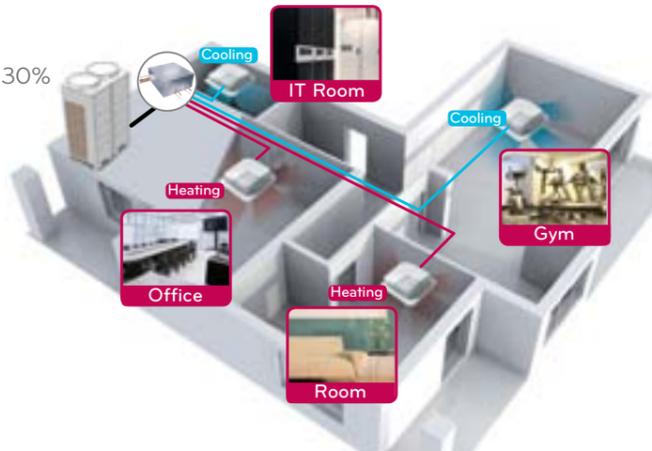


Heating & Cooling Synchronous Operation

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



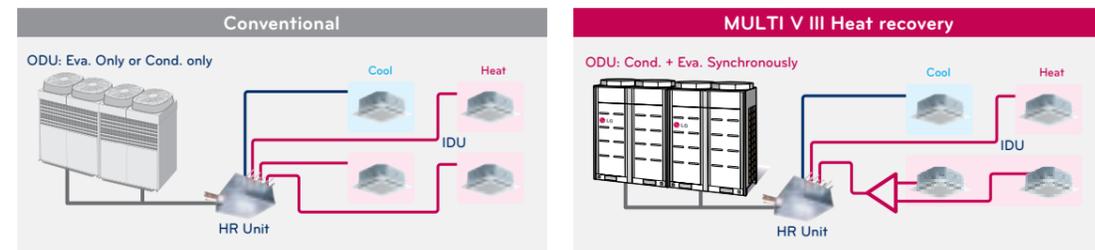
* Outdoor temperature : 7°C DB / 6°C WB
* Indoor temperature : 20°C DB / 15°C WB



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)

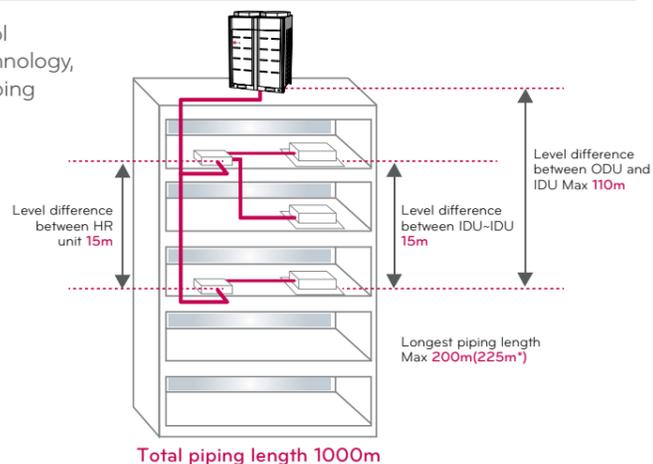


Long Piping Length

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

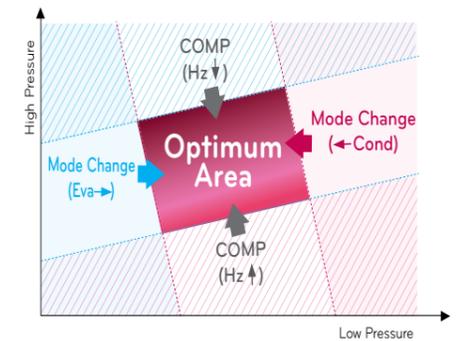
* Equivalent
** Conditional application



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

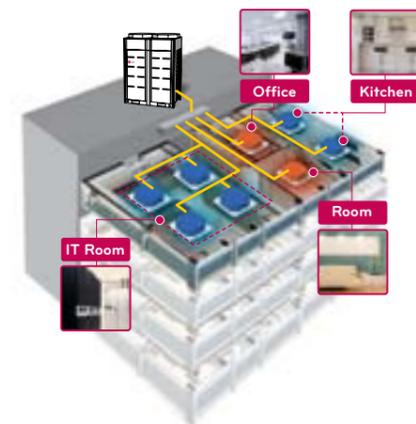
- Real time pressure control
- Optimal cycle in optimum area
- Minimize settling time after switching mode : MAX 5 min.



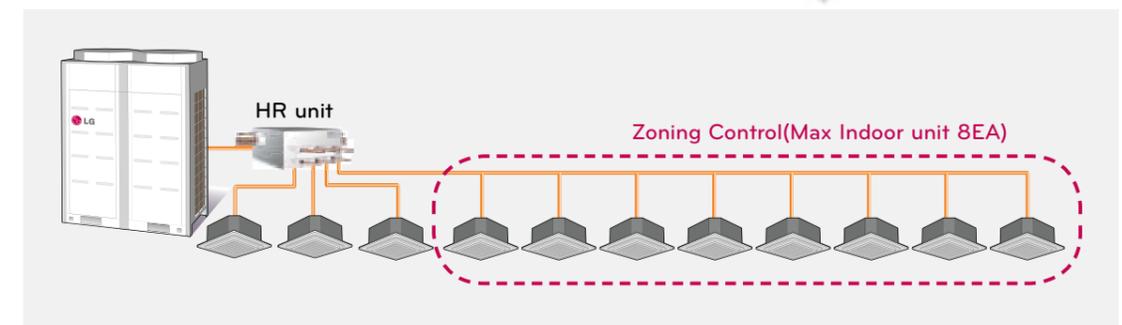
Convenient Free Zoning

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

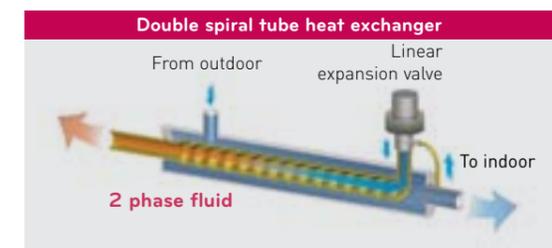


[Zoning control]



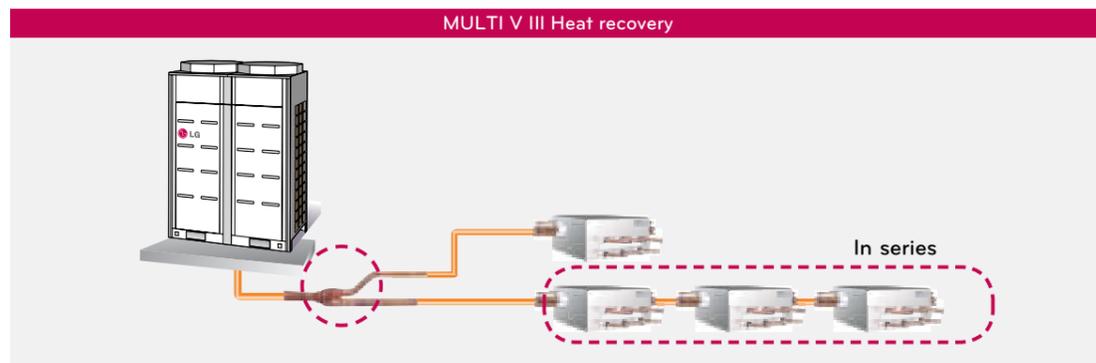
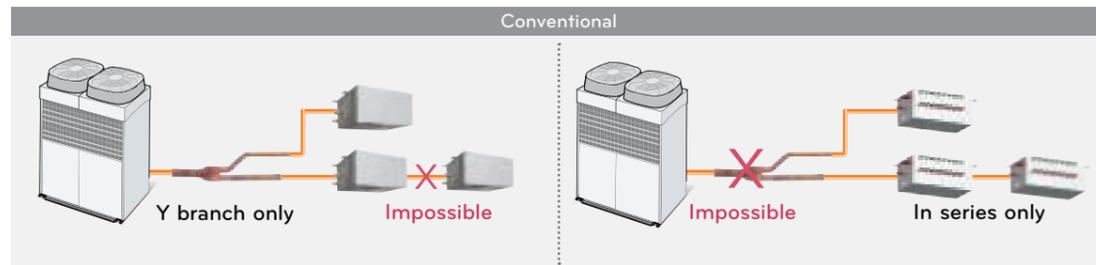
High Efficiency Heat Recovery Unit

- 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.

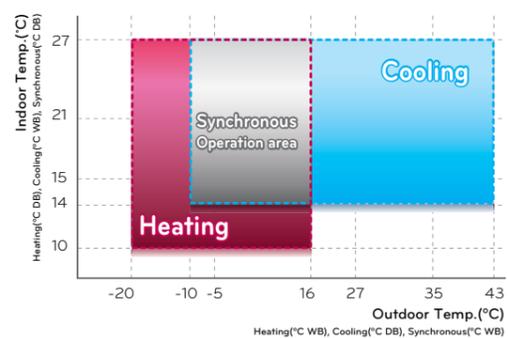


Wide Operation Range

Expanded Low Temperature Operation area through Condenser with Various Control

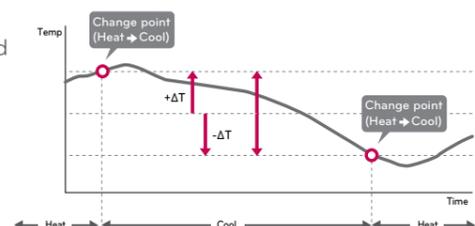
- Heating mode : - 20°C WB ~ 16°C WB
- Cooling mode : - 10°C DB ~ 43°C DB
- Synchronous mode : -10°C WB ~ 16°C WB

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



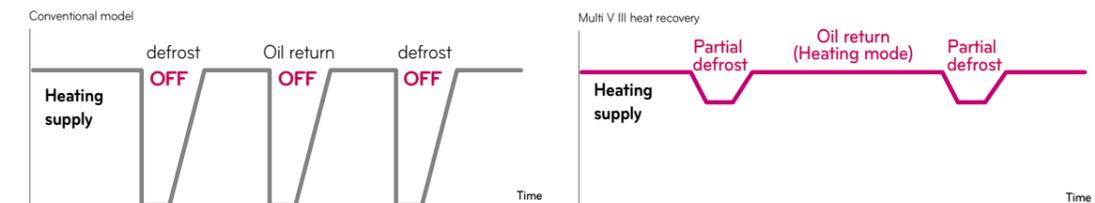
Auto Changeover

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

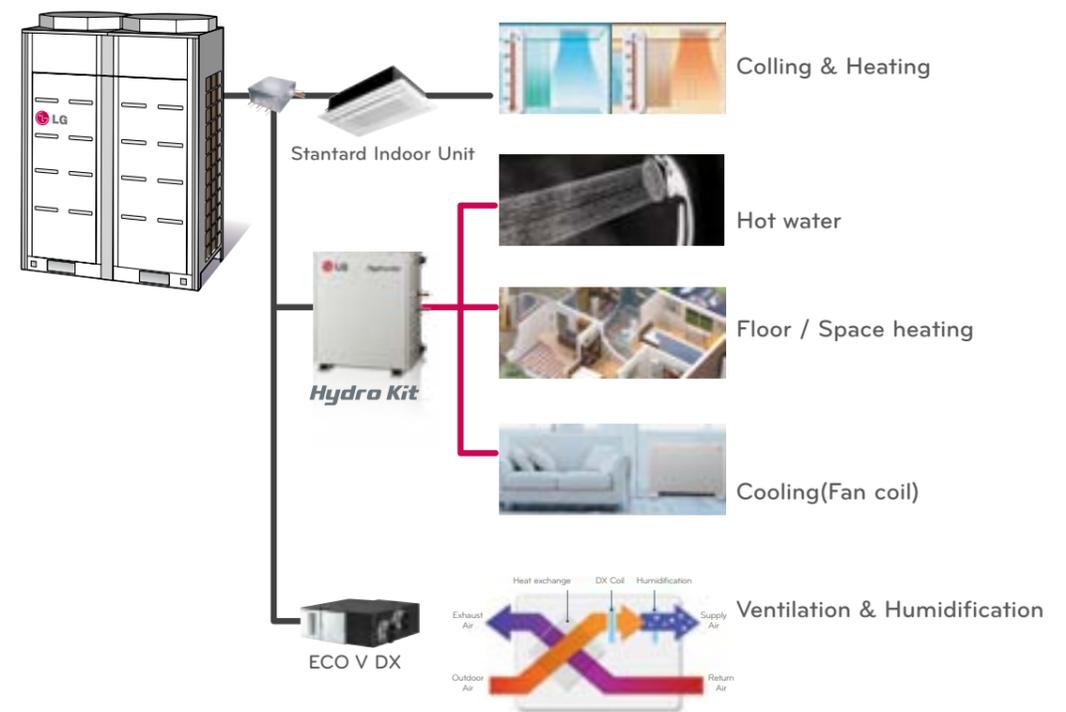


*Existing mode can be operated automatically, depending on the condition of application.

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



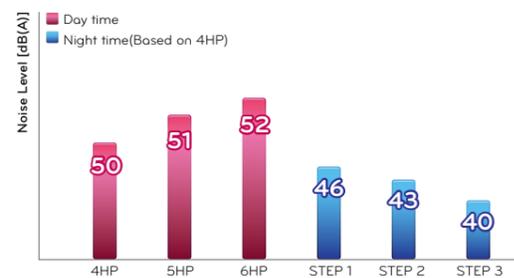
MULTI VTM MINI

Enhanced Comfort

- Night silent operation
- High COP

Mini	1Ø, 220V		3Ø, 380V	
	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

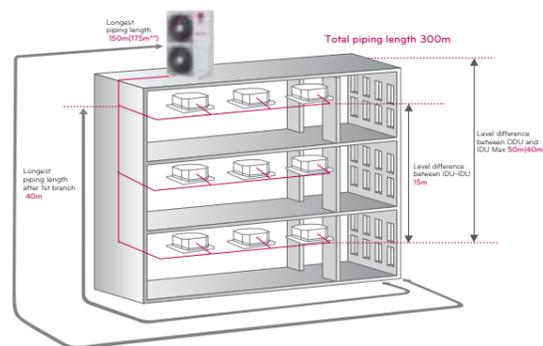
Noise level (dBA)



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

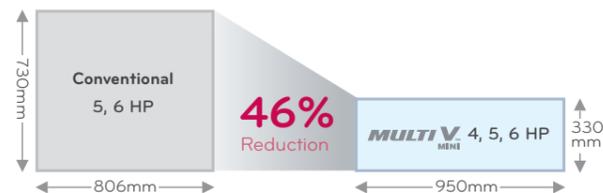
*Outdoor unit is lower than indoor unit.



Slim & Compact Size

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

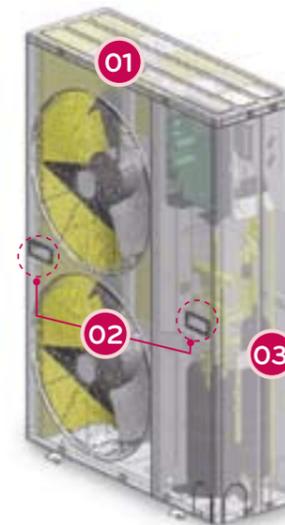
Foot print area



Volume



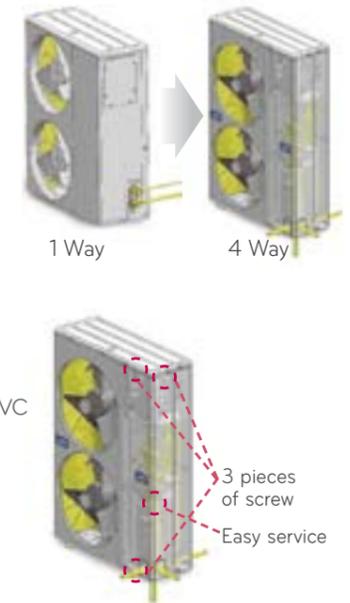
Easy to Service



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

- 02** Convenient moving handle

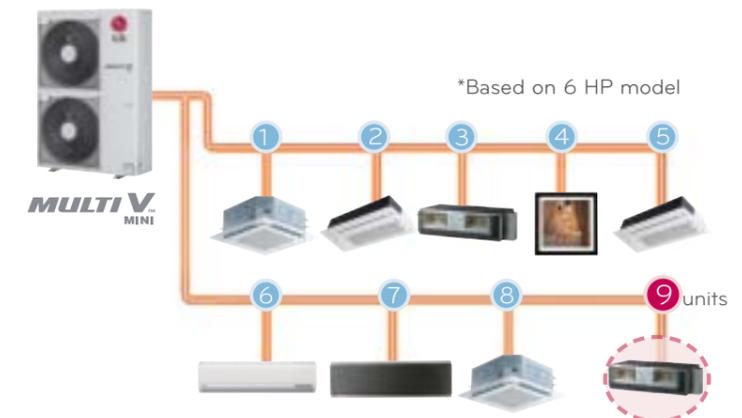
- 03** Compact design & Easy service
- Remove 3 pieces of screw for SVC
- Front panel removal system



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

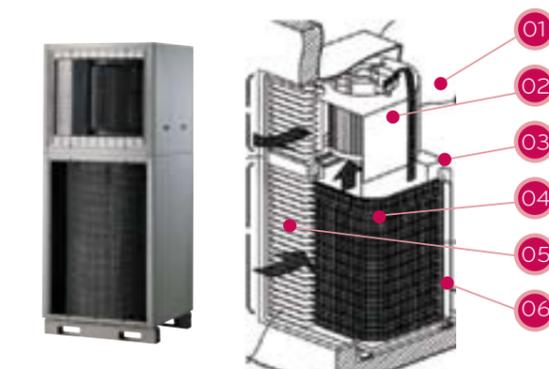
The indoor noise level is maintained at 30~40dBA, as quiet as being in the library



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 structure (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)



LG patents : 57items

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

Duct application



How to set up

- E.S.P control

1	2	3	4	5	6	7	8	9	10	11	12	13	14	Step 1 : 4mmAq < ESP ≤ 6mmAq
1	2	3	4	5	6	7	8	9	10	11	12	13	14	Step 2 : 6mmAq < ESP ≤ 8mmAq
1	2	3	4	5	6	7	8	9	10	11	12	13	14	Step 3 : 8mmAq < ESP ≤ 10mmAq
1	2	3	4	5	6	7	8	9	10	11	12	13	14	Step 4 : 10mmAq < ESP ≤ 12mmAq

- Noise control

1	2	3	4	5	6	7	8	9	10	11	12	13	14	Low blowing noise : Max - 100 rpm
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4-Step Modularized Design

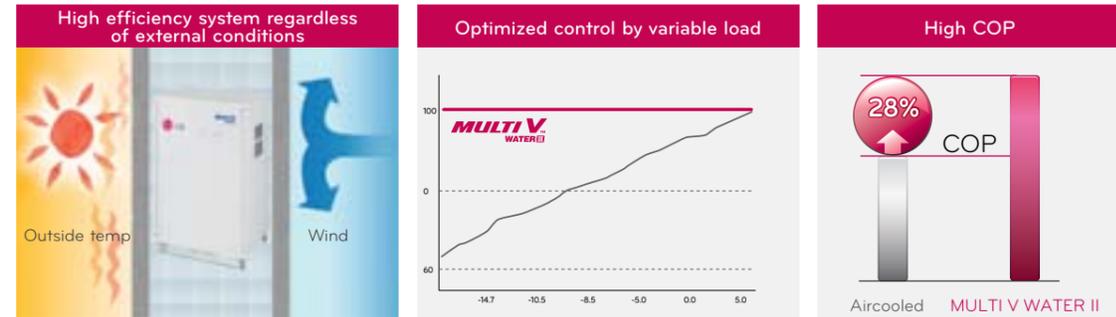
- Modularized design of the outdoor unit provides simpler installation and maintenance.
- Outdoor unit can be installed according to overall building construction schedule.
- Louver is provided locally



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

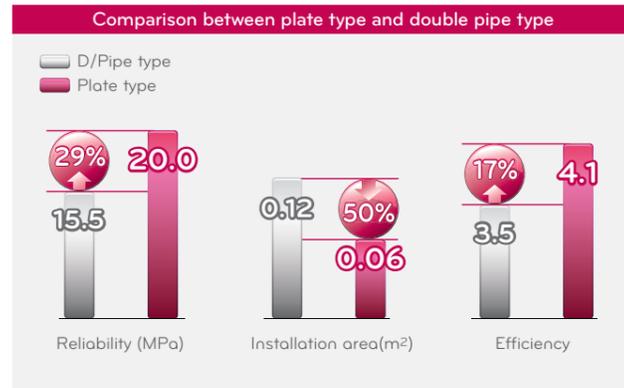
Economic Water System

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.



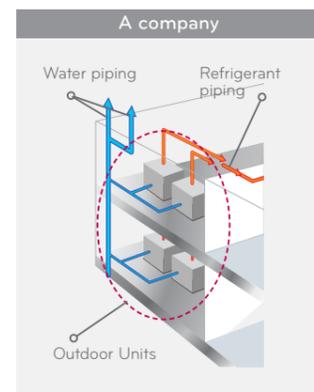
High Efficiency & Reliability

- 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

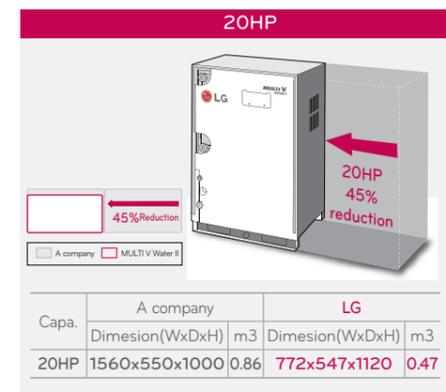


Easy Installation & Compact Size

- 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.

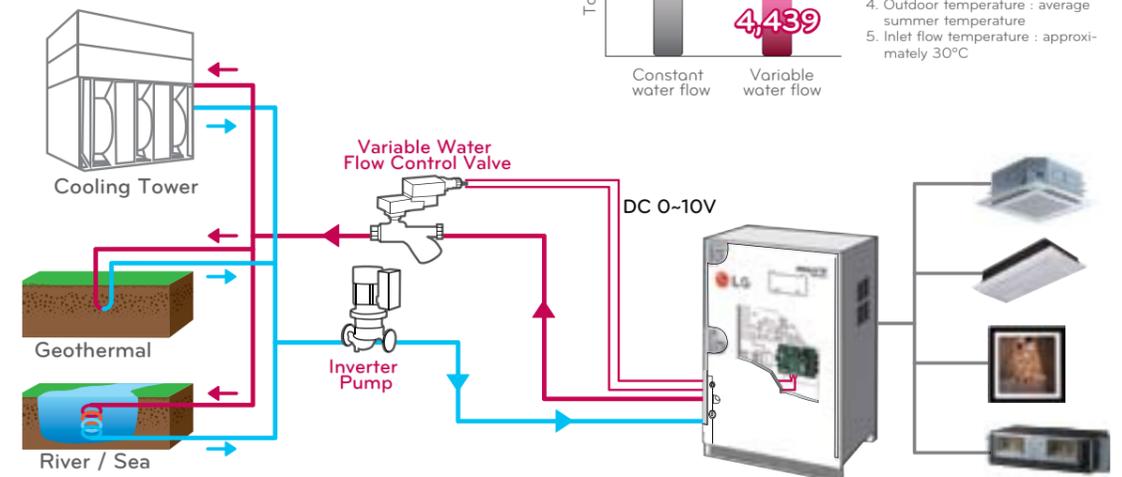
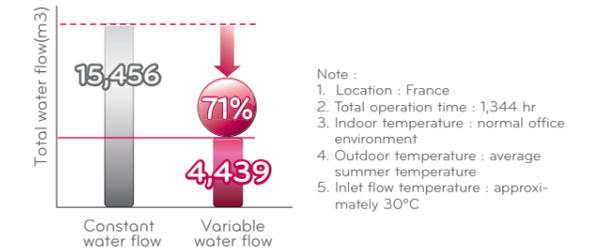


- The working water temperature range is between -5°C~45°C
- Antifreeze should be applied for according to each application.

**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	m ³ /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		
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 mm ²	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 st 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	
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	m ³ /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		kg	12.8	13.4		
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 mm ²	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 st 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	m ³ /min	420		450		460	
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	
Refrigerant	Type			R410A					
	Charge			14.0		14.5		16.0	
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 mm ²	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 st branch **			m	40(90)					
Piping level difference		IDU-ODU	m	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		50 - 160%					
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
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	m ³ /min	610			630	
Sound Pressure		High	dBA	62.8			64.0	
Dimension		WxHxD	mm	(920 x 1,680 x 760) x 1 + (1,240 x 1,680 x 760) x 2			(1,240 x 1,680 x 760) x 3	
Net weight			kg	240 x 1 + 260 x 2			260 x 3	
Refrigerant	Type			R410A				
	Charge			20.4			21.0	
Control			EEV					
Refrigerant Oil	Type			FVC68D(PVE)				
	Charge			16,200			16,500	
Power Supply			Ø / V / Hz	3 / 380 - 415 / 50				
Transmission cable (VCTF-SB)			N x mm ²	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 st 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				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	
Sound Pressure			High	dBA	65.8	66.5			66.8
Dimension			WxHxD	mm	(1,240 x 1,680 x 760) x 3				
Net weight				kg	260 x 2 + 325 x 1	260 x 1 + 325 x 2	315 x 1 + 325 x 2	325 x 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 st 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
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		
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 st 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	Type			260 x 2 + 325 x 2	260x1 + 315x1 + 325x2	260 x 1 + 325 x 3	315 x 1 + 325 x 3	325 x 4
	Charge			kg	32.0	32.5	34.0	34.5
Refrigerant	Type			R410A				
	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				
Actual longest piping Length *				m				
Longest piping length after 1 st branch **				m				
Piping level difference	IDU-ODU			m				
Piping Connection	Liquid			mm(inch)				
	Gas			mm(inch)				
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.

MULTI V III Heat Recovery



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	m ³ /min	180	190	210	240	250		
Sound Pressure		High	dBA	57	58	61	62			
Dimension		WxHxD	mm	(920x1,680x760)x1			(1,240x1,680x760)x1			
Net weight			kg	190 x 1	240 x 1	270 x 1	320 x 1	330 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 mm ²	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 st 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							
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	
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	m ³ /min	380	400		
Sound Pressure		High	dBA	61			
Dimension		WxHxD	mm	(920x1,680x760)x2		(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 + 270 x 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 mm ²	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 st 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)		Ø28.58(1 1/8)	
	High Pressure Gas Pipes		mm(inch)	Ø28.58(1 1/8)		Ø22.2(7/8)	
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				
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	m ³ /min	420	450	460	490	500	
Sound Pressure		High	dB(A)	62.8	63.5		65.0		
Dimension		WxHxD	mm	(1,240x1,680x760)×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	
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 mm ²		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 st 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)	Ø34.9(1 3/8)			Ø41.3(1 5/8)		
	High Pressure Gas Pipes		mm(inch)	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
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	m ³ /min	610			630	660
Sound Pressure		High	dB(A)	62.8	64.0		64.5	65.4
Dimension		WxHxD	mm	(920x1,680x760)×1 + (1,240x1,680x760)×2		(1,240x1,680x760)×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	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 mm ²		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 st 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)			Ø34.9(1 3/8)	
	High Pressure Gas Pipes		mm(inch)	Ø34.9(1 3/8)			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			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	Type			R410A				
	Charge			23.0	25.0		25.5	27.0
Refrigerant Oil	Control			EEV				
	Type			FVC68D(PVE)				
Refrigerant Oil	Charge			18,200	19,900		21,600	
	Power Supply			Ø / V / Hz				
Transmission cable (VCTF-SB)			N x mm²					
Total Piping Length			Max					
Actual longest piping Length *			m					
Longest piping length after 1 st branch **			m					
Piping level difference			IDU-ODU					
Piping Connection	Liquid Pipes			mm(inch)				
	Low Pressure Gas Pipes			mm(inch)				
	High Pressure Gas Pipes			mm(inch)				
Number of Outdoor Unit			3					
Number of Maximum Connectable Indoor Units ***			64					
Ratio of the Connectable Indoor Units			Min ~ Max					
Heat exchanger			Type					

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
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	Type			R410A				
	Charge			28.0	28.5	29.0	30.5	
Refrigerant Oil	Control			EEV				
	Type			FVC68D(PVE)				
Refrigerant Oil	Charge			22,000	23,700		25,400	
	Power Supply			Ø / V / Hz				
Transmission cable (VCTF-SB)			N x mm²					
Total Piping Length			Max					
Actual longest piping Length *			m					
Longest piping length after 1 st branch **			m					
Piping level difference			IDU-ODU					
Piping Connection	Liquid Pipes			mm(inch)				
	Low Pressure Gas Pipes			mm(inch)				
	High Pressure Gas Pipes			mm(inch)				
Number of Outdoor Unit			4					
Number of Maximum Connectable Indoor Units ***			64					
Ratio of the Connectable Indoor Units			Min ~ Max					
Heat exchanger			Type					

Specifications

HP			72	74	76	78	80	
Model	Combination unit		ARUB72OLT3	ARUB74OLT3	ARUB76OLT3	ARUB78OLT3	ARUB80OLT3	
	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
	Cooling	Nom	kW	52.0	53.8	56.0	57.8	60.0
Power Input	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
	Cooling			3.88	3.85	3.80	3.78	3.73
COP	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	m ³ /min	920	950	960	990	1,000
Sound Pressure		High	dB(A)	67.5	67.8		68.0	
Dimension		WxHxD	mm	(1,240x1,680x760)×4				
Net weight	Type		kg	270 × 2 + 330 × 2	270x1 + 320x1 + 330x2	270 × 1 + 330 × 3	320 × 1 + 330 × 3	330 × 4
	Refrigerant		Charge	kg	32.0	32.5	34.0	34.5
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 mm ²		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 st branch **			m	40(90)				
Piping level difference	IDU-ODU		m	110				
Piping Connection	Liquid Pipes		mm(inch)	Ø22.2(7/8)				
	Low Pressure Gas Pipes		mm(inch)	Ø53.98(2 1/8)				
	High Pressure Gas Pipes		mm(inch)	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					
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



MULTI V™ SPACE II



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					
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 st 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 :

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

* () : equivalent length

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

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			-5°C ~ 43°C			
	Heating	Min-Max	°C(WB)	-20°C ~ 16°C			-20°C ~ 16°C			
Compressor	Type	DC Scroll			DC Scroll					
	Number of Compressor	1			1					
Fan	Type	Sirocco			Sirocco					
	Motor Type	BLDC motor			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			750 x 1,790 x 650			
Net weight			kg	200			200			
Refrigerant	Type	R410A			R410A					
	Charge	kg		5.2			6.4			
Refrigerant Oil	Type	FVC68D(PVE)			FVC68D(PVE)					
	Charge	cc		2,300			2,300			
Power Supply	Ø / V / Hz		3 / 380 ~ 415 / 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 st branch			m	40			40			
Piping level difference	IDU-ODU		m	50			50			
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			9			13			
Ratio of the Connectable Indoor	Min ~ Max		50 ~ 130%			50 ~ 130%				
Heat exchanger	Type		Gold fin			Wide Louver fin(Gold-coating)				

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

* () : equivalent length

MULTI V™ WATER II Heat Pump



MULTI V™ WATER II Heat Recovery



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
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	dB(A)	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
Refrigerant Oil	Control		EEV					
	Type		FVC68D(PVE)					
Power Supply	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
	Type		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 st 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
Water Connection Pipe	Head Loss	kPa	26.5	43.0				
	Inlet	m	PT32	PT40	PT40 + PT32	PT40x2	PT40 x 2 + PT32	PT40x3
Water Connection Pipe	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 on installation section.)

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

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
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	dB(A)	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
Refrigerant Oil	Control		EEV					
	Type		FVC68D(PVE)					
Power Supply	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
	Type		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 st 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
Water Connection Pipe	Head Loss	kPa	26.5	43.0				
	Inlet	m	PT32A	PT40A	PT40A+PT32A	PT40Ax2	PT40Ax2+PT32A	PT40Ax3
Water Connection Pipe	Outlet	m	PT32A	PT40A	PT40A+PT32A	PT40Ax2	PT40Ax2+PT32A	PT40Ax3
	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 on installation 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
- 68 Standard
- 69 Wall mounted
- 70 Console
- 72 Ceiling Cassette
- 76 Ceiling Concealed Duct
- 80 Fresh Air Intake Unit
- 82 Ceiling & Floor
- 83 Ceiling Suspended
- 84 Floor standing



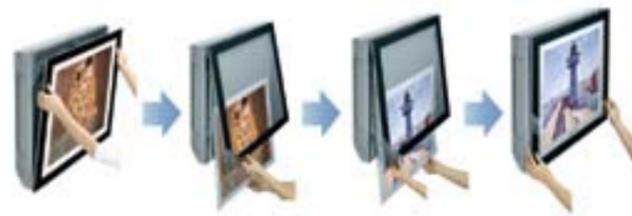
ART COOL

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



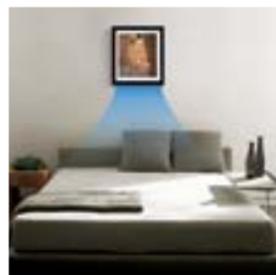
Blue 07/09/12/15GSEB2
18/24GS8B2

Digital Air Flow Control

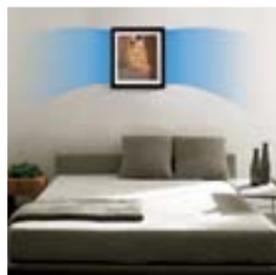
The air flow can be controlled to ensure maximum comfort and convenience.



Normal
fast & even widely



Jet cool
speedy & powerful



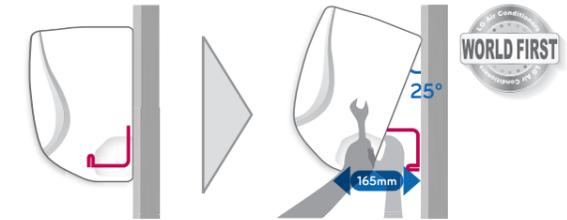
Sleep mode
indirectly & softly

STANDARD

Installation support clip

Installation support clip makes installation easier

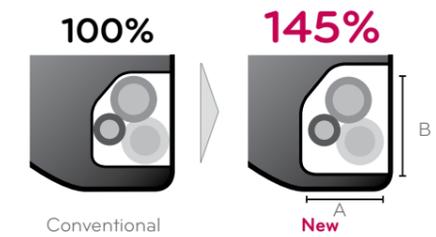
*Only Standard



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.

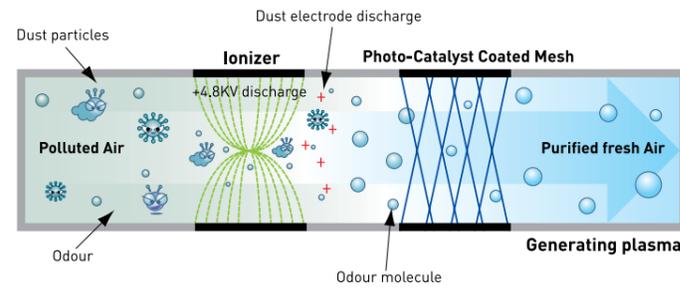


- 1 VOC filter removes odor and hazardous VOCs that is discharged from household materials made with chemical substances (carpet, paint, cleaners, furniture, etc.) (VOC= Volatile Organic Chemical)
- 2 Formaldehyde filter cuts off formaldehyde, a leading cause of new-house syndrome, and prevents dermatitis,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

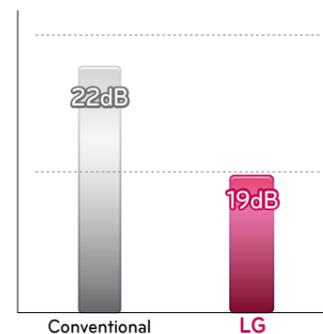
The indoor unit has a quiet operational noise level in the sleep mode to offer you peace and quiet for the bedroom or office. For example, LG model ARNU09GSBL2, ARNU12GSBL2 in sleep mode is only 19dB. In addition, the outdoor units have reduced vibration and noise thanks to a super quiet fan and motor.

Conventional Fan

When the fan rotates, the stabilizer and the fan blade are in parallel (= the contact of lines)
→ Instantaneous pressure change is great.

Skew Fan

When the fan rotates, the stabilizer and the fan blade are not in parallel (= the contact of points)
→ Instantaneous pressure change is small.



CONSOLE

LG Unique design

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

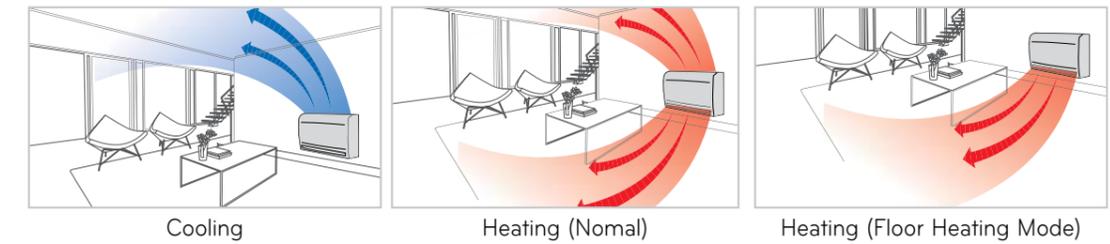
- Full front panel
- 3 dimensional round design



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.



Healthy Air (3 stage air filter system)

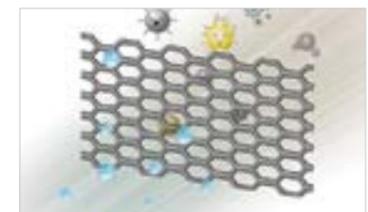
1st Advanced pre filter :

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



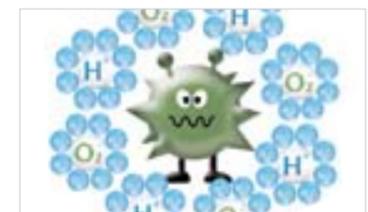
2nd Allergy Filter :

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 :

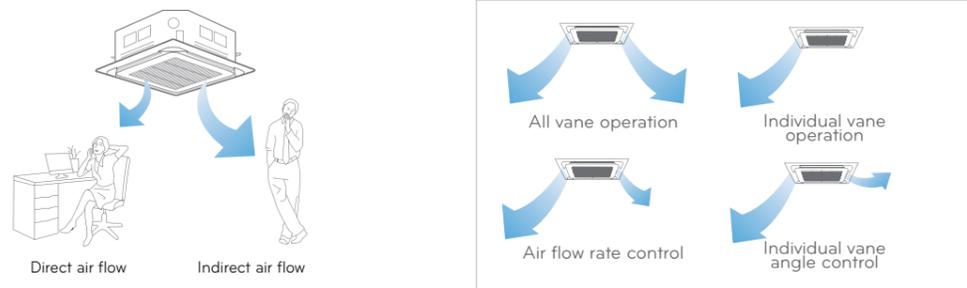
The sterilized ion generating system, Ion Generator, emits around 1.2 million ions, and catches hazardous substances floating in the air, therefore proactively looking for and catching germs.



CEILING CASSETTE

4 Vanes Independent Operation

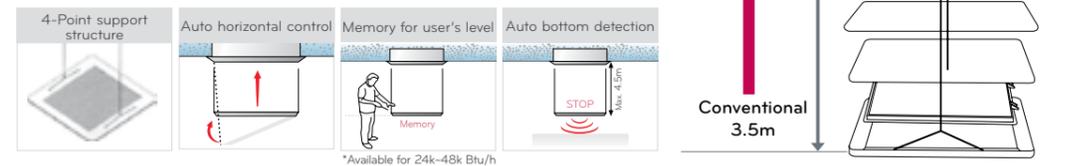
Vane angle control satisfies both users who like direct wind and indirect wind, and also it prevents cold air draft.



Auto Elevation Grille

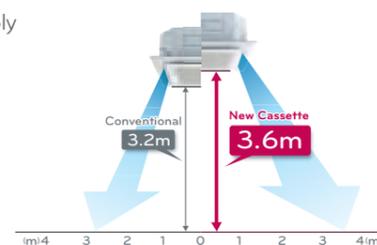
Easy filter cleaning with elevation grille

- Installed inside main body
- Auto horizontal level
- 4 points support
- Memory for user's level
- Max. 4.5m length



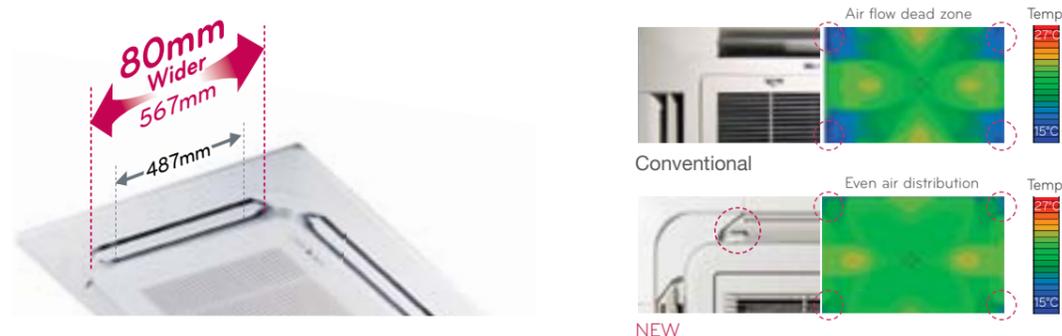
High Ceiling Mode

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

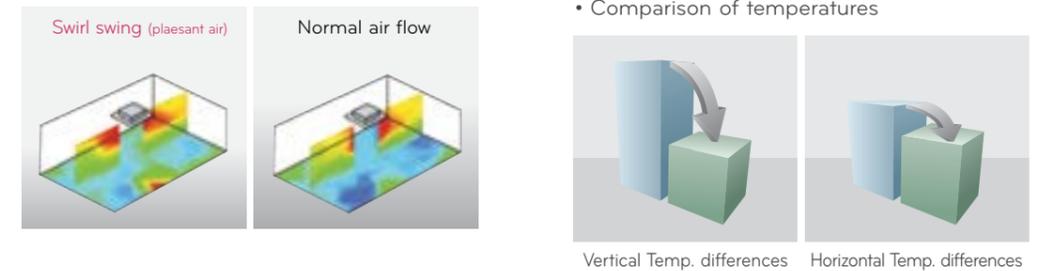
- Group control : 1 remote controller to several indoor units
- Second remote control : 2 remote controllers to 1 indoor unit

Easy & solid attachment to the wall



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

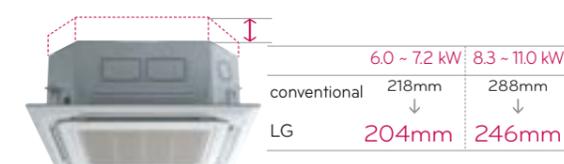
Easy installation with corner detachable decoration panel.

- Corner 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

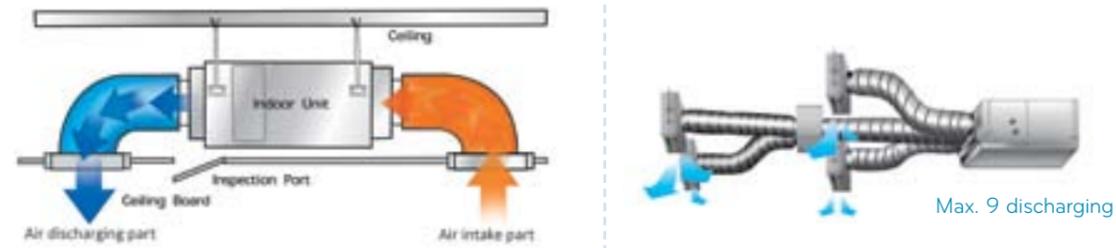
It provides easy installation with a one-touch detachable panel.



CEILING CONCEALED DUCT

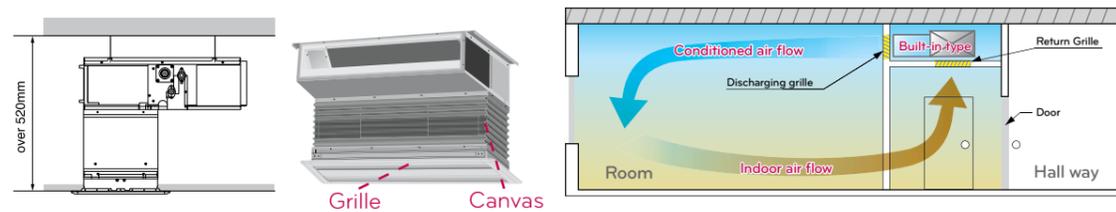
Application of Ceiling Concealed Duct

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.

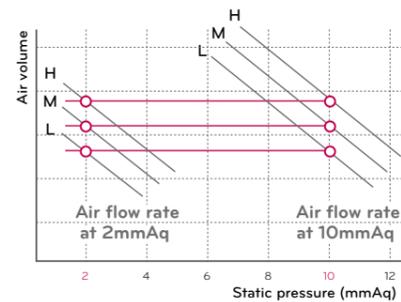


Linear E.S.P Control

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.

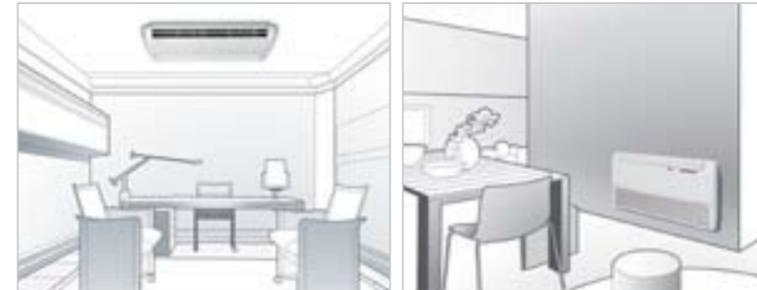


*E.S.P is easily controlled by remote controller

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.

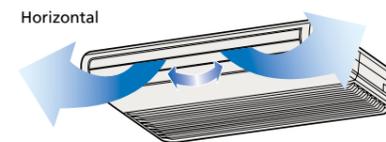


*Floor is only for DC inverter

Airflow Direction Control

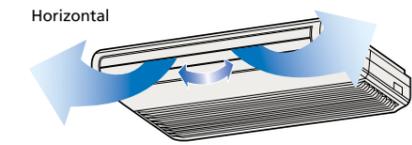
Horizontal Airflow Direction Control.

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

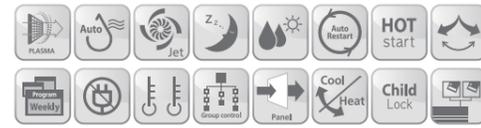
Photo changeable



Panel type



ART COOL Gallery



* 1: Photo changeable
V: Silver, E: Red, G: Gold, H: White 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	
	Heating	H/M/L	m³/min		8.1 / 6.3 / 4.2	
Sound Pressure	H/M/L		dBA		38 / 32 / 27	
Dimension	Body	WxHxD	mm			
Net weight			kg (lbs)		600 x 600 x 145	
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
 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	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	PQRCVSL0QW	PQRCVCL0Q (Black) PQRCVCL0QW (white)	PQRCHCA0Q(Black) PQRCHCA0QW(White)	PQWRHDF0

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

ART COOL MIRROR



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

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											
	Heating +7°C	Max W	40											
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			
	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			
Sound Pressure	H/M/L		dBA		37 / 33 / 23		39 / 35 / 25		41 / 36 / 27		42 / 36 / 27			
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
 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

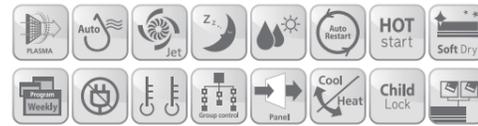
Accessories

Model	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	PQRCVSL0QW	PQRCVCL0Q (Black) PQRCVCL0QW (white)	PQRCHCA0Q(Black) PQRCHCA0QW(White)	PQWRHDF0

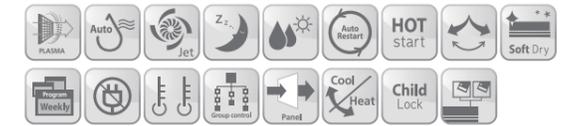
ARNU07GSBL2 / ARNU09GSBL2 / ARNU12GSBL2 ARNU15GSBL2 / ARNU18GSCL2 / ARNU24GSCL2

Standard



ARNU07GSEL2 / ARNU09GSEL2 / ARNU12GSEL2 ARNU15GSEL2 / ARNU18GS5L2 / ARNU24GS5L2

Wall Mounted



Specifications

Model	ARNU07GSBL2	ARNU09GSBL2	ARNU12GSBL2	ARNU15GSBL2	ARNU18GSCL2	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	dB(A)		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)					

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			40		
	Heating +7°C	Max	W	40			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	dB(A)		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

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				

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	PQRCVSL0QW	PQRCVCL0Q (Black) PQRCVCL0QW (white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDF0

Wired remote controller				Wireless remote controller
Standard type	Standard type	Simple type	Simple type for hotel	
PQRCVSL0	PQRCVSL0QW	PQRCVCL0Q (Black) PQRCVCL0QW (white)	PQRCHCAOQ(Black) 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	dB	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(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

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Accessories

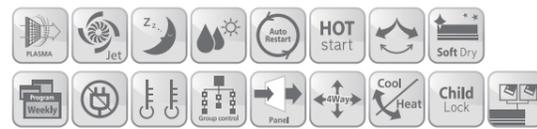
Model	ARNU07GQAA2	ARNU09GQAA2	ARNU12GQAA2	ARNU15GQAA2
Dry Contact	Without case(1 contact point)		PQDSA	
	With case(1 contact point)		PQDSB / PQDSB1	
	With case(2 contact point)		PQDSBC	

Wired remote controller					Wireless remote controller
Deluxe type	Standard type	Standard type	Simple type	Simple type for hotel	
PQRCUDSO(white) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVSLO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(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										

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

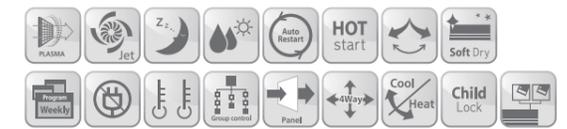
Accessories

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) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVLSLO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDFO

ARNU24GTPC2 / ARNU28GTPC2 ARNU36GTNC2 / ARNU42GTMC2 / ARNU48GTMC2

4 Way Cassette (840x840)



Specifications

Model	ARNU24GTPC2	ARNU28GTPC2	ARNU36GTNC2	ARNU42GTMC2	ARNU48GTMC2								
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							
	Heating +7°C	Max	W			30							
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										

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) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVLSLO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDFO

ARNU18GTLC2 / ARNU24GTLC2

2 Way Cassette



ARNU07GTUC2 / ARNU09GTUC2 ARNU12GTUC2 / ARNU18GTTC2 / ARNU24GTTC2

1 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					
Net weight	kg(lbs)			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							

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									kg 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

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			

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) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVLSO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDFO

Wired remote controller					Wireless remote controller
Deluxe type	Standard type	Standard type	Simple type	Simple type for hotel	
PQRCUDSO(white) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVLSO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDFO

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 (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	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)					

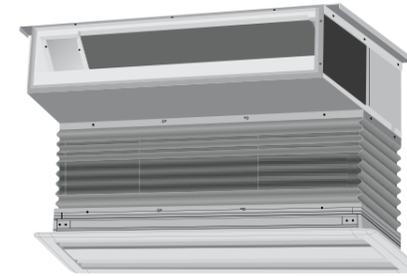
Note 1. Capacities are based on the following conditions
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB
Interconnecting piping length 7.5m / Level difference of zero
Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB
Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB
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	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) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVLSLO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDFO

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 (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
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	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) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVLSLO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDFO

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	35 / 34 / 33	37 / 35 / 34	39 / 37 / 34	40 / 38 / 37	42 / 41 / 40
Dimension	Body	WxHxD	mm	882 x 260 x 450					
Net weight			kg(lbs)	26.0(57.4)			26.5(58.4)		
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
 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	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) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVSLO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDFO

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						
	Heating +7°C	Max	W	450						
Power Supply	Ø / V / Hz		1 / 220 - 240 / 50							
Fan Airflow Rate (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
 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

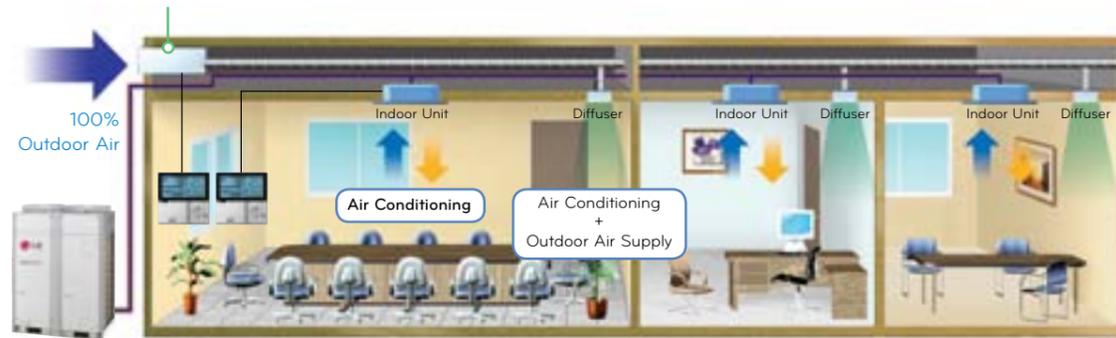
Model	ARNU28GBGA2	ARNU36GBGA2	ARNU42GBGA2	ARNU48GBRA2	ARNU54GBRA2	ARNU76GB8A2	ARNU96GB8A2
Dry Contact	Without case(1 contact point)	PQDSA					
	With case(1 contact point)	PQDSB/ PQDSB1					
	With case(2 contact point)	PQDSBC					

Wired remote controller					Wireless remote controller
Deluxe type	Standard type	Standard type	Simple type	Simple type for hotel	
PQRCUDSO(white) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVSLO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDFO

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

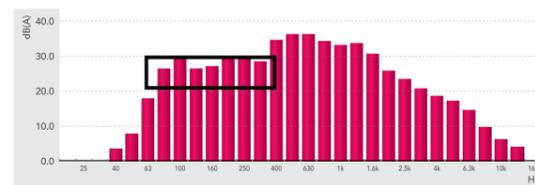
Spring Season

MULTI V III Outdoor Units

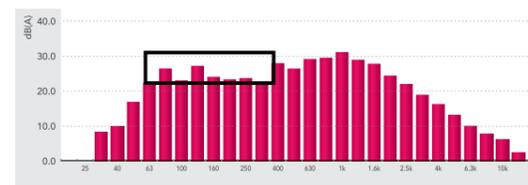
Autumn Season

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 (High Mode)	Cooling	H/M/L	m ³ /min	18.8/14.7/14.7	23.7/13.2/13.2	35.7/23.7/23.7
	Heating	H/M/L	m ³ /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)	
	Drain	I.D. mm (Inch)		Ø25(31/32)		

Notes:

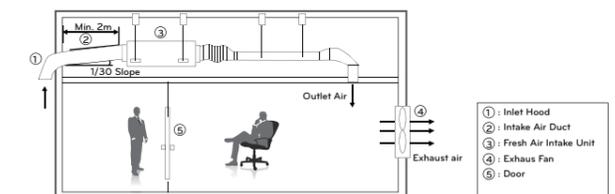
1. Capacities are based on the following conditions:

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

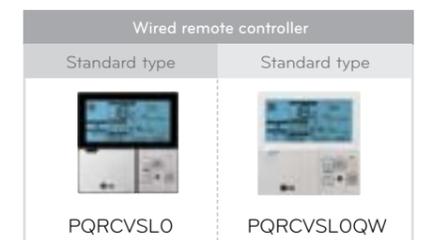


Installation Scene

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. 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. 2) The total capacity of Fresh Air Intake Unit should be less than 30% of the outdoor units.



ARNU09GVEA2 / ARNU12GVEA2

Ceiling & Floor



URNU18GVJA2 / URNU24GVJA2 URNU36GVKA2 / URNU48GVLA2

Ceiling Suspended



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)					

Specifications

Model	URNU18GVJA2			URNU24GVJA2			URNU36GVKA2			URNU48GVLA2		
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
 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

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

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) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVSLO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDFO

Wired remote controller					Wireless remote controller
Deluxe type	Standard type	Standard type	Simple type	Simple type for hotel	
PQRCUDSO(white) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVSLO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDFO

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
 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				

Wired remote controller					Wireless remote controller
Deluxe type	Standard type	Standard type	Simple type	Simple type for hotel	
PQRCUDSO(white) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVLSLO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDFO

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
 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	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				

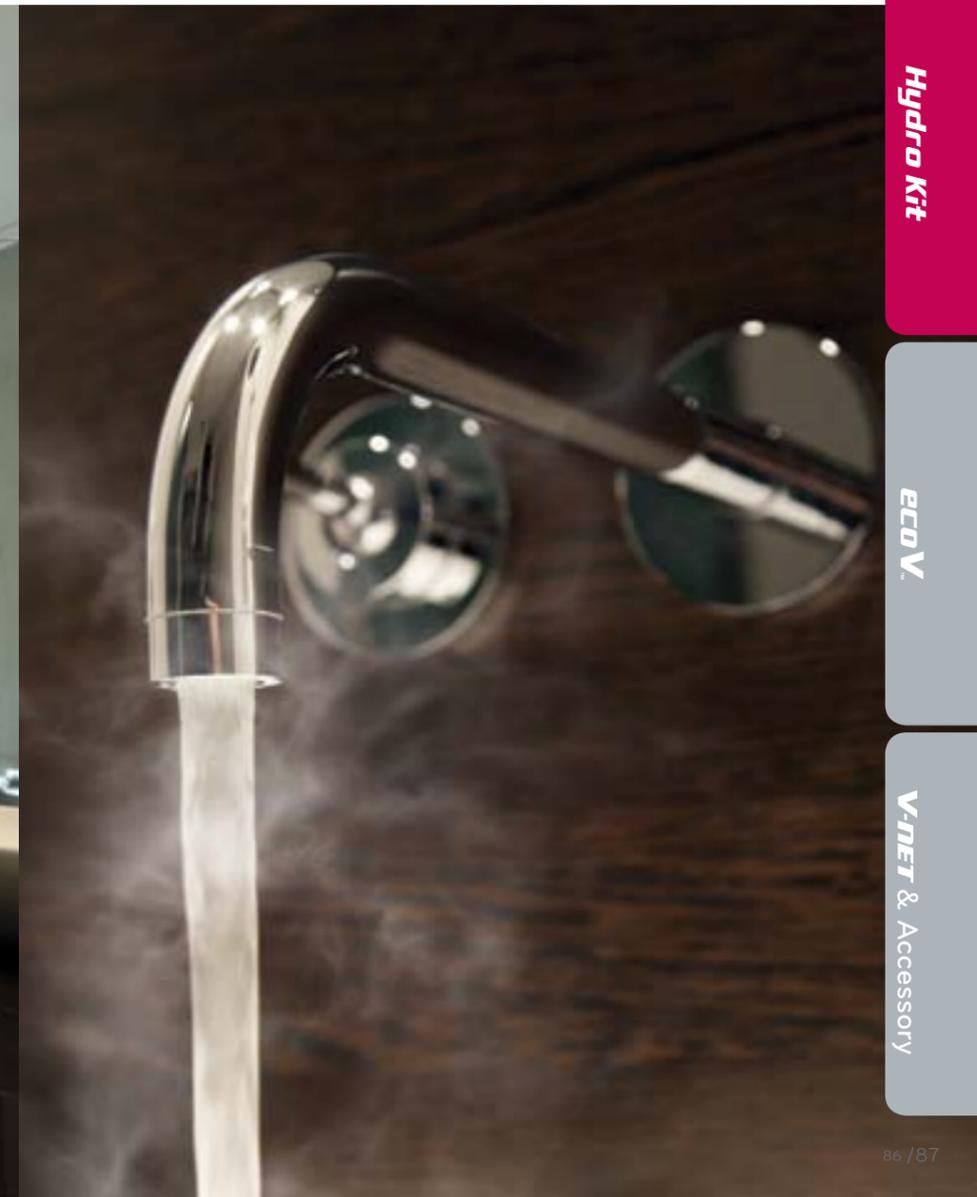
Wired remote controller					Wireless remote controller
Deluxe type	Standard type	Standard type	Simple type	Simple type for hotel	
PQRCUDSO(white) PQRCUDSOB(blue) PQRCUDSOS(silver)	PQRCVLSLO	PQRCVSLOQW	PQRCVCLOQ(Black) PQRCVCLOQW(white)	PQRCHCAOQ(Black) PQRCHCAOQW(White)	PQWRHDFO

Hydro Kit

TOTAL HEATING & HOT WATER SOLUTION

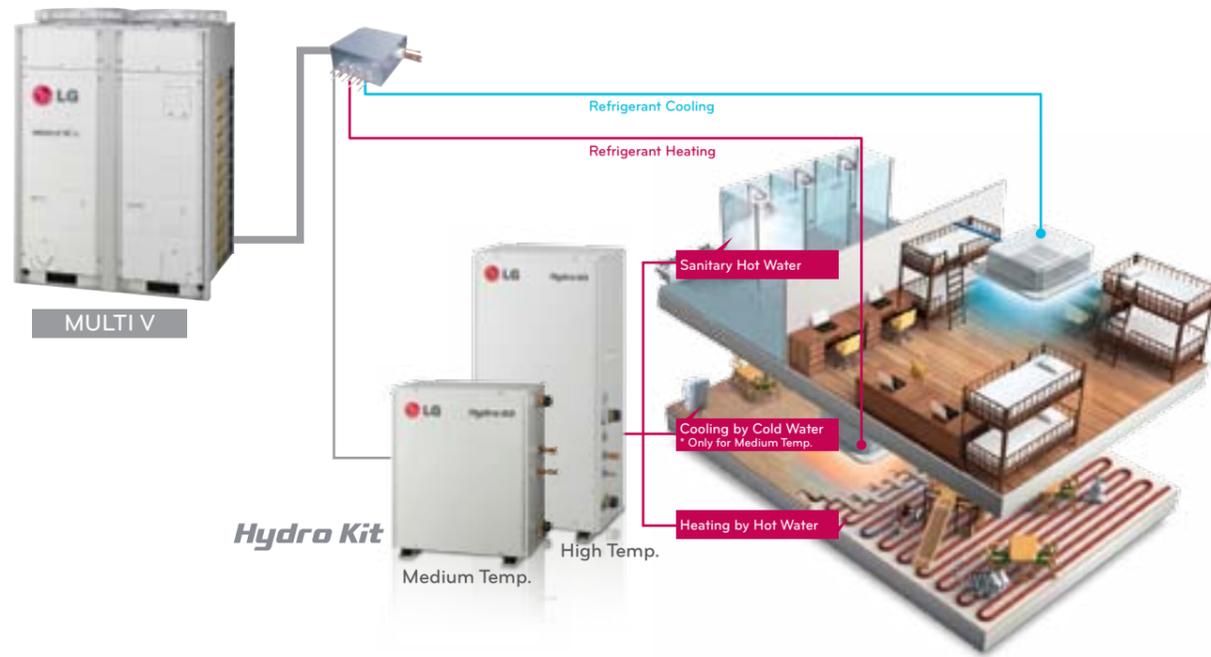
Hydro kit, utilizing MULTI V to provide floor heating and hot water supply as the total HVAC solution.

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.

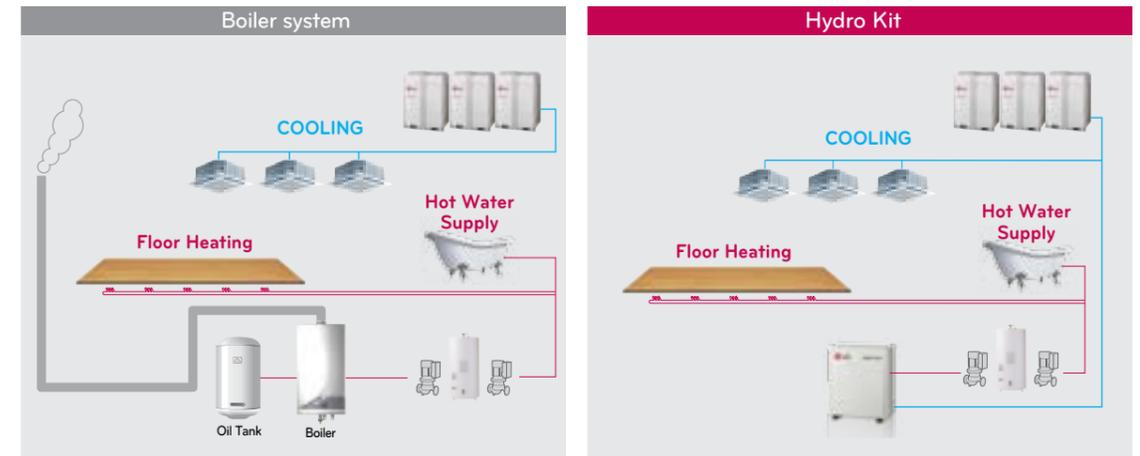


HYDRO KIT BENEFIT

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.

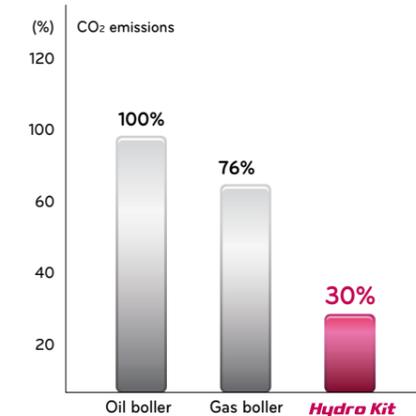
Easy Installation

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.



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.

	Air-Cooled Heat Pump	MULTI V™ III Heat Pump	
		MULTI V™ III Heat Recovery	
	Water-Cooled Heat Pump	MULTI V™ WATER II Heat Pump	
		MULTI V™ WATER II Heat Recovery	

ECONOMICS

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

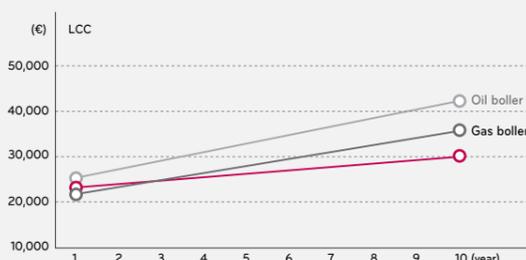
High Economical Efficiency through Energy Saving

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



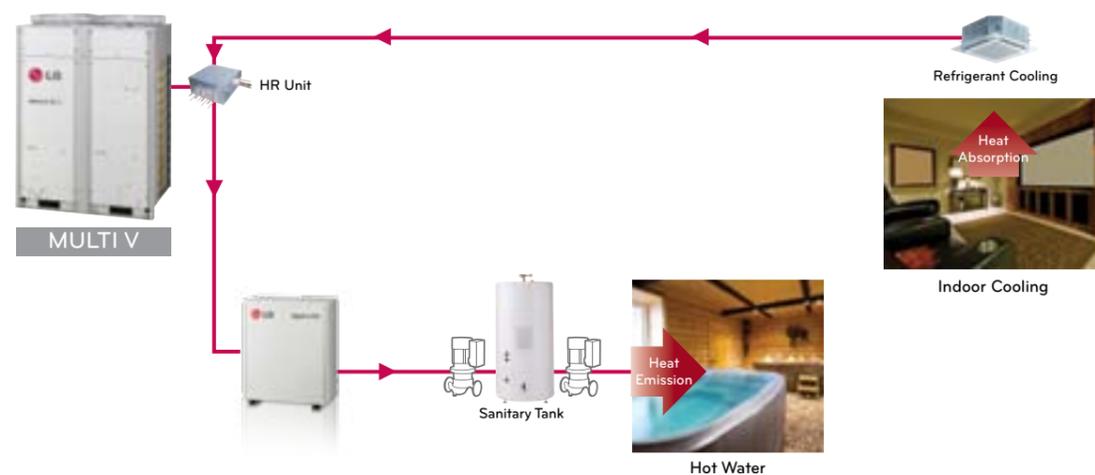
Analysis Conditions

- Building Type : Dormitory, flats
- Cooling / Floor Heating / Sanitary Hot water for 10 years
- Cooling : Multi V Indoor unit
- Floor Heating : Medium Temp. Hydro kit (1ea)
- Sanitary Hot water : High Temp. Hydro kit (2ea), Sanitary Hot water tanks
- Electricity cost : Average cost in EU
- Gas cost : Average cost in EU
- Oil cost : Average cost in EU



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

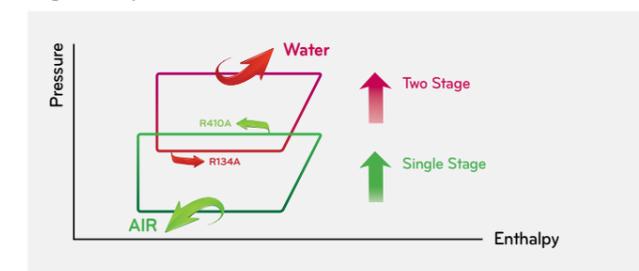
- Leaving water temperature up to 80°C



High Temperature of Hydro Kit Cycle Diagram



High Temperature Technical



APPLICATION

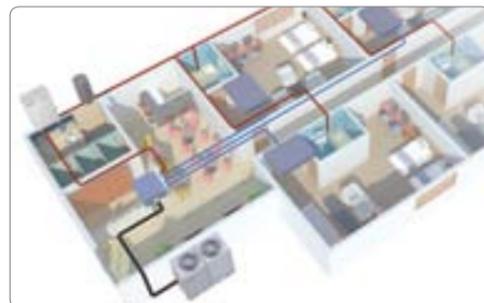
Various Application

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



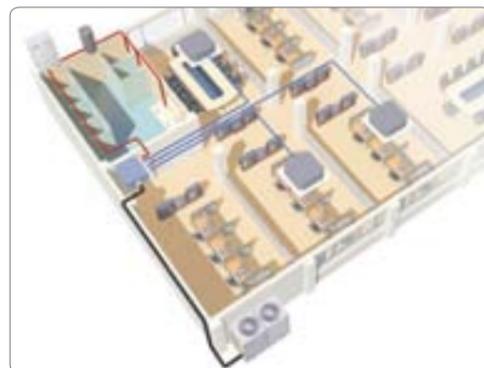
Hotel

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

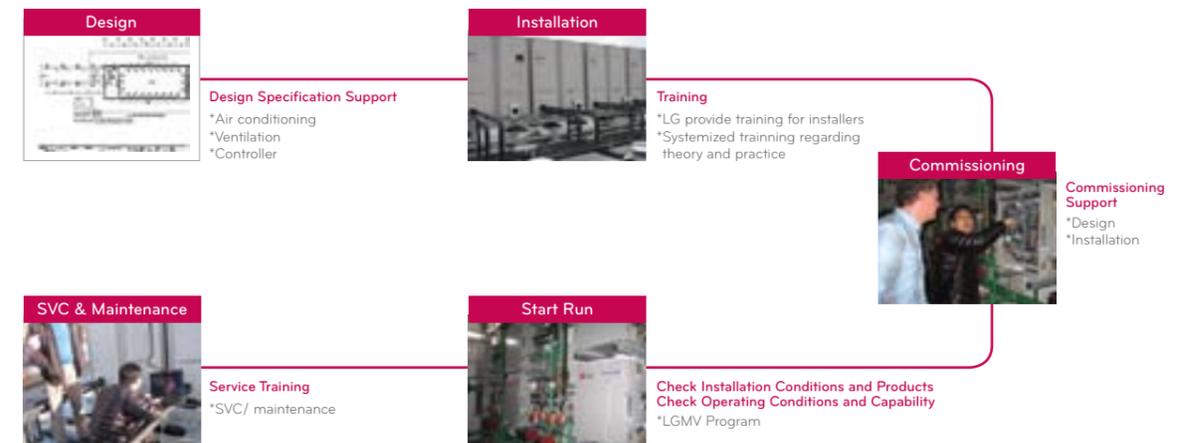
In the office while cooling HR unit makes sanitary tank to be warmed using waste energy, hot water can be supplied at all times.



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	-
Input (Rated) Heating	kW	0.01	5.0
Casing		Painted Steel Plate	Painted Steel Plate
Dimensions	Body	W x H x D	mm
			inch
		520 x 631 x 330	520 x 1080 x 330
		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
		Rated Water Flow	L/min
		Head Loss	kPa
			46.0
			25.0
Compressor	Refrigerant to Refrigerant	Type	-
			Brazed Plate HEX
Piping Connections	Water Side	Inlet	inch
		Outlet	inch
	Refrigerant Side	Liquid	mm(inch)
		Gas	mm(inch)
			Male PT 1
			Male PT 1
			Ø 9.52(3/8)
			Ø 22.2(7/8)
Drain Piping Connection		inch	Male PT 1
			Male PT 1
Sound Press Level	Cooling	dB(A)	26
	Heating	dB(A)	26
Power Supply Cable	No. x mm ²		3C x CV2.5
Communication cable	No. x mm ²		2C x CVV-SB 1.0-1.5
Refrigerant	Refrigerant to Refrigerant	Refrigerant name	-
		Control	-
	Refrigerant to Water	Refrigerant name	R410A
		Precharged Amount	kg (lbs)
	Control	EEV	
			Electronic Expansion Valve
			R134a
			3.0 (6.6)
			EEV

*Notes
 Capacities are based on the following conditions:
 1. 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)
 2. 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)
 3. Piping Length : Interconnected Pipe Length = 7.5m
 4. Difference Limit of Elevation (Outdoor - Indoor Unit) is Zero.

* Medium Temp. ** High Temp.

ecoVTM Energy Recovery Ventilator

ecoVTM 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

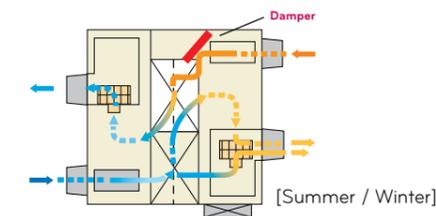
Efficiency and comfort is ensured by the high-efficiency energy recovery central core which recovers energy from the indoor air and transfers it to the fresh incoming air without mixing airstream.



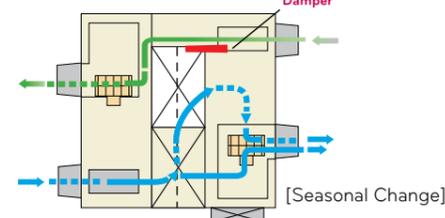
Bypass Ventilation

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

• Enthalpy Heat Exchange Mode

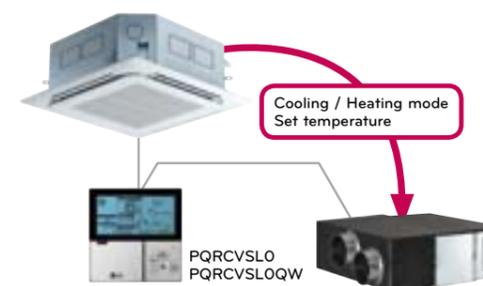


• Bypass Mode



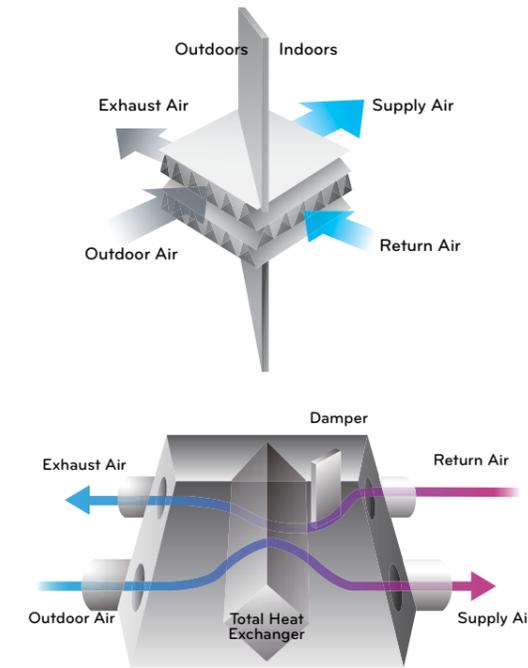
Interlocking with Air Conditioning System

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



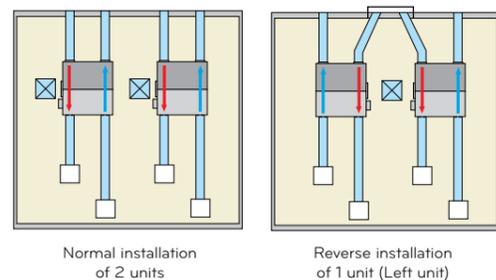
Compulsory Exhausting System

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.

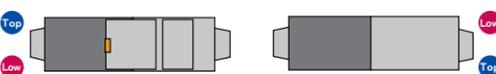


Flexibility of Installation

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

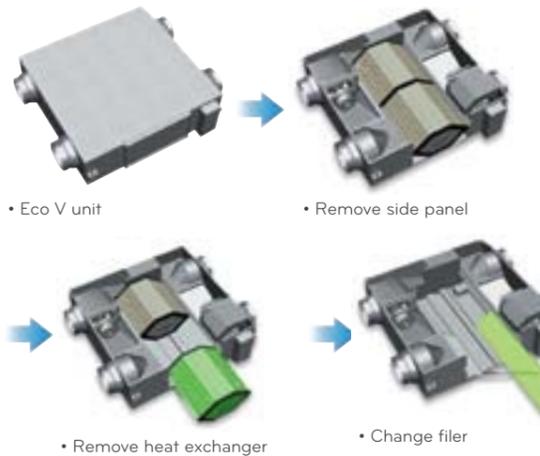


• Inspection hole



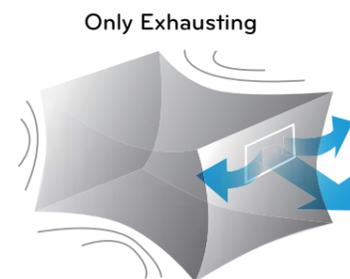
Easy Cleaning and Changing Filter

It is easy and convenient to change and clean filter.

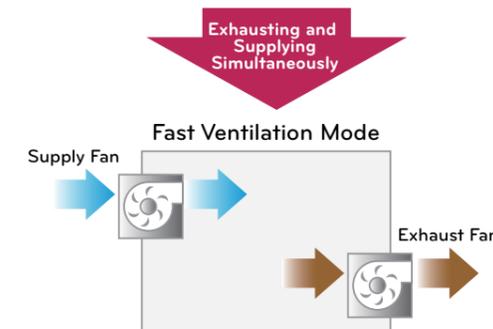


Fast Ventilation Mode

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

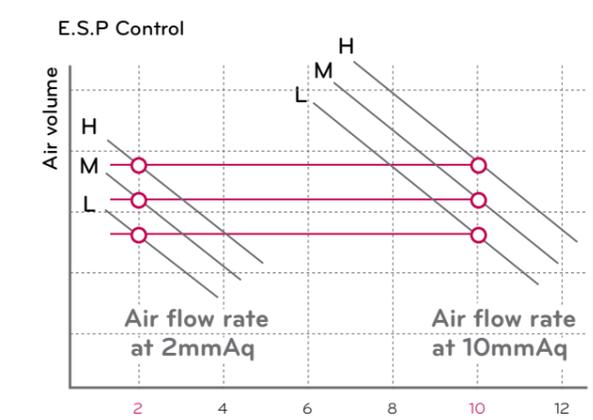


Exhausting operation causes negative indoor air pressure, and cannot fully ventilate.



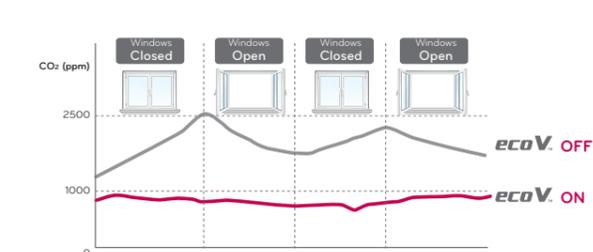
E.Tuning (External Static Pressure Control)

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

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

ECO V



LZ-H080GBA2
LZ-H100GBA2



LZ-H150GBA2
LZ-H200GBA2

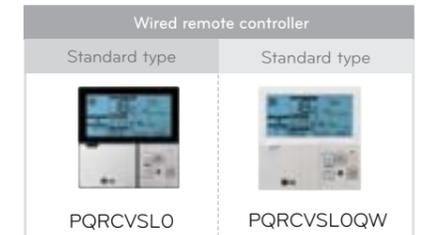
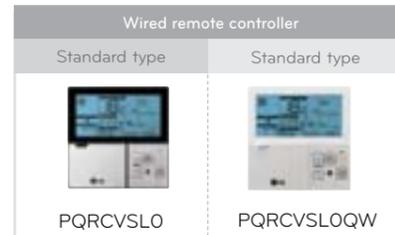
Specifications

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		
Step	SH/H/L	SUPER-HIGH / HIGH / LOW		
Current	SH/H/L Amps	1.04/0.97/0.7	1.73/1.58/0.77	1.92/1.58/0.79
Power Input	SH/H/L W	110/105/75	200/180/80	230/220/85
Air Flow	SH/H/L CMH(CFM)	250/250/150(147/147/88)	350/350/210(206/206/124)	500/500/320(294/294/124)
External Static Pressure	SH/H/L Pa(In.wg)	150/130/110(0.60/0.52/0.44)	170/150/100(0.68/0.60/0.40)	150/100/50(0.60/0.40/0.2)
Temperature Exchange Efficiency	SH/H/L %	80/80/85	83/83/87	75/75/79
Enthalpy Exchange Efficiency	Heating(SH/H/L) %	70/70/78	80/80/85	72/72/77
	Cooling(SH/H/L) %	64/64/68	78/78/83	70/70/75
Noise Level(Sound Level, 1.5m)	dBA	32/28/21	33/28/23	34/32/25
Step	SH/H/L	SUPER-HIGH / HIGH / LOW		
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		
Supply Air Fan	Size(Ø) mm(inch)	Ø150(Ø5.91)		
	Qty EA	1		
Exhaust Air Fan	Type	Direct-Drive		
	Qty EA	1		
Filters	Type	Cleanable		
	Size(WxHxD) mm(inch)	600x10x150(23.62x0.39x5.91)		855x10x166(33.66x0.39x6.54)
Remote Controller		PQRCVSLO / PQRCVSLOQW		
Dry Contact		PQDSB / PQDSB1		

Specifications

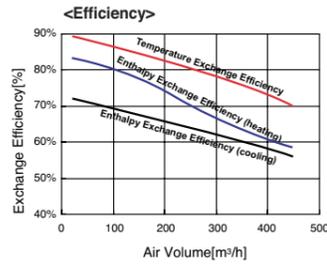
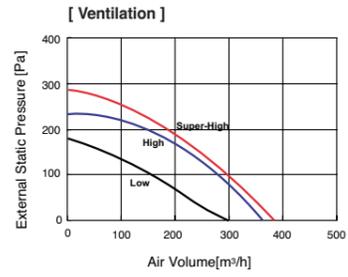
Model	Unit	LZ-H080GBA2	LZ-H100GBA2	LZ-H150GBA2	LZ-H200GBA2
Nominal Capacity	CMH(CFM)	800(471)	1000(589)	1500(883)	2000(1177)
Power Supply	øV,Hz	1, 220-240, 50-60			
Step	SH/H/L	SUPER-HIGH / HIGH / LOW			
Current	SH/H/L Amps	2.77/2.16/1.44	3.41/2.91/1.76	5.6/5.4/2.9	6.8/5.9/3.6
Power Input	SH/H/L W	360/370/165	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
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	39/37/33	39/37/33
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			
Supply Air Fan	Size(Ø) mm(inch)	Ø250(Ø9.84)			
	Qty EA	1			
Exhaust Air Fan	Type	Direct-Drive			
	Qty EA	1			
Filters	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:
1. ECO V Mode - Enthalpy Heat Recovery Ventilation mode
2. 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.

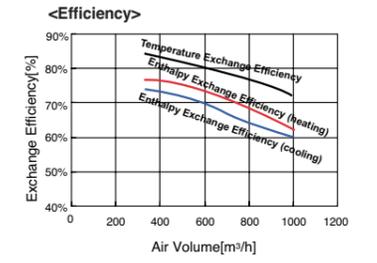
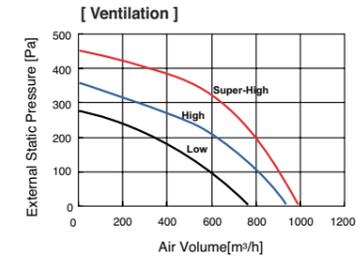


Notes:
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- Sound measured at 1.5m below the center the body.
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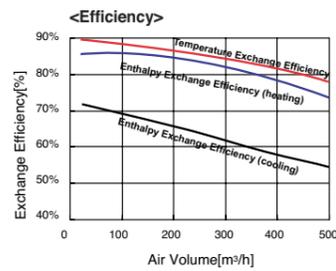
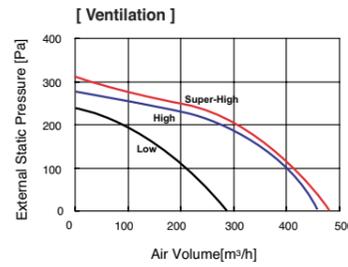
LZ-H025GBA2



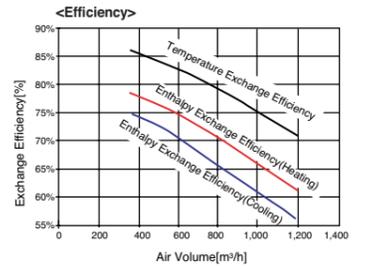
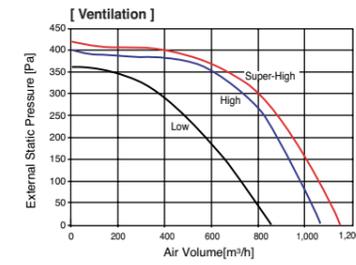
LZ-H080GBA2



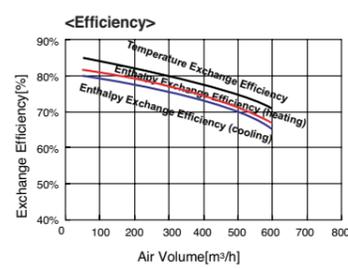
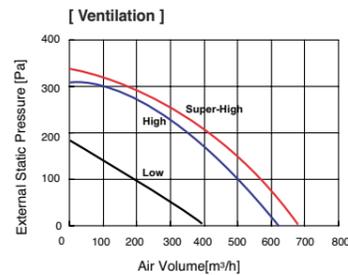
LZ-H035GBA2



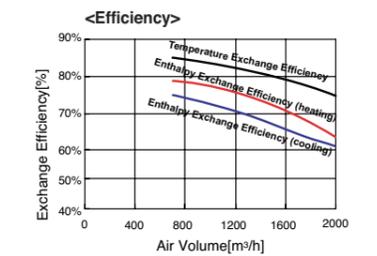
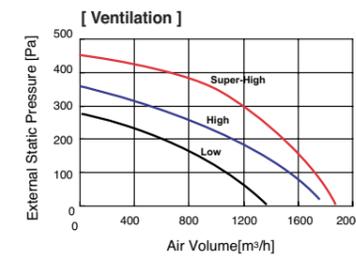
LZ-H100GBA2



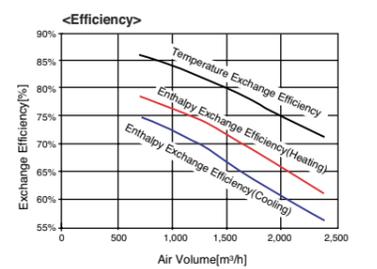
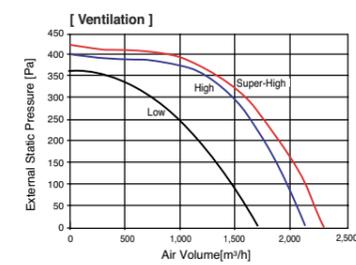
LZ-H050GBA2



LZ-H150GBA2



LZ-H200GBA2



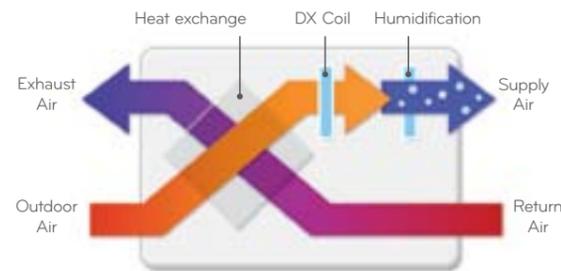
Providing cool / Warm Fresh air

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.



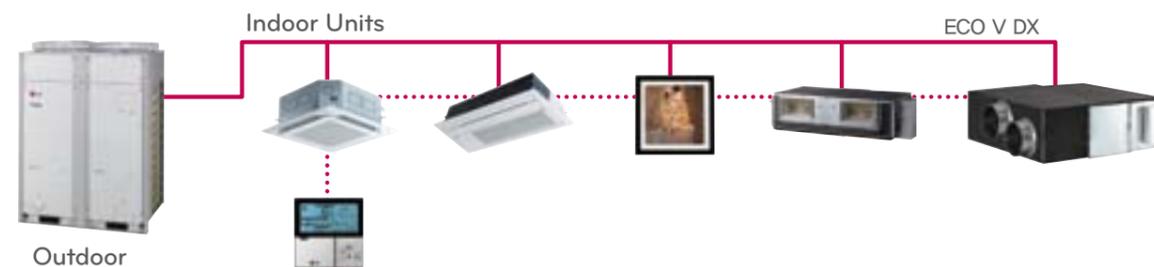
Total Air conditioning Solution

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

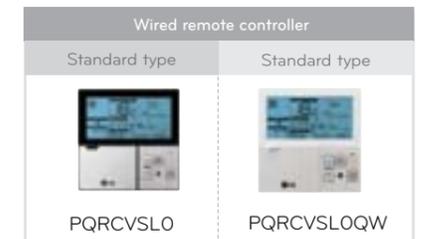


Specifications

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				
	Heating SH/H/L	%	68/68/69	64/64/66	60/60/63	68/68/69	64/64/66	60/60/63				
Enthalpy exchange efficiency	SH/H/L	%	76/76/77	74/74/76	71/71/73	76/76/77	74/74/76	71/71/73				
	Heating SH/H/L	%	500/500/440	800/800/640	1000/1000/820	500/500/440	800/800/640	1000/1000/820				
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
Refrigerant	Bypass mode	dB(A)					39/37/34	40/38/35	40/38/35	39/37/35	41/38/36	41/39/36
	System	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					
Connection duct diameter	Water	mm					Ø12.7					
	Drain	mm	Ø6.35									
		mm					Ø25.4					
Remote Controller		PQRCVSLO / PQRCVSLQW										
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.



FUNCTION ICON

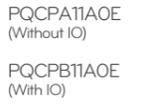
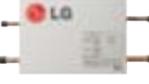
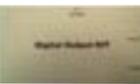
		Gallery	Mirror	Standard	Wall mounted	Console	4way Cassette		2 way Cassette	1 way Cassette	Low Static	Built-in	High Static	Ceiling & Floor	Ceiling Suspended	Floor Standing
NEO Plasma Air Purifying System		●	●	●	●		●		●	●						
Jet Cool		●	●	●	●	●	●		●	●				●	●	
Healthy Dehumidification		●	●	●	●	●	●		●	●	●	●	●	●	●	●
Hot Start (Heat pump only)		●	●	●	●	●	●		●	●	●	●	●	●	●	●
Child Lock Function (Wired remote controller only)		●	●	●	●	●	●		●	●	●	●	●	●	●	●
Soft Dry Operation Mode				●	●	●	●		●	●	●	●	●	●	●	●
Low Standby Power		●	●	●	●	●	●		●	●	●	●	●	●	●	●
Group Control (Wired remote controller only)		●	●	●	●	●	●		●	●	●	●	●	●	●	●
Auto Changeover (MULTI V SYNC model only)		●	●	●	●	●	●		●	●	●	●	●	●	●	●
Auto Clean		●	●	●	●				●	●						
Sleep Mode Auto Operation		●	●	●	●	●	●		●	●	●	●	●	●	●	●
Auto Restart		●	●	●	●	●	●		●	●	●	●	●	●	●	●
4-Way Air Deflection							●		●	●						
Swirl Swing		●	●		●	●	●		●							
Weekly Program (Wired remote controller only)		●	●	●	●	●	●		●	●	●	●	●	●	●	●
Two Thermistor Control (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	
Standard	Deluxe	Simple								
 PQRCVSLO  PQRCVSLOQW	 PQRCUDSO (White)  PQRCUDSOB (Blue)  PQRCUDSOS (Silver)	 PQRCVLOQ (Black/Simple)  PQRCVLOQW (White/Simple)  PQRCVLOQW (White/Simple for Hotel)	 PQWRHDFO	 AC EZ PQCSZ250SO	 AC Smart II PQCSW320A1E  Option Kit PQCSE341AO PQCSE342AO  Expansion Kit PQCSE440UO	 PQCPA11AOE (Without IO)  PQCPB11AOE (With IO)  PQCSS520AOE (AC Manager)	 PQNFB16A1 (LONWORKS®)  PQNFB17B0 (BACnet/Modbus)	 Comm. kit PRCKAO  EEV kit PRLK048AO  Control kit PRCKD20E PRCKD40E  Expansion kit PATX13AOE PATX20AOE PATX25AOE PATX35AOE PATX50AOE	 PI 485 PMNFP14A1 PMNFP14AO PHNFP14AO PSNFP14AO  DO Kit PQNFP00TO	PDI, Dry Contact, Variable Water Flow Control Kit, Independent Power Module, CO ₂ Sensor, Cool/Heat Selector, Suction Grille / Canvas, Auto Elevation Grille, Plasma Kit, Ventilation Kit (Fresh Kit) for New Cassette, Cassette Cover, Air Guide, Refrigerant charging Kit, Drain Pan, Stopper Valves, Heat Recovery Unit, Y Branch and Header Branch, Piping 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)

PQRCUDS0 / PQRCUDS0B / PQRCUDS0S

Deluxe Wired Remote Controller

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



PQRCUDS0
(White)



PQRCUDS0B
(Blue)



PQRCUDS0S
(Silver)

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 remote receiver	✓
Main/Sub setting of indoor units (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.

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 (For override function)	★

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

MODEL NAME & APPLICABLE MODELS

Model Name	Type	Applicable Models
PQWRHDF0	H/P	CST, SRAC, CVT, Duct, Floor Standing ✓

※Combination with other remote controllers for various indoor units.

PQCSZ250S0

AC EZ

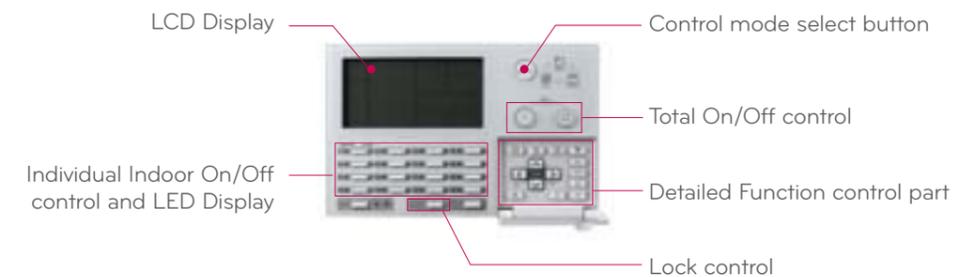
In addition to On/Off control, more functions such as operation mode, fan speed, and scheduling can be run and monitored.



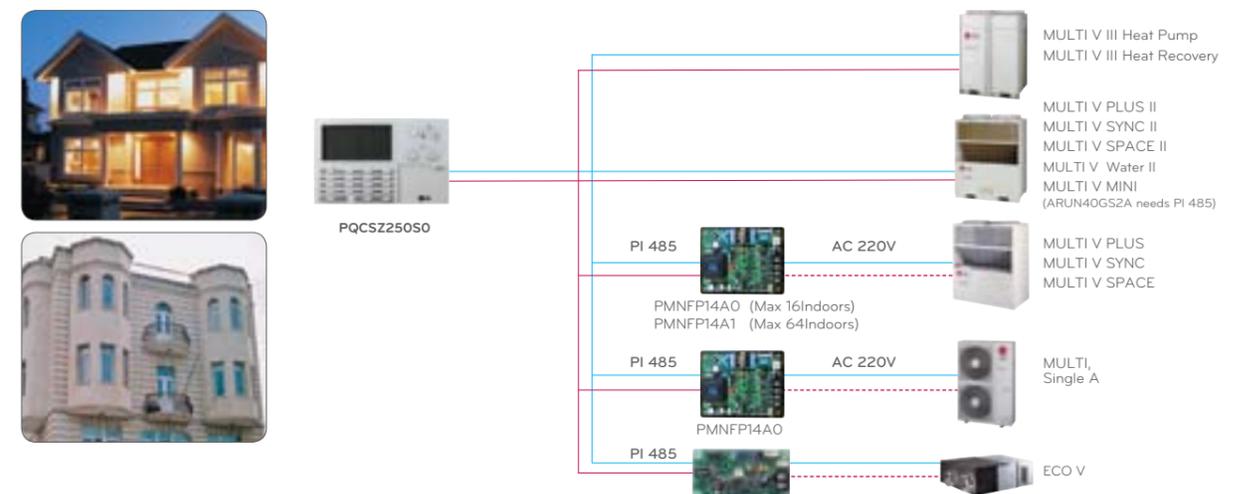
FEATURES (For LGAP applied models)

	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



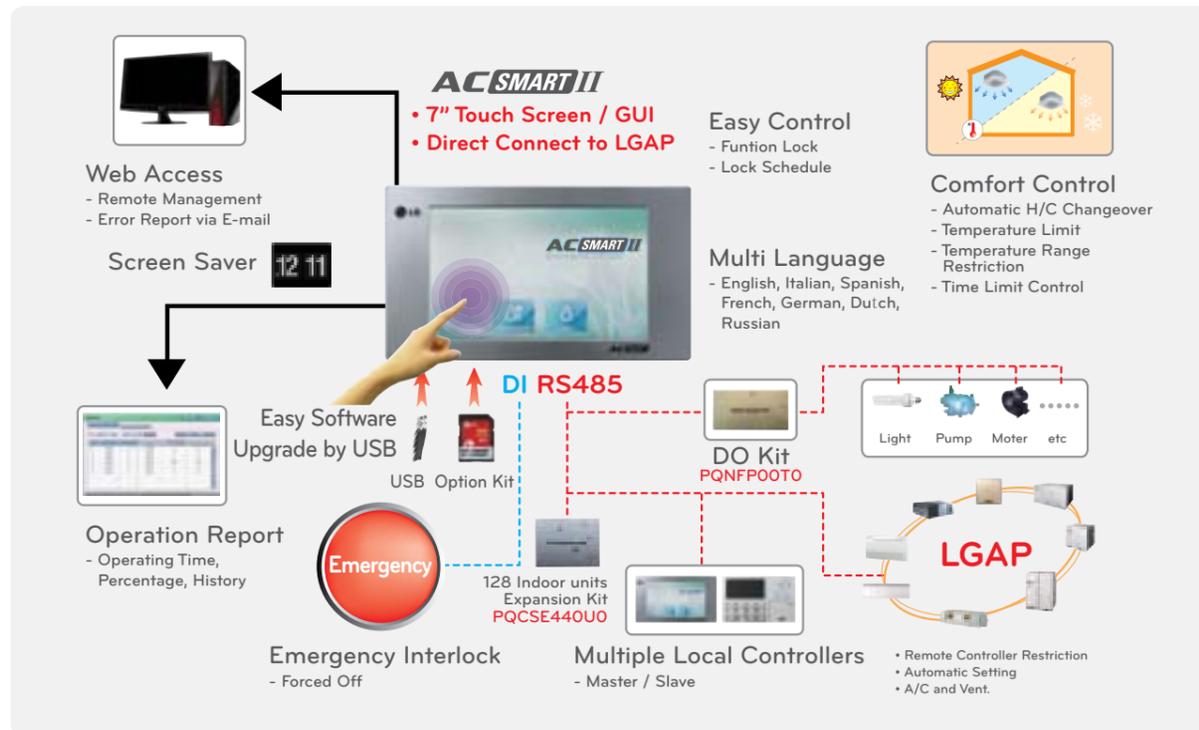
AC Smart II : PQCSW320A1E 128 Units Expansion Kit : PQCSE440U0 Option Kit : PQCSE341A0 / PQCSE342A0

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)



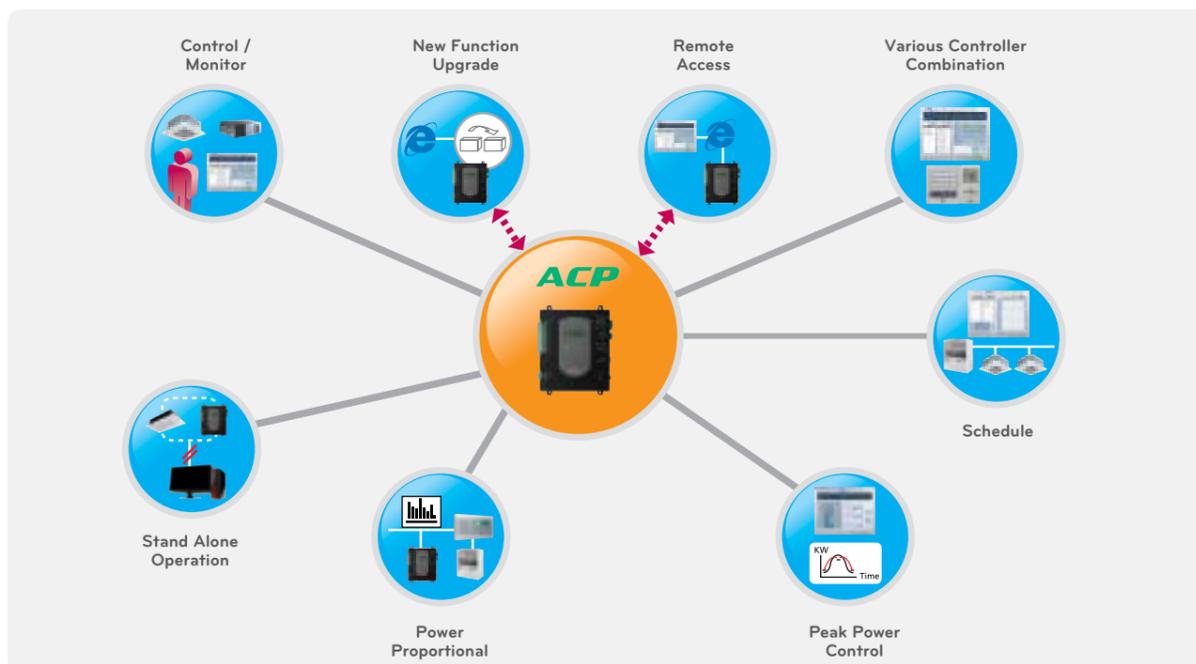
With its Linux based web server, users can control up to 256 indoor units or 128 ECO V units for functions such as temperature setting, schedule, peak, power control, etc.



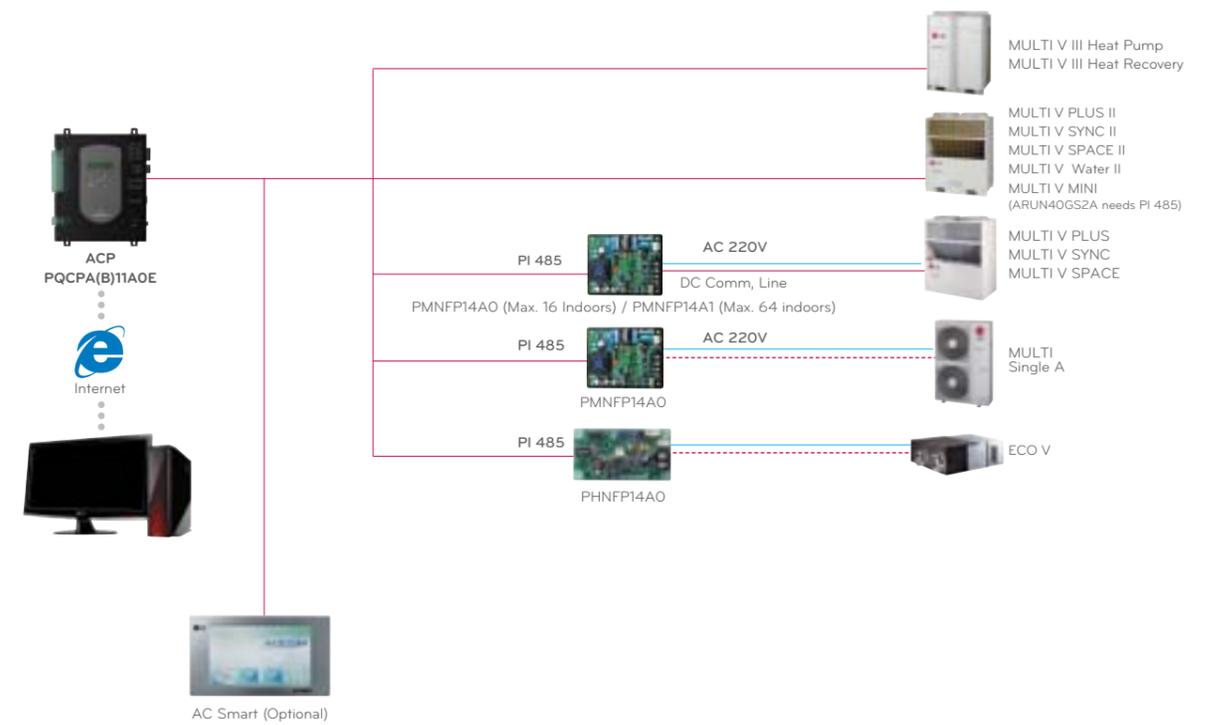
FEATURES (For LGAP applied models)

	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 function	-
Cycle Data Monitoring	-

ACP (For LGAP applied models)



COMBINATION



PQCSS520A0E

AC MANAGER

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



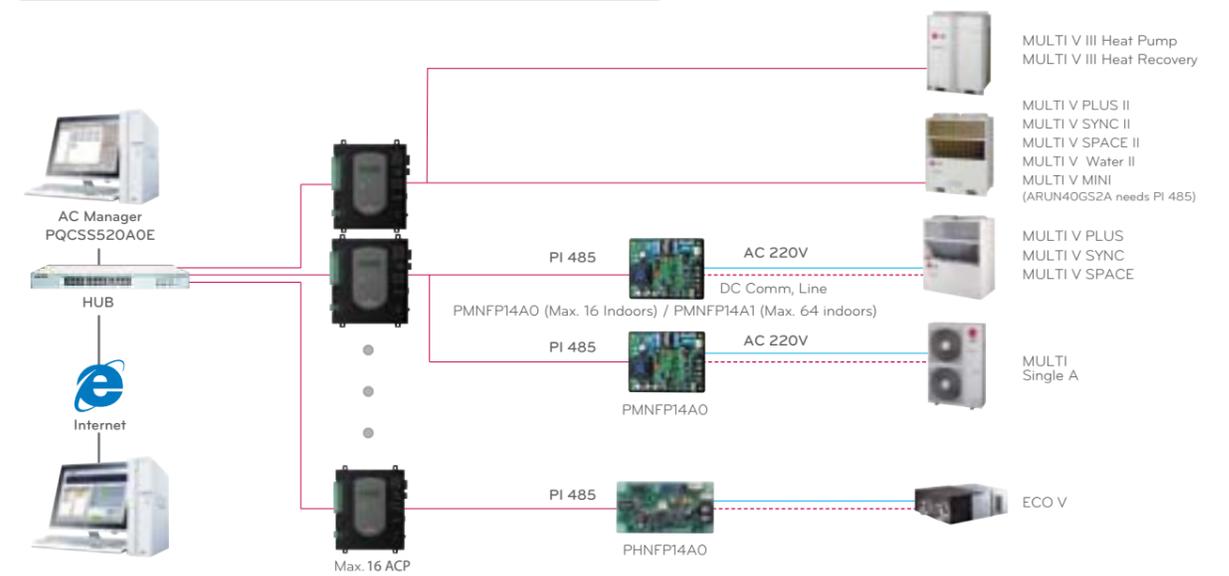
FEATURES

	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®)



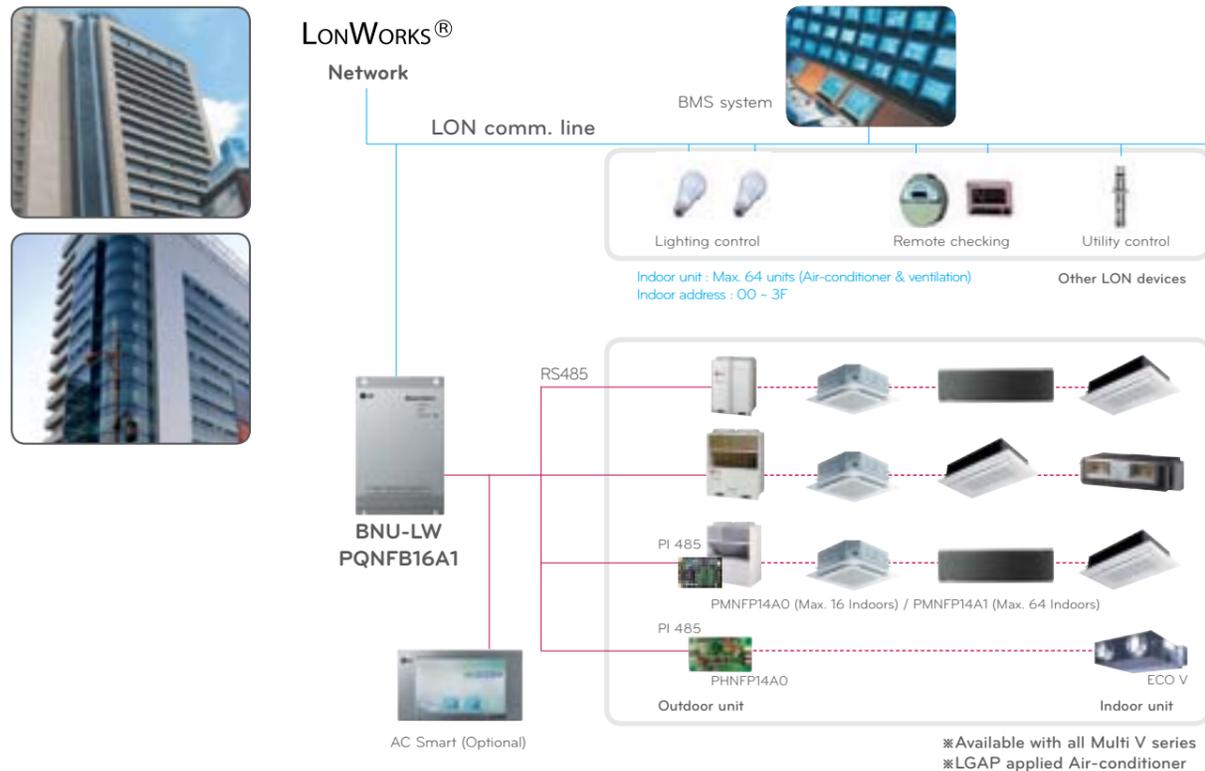
- Easy interface between BMS and LG Air-conditioner
- LonMark certified
 - Independence of BMS under the standard BMS
 - Operation system based on LNS(LONWORKS® Network Service)

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)



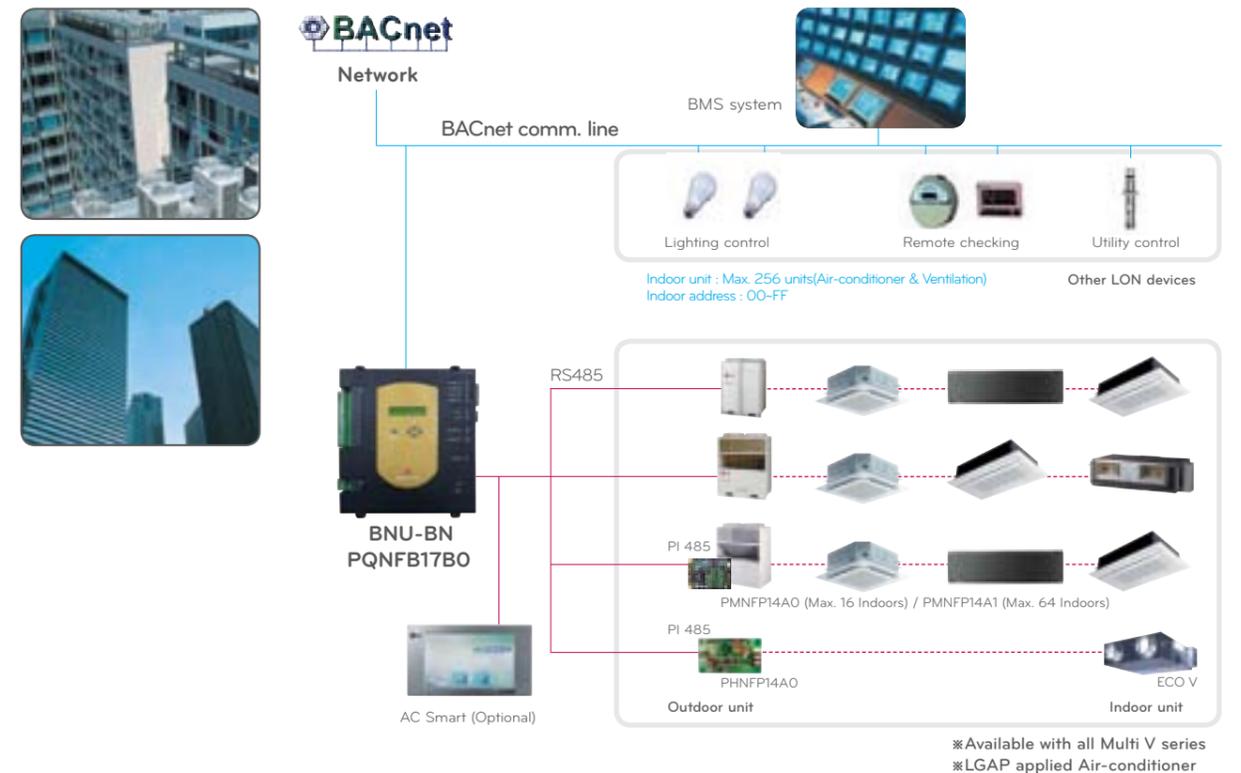
- Easy interface between BMS and LG Air-conditioner
- BTL certified
 - Independence of BMS under the standard BMS.
 - Operation system based on BACnet Service.

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.

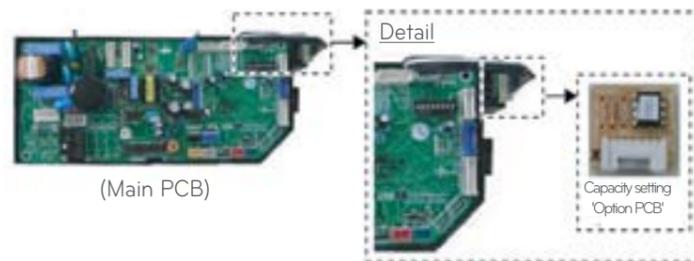


SPECIFICATION

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

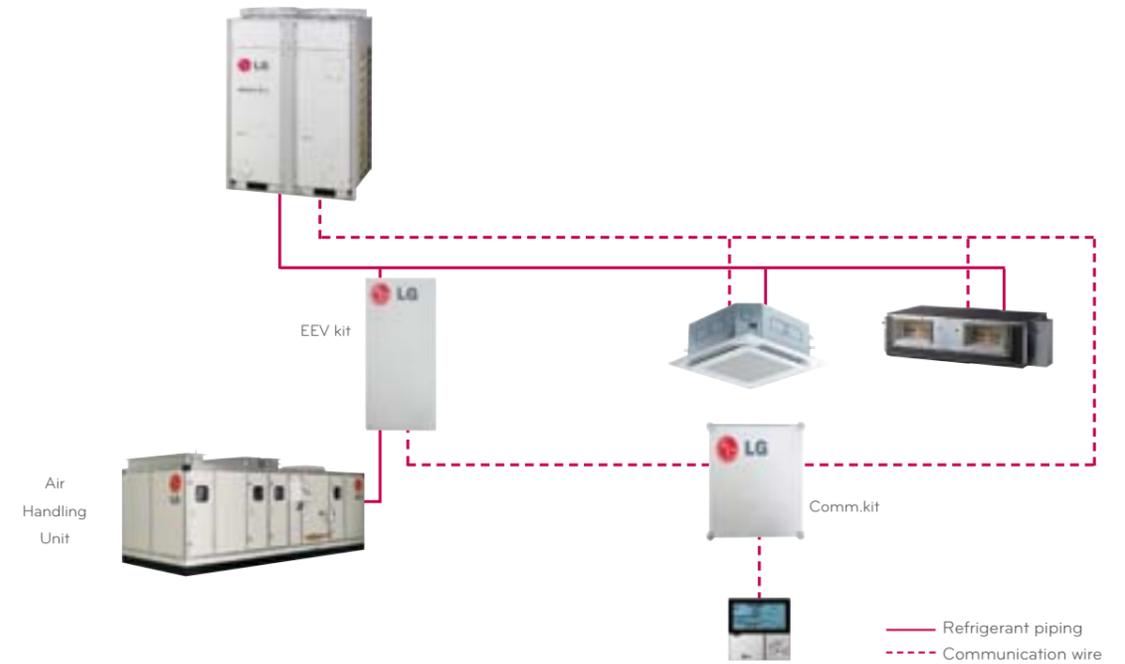
- When selecting evaporator, change 'Option PCB' in Control kit according to below table (Basic 'Option PCB' is for 36k Btu/h)



Option PCB P/No	Capacity (Btu/h)	Standard heat exchanger Volume(10 ⁻³ × m ³)	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	• AHU Controller • ODU Comm. PCB • Sensor Power Supply
	PRCKD40E						

PATX13A0E / PATX20A0E / PATX25A0E / PATX35A0E / PATX50A0E

AHU Expansion kit

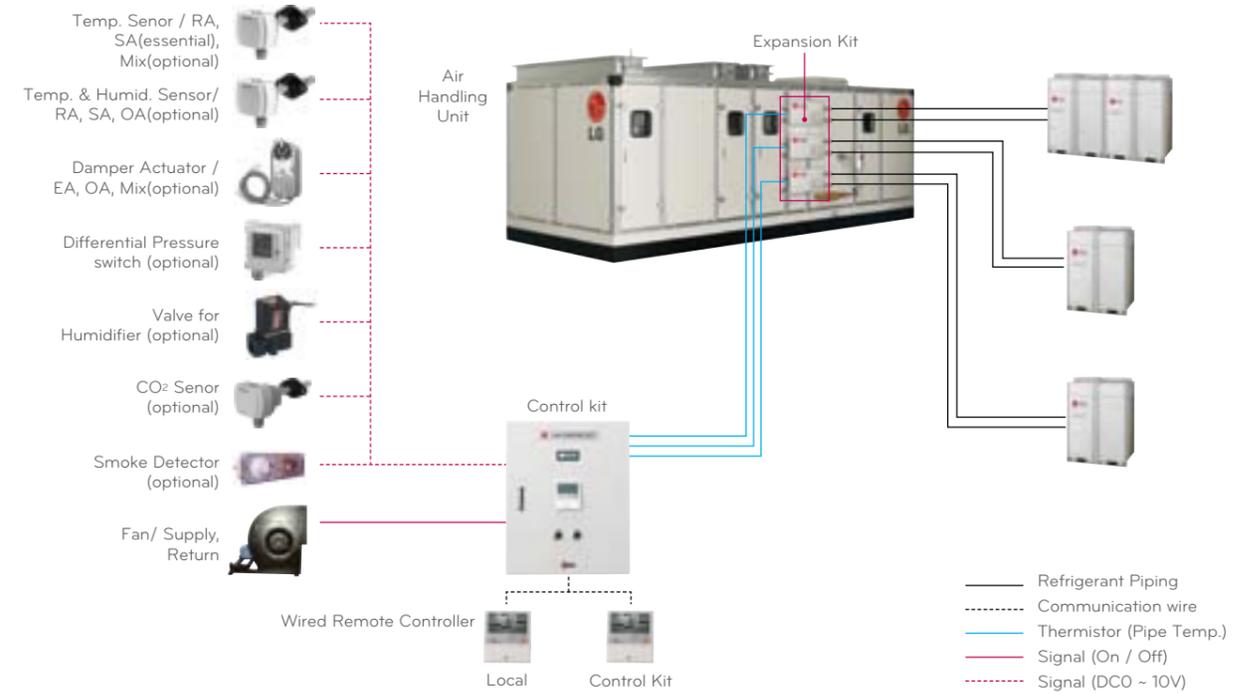
AHU have functions such as cooling, heating, humidification, air cleansing and ventilation to provide various solutions.



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

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 : PMNFP14A0
- 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 : PHNFP14A0
- 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

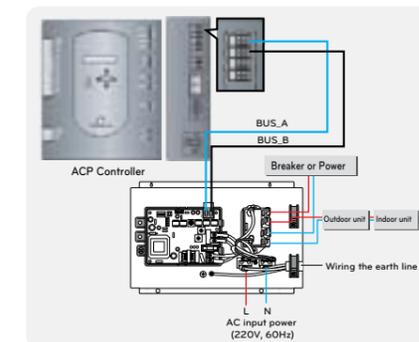
DO Kit

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



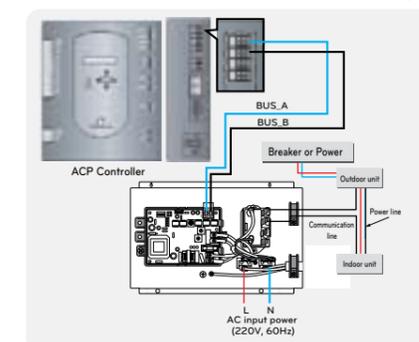
WIRING DIAGRAM

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.)



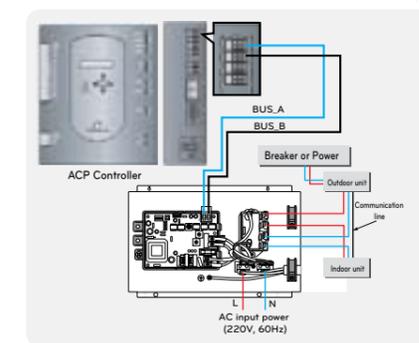
1. Pull out the power or shut down the breaker.
2. Connect the power line from the breaker to the additional relay cable.
3. Connect to the outdoor unit power line and the additional relay cable.
4. Finish the connected area with the insulating tape.

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

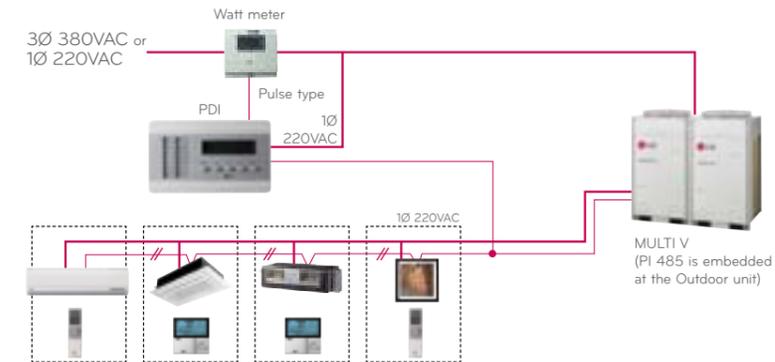
$$\text{Power used per room} = \frac{\text{Total power consumed for an external unit}}{\text{total weight}} \times \text{weight by room}$$

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

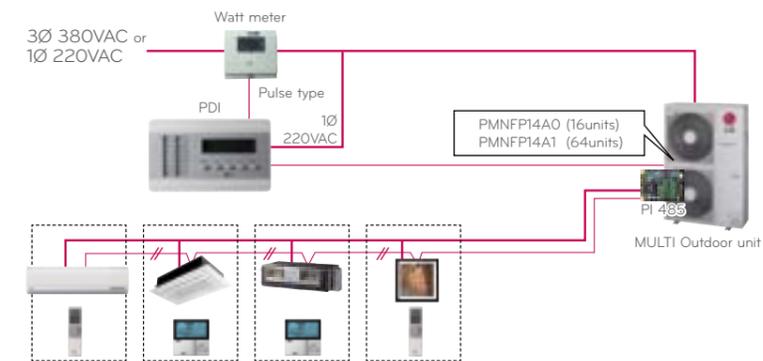
WIRING DIAGRAM

Independent operation of PDI

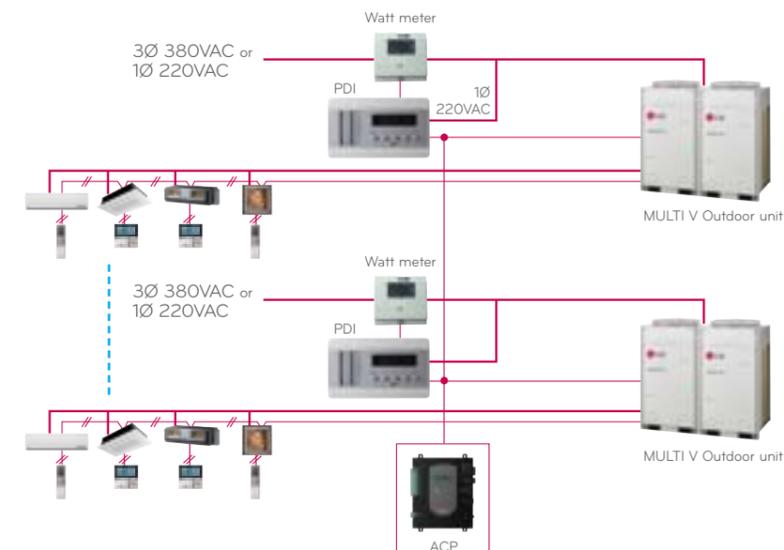
- MULTI V PLUS II / MULTI V SYNC II / MULTI V III / MULTI V WATER II / MULTI V SPACE / MULTI V MINI



• MULTI



• Operation with other central controller



PQDSA(1) / PQDSB(1) / PQDSBC

Dry Contact

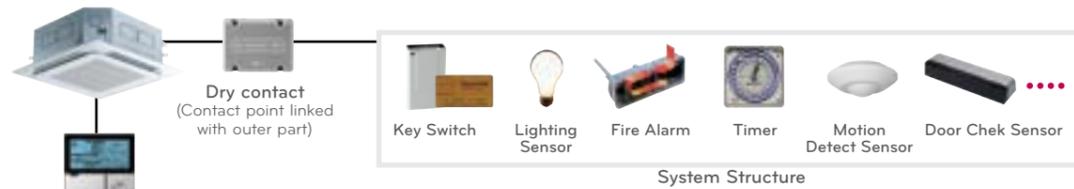
Connected between an indoor unit and external devices to control various functions.



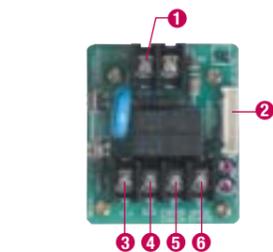
SPECIFICATION

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	✓	✓	✓

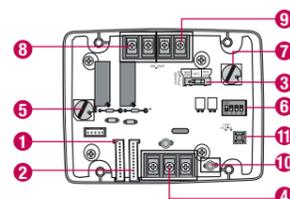
※Refer to each model PDB for applicable models.
 ※With case model : PQDSB(1), PQDSBC / Without case model : PQDSA(1)



PARTS DESCRIPTION



- 1 CN-POWER : AC 220V / 24V
- 2 CN-CC : Main PCB connector
- 3 CN-DRY(L) : Dry Controller connector
- 4 CN-DRY(SIG) : Dry Controller connector
- 5 CN-DRY(ERROR CHECK) : Error check display connector
- 6 CN-DRY(OPER STATE) : Operation display connector



- 1 CN_INDOOR : Connect communication wire between indoor unit and Dry Contact for communication and supply power to Dry Contact for communication
- 2 CN_PI 485 : PI 485 connector
- 3 CHANGE_OVER_SW : Switch to select voltage (5V-12V) of contact point
- 4 CN_CONTROL : Contact point signal input
- 5 CONTROL_MODE_SW : Switch to select the control mode
- 6 SETTING_SW : Switch to select whether to use set function of Dry Contact for communication
- 7 TEMP_SETTING : Switch to set the desired temperature of the indoor unit
- 8 CN_OUT(O1,O2) : Connector to show whether the indoor unit is operating
- 9 CN_OUT(E3,E4) : Connector to show whether there is an error with the indoor unit
- 10 DISPLAY_LED : LED to display the status of the Dry Contact for communication
- 11 RESET_SW : Reset switch

PQDSBNGCM1

Dry Contact

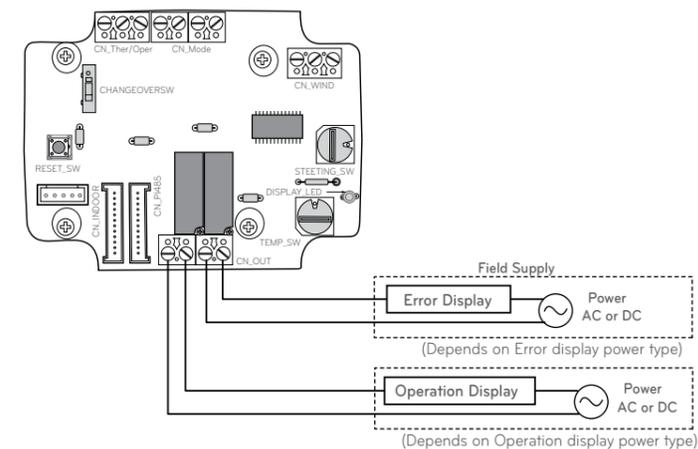
Connected between an indoor unit and external devices to control various functions.



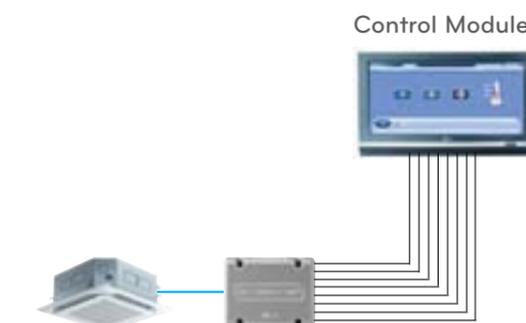
FEATURES

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.

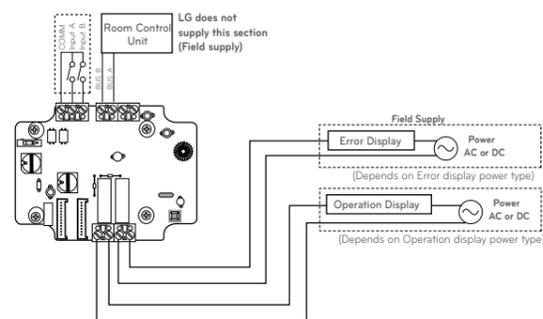


SPECIFICATION

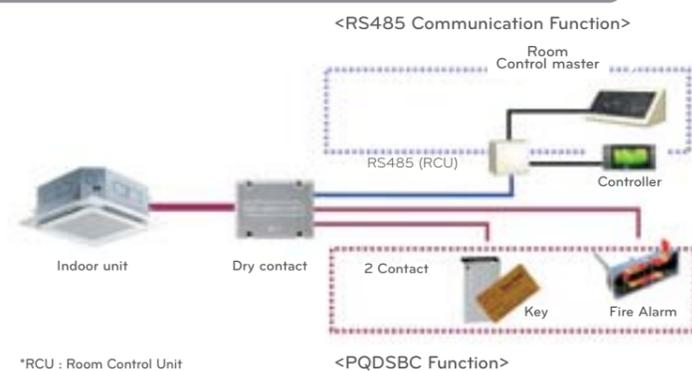
- 1) Model name : PQDSBCGCD0
- 2) Specification
 - Dimensions(mm) : 105x78x35
 - Applied Model : MULTI V Plus II & MULTI V III
 - Function
 - Contact Point : 2 contact point (operation depends on the Control Mode_SW setting)
 - PI 485 Communication Mode Input : LGAP 485 Communication
 - Voltage/Non Voltage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

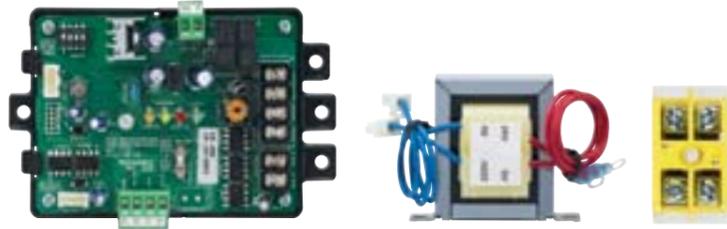
STRUCTURE



PRVCO

Variable Water Flow Control Kit

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

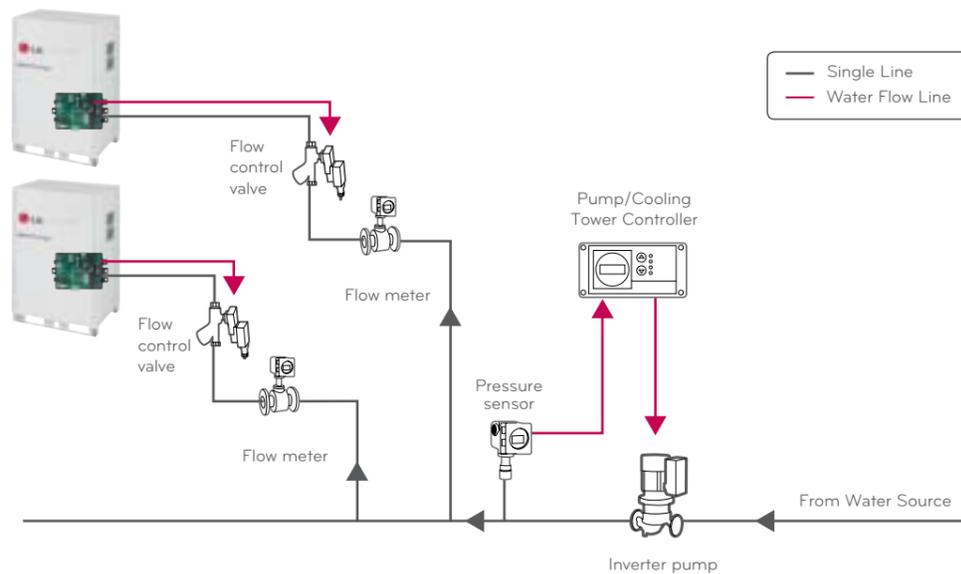


FEATURES

- 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.

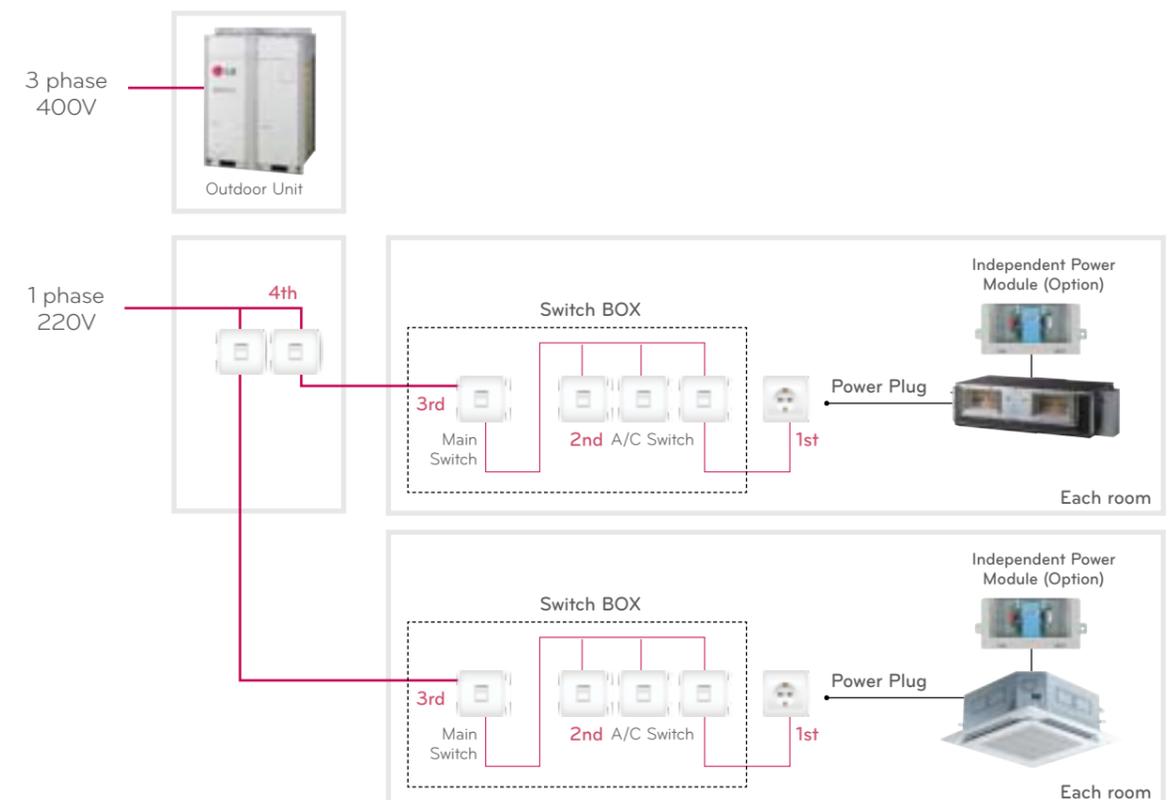


SPECIFICATION

- 1) Model name : PRIP0
- 2) Specification
 - Applied Model : MULTI V Indoor
 - Function
 - Supply Voltage : DV12V ± 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-CORVO

CO₂ Sensor

CO₂ concentration sensor in ventilation system.



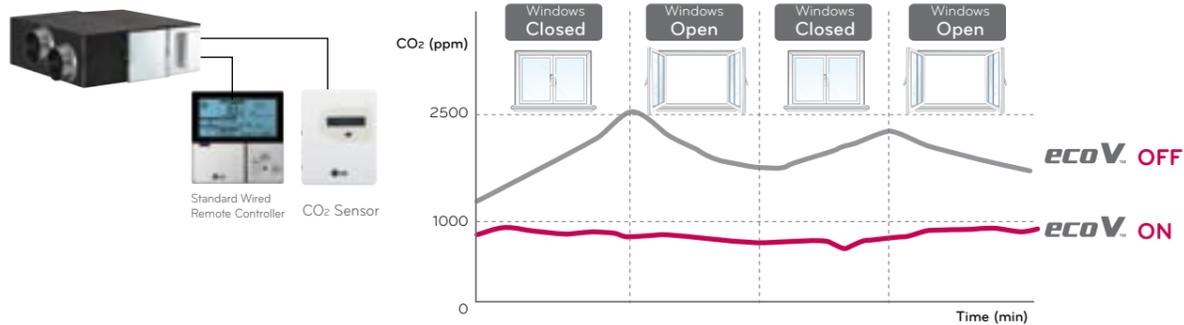
SPECIFICATION

- 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 CO₂)
 - Accuracy : 30 ppm ± 5% of reading

- 3) Description

The product is especially designed to detect CO₂ 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

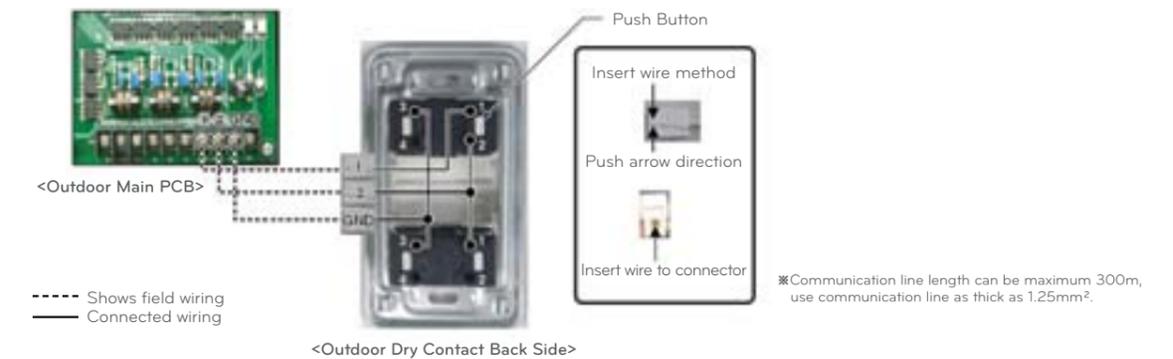
- Indoor unit control without central controller
- Select operation mode : Cooling, Heating, Fan mode
- Mode lock for cooling & heating mixing error-proof during the change of season.

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 APLIED

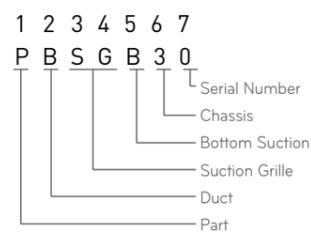
- Ceiling concealed duct _ Built-in type (refer PDB for applicable model)

ACCESSORY MODEL NAME

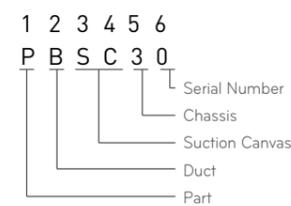
Type	Model Name	Capacity (Btu/h)					
		7K	9K	12K	15K	18K	24 K
Grille	PBSGB30	✓	✓	✓	✓	-	-
	PBSGB40	-	-	-	-	✓	✓
Canvas	PBSC30	✓	✓	✓	✓	-	-
	PBSC40	-	-	-	-	✓	✓

DETAILS OF MODEL NAME

For the suction grille :



For the suction canvas :



PARTS INCLUDED

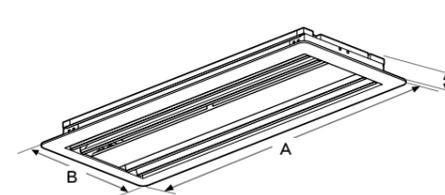
For the suction grille :

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

For the suction canvas :

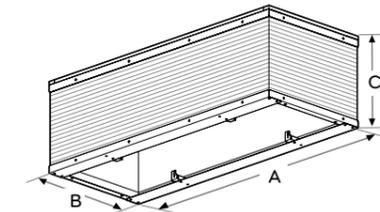
- Air suction canvas (1EA)
- Screws for air suction canvas (4EA)
- Adjusting chain (4EA)
- Screws for adjusting chain (8EA)
- Installation manual (1EA)

DIMENSION



(Unit : mm)

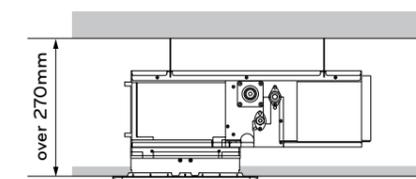
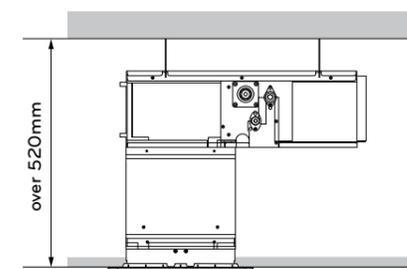
	A	B	C
PBSGB30	910	359	56
PBSGB40	1188	359	56



(Unit : mm)

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

APPLICATION

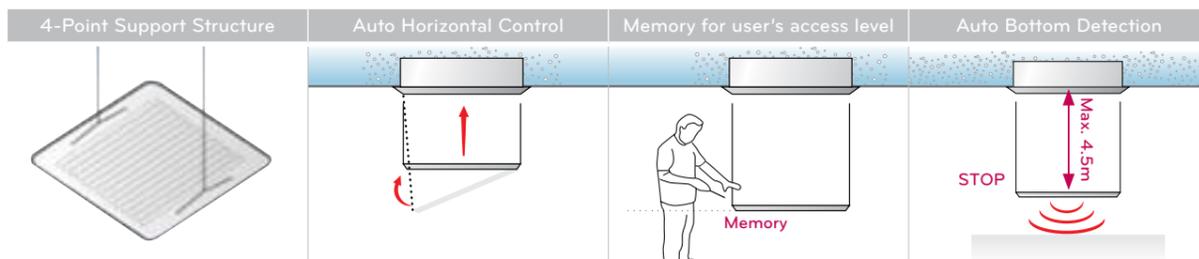


PTEGM0

Auto Elevation Grille Easy filter cleaning with elevation grille.



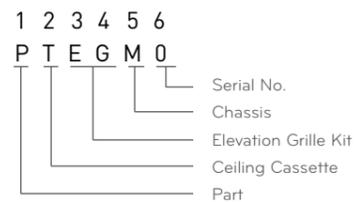
FEATURES



MODELS APPLIED TO

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

DETAILS OF MODEL NAME



PARTS SUPPLIED

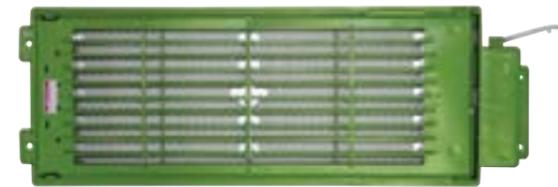
- Inlet Grille (1EA)
- Auto elevation grille kit (1EA)
- Wireless Remote Controller (1EA)
- Screws (4EA)
- Installation manual (1EA)

APPLICATION



PTPKM0 / PTPKQ0

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



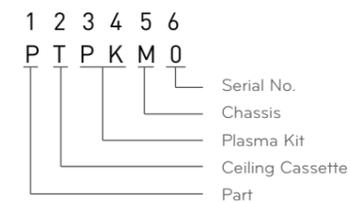
FEATURES

- 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



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



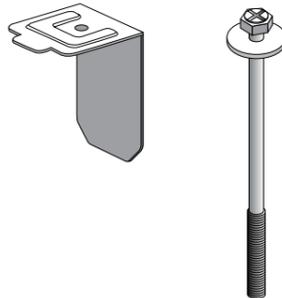
PTVK420



PTVK430

FEATURES

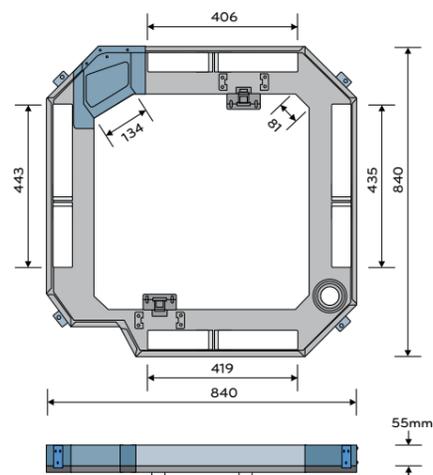
- Installation Bracket
- Bolt
- Screw
- Installation manual



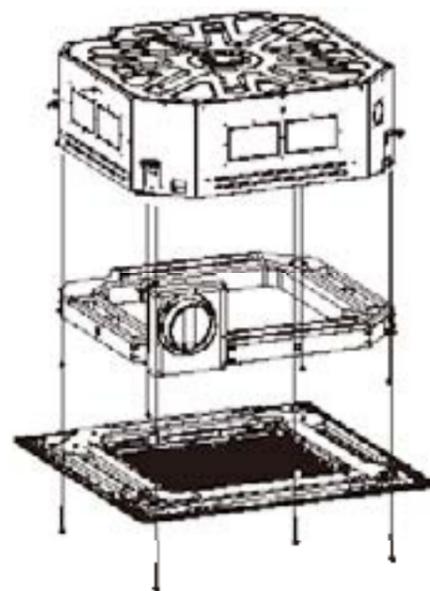
MODELS APPLIED TO

- 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

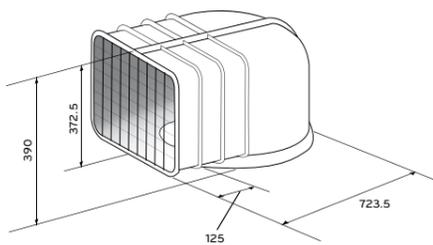
- Converts vertical discharge into horizontal discharge.
- Designed for outdoor discharge air.
- Direction of air discharge can be changed by simple installation.
- Installation flexibility

MODELS APPLIED TO

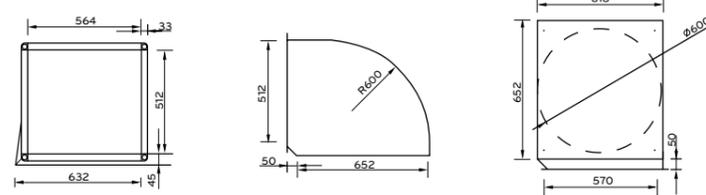
- MULTI V type, MULTI V Plus II type, MULTI V III (UX2, UX3)

DIMENSION

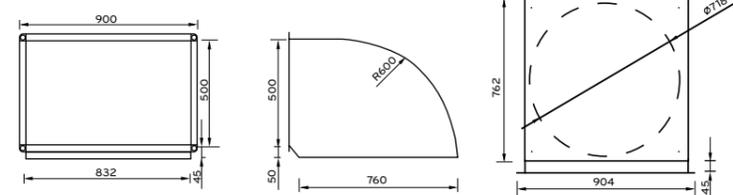
MULTI V Plus II



MULTI V III (UX3)



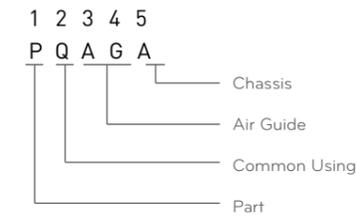
MULTI V III (UX2)



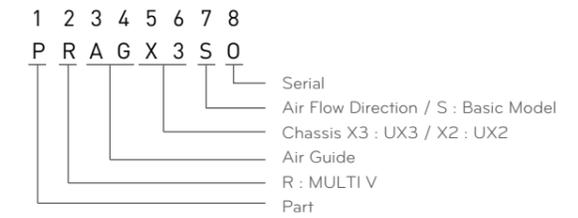
Model Name	Gross Weight	Net Weight
PQAGA	6kg	5kg
PRAGX2SO	22.5kg	12.3kg
PRAGX3SO	17kg	9.4kg

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

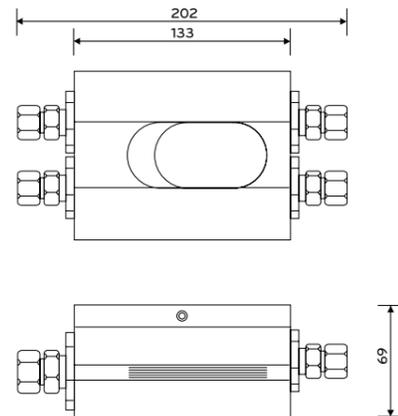
- Arrange manifold, capillary assembly, refrigerant vessel and scale
- Connect manifold to the gas pipe service valve of outdoor unit as shown in the figure.
- Connect manifold and capillary tube. Use designated capillary assembly only.
If designated capillary assembly isn't used, the system may get 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

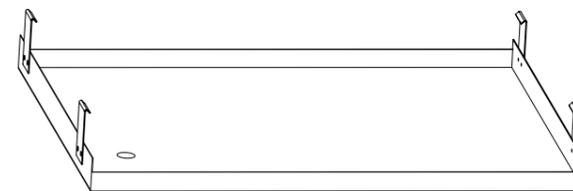
DIMENSION



PRODX20 / PRODX30

Drain Pan

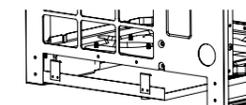
Installed to drain water from a MULTI V III outdoor unit.



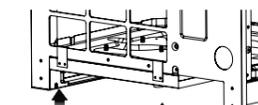
USAGE

This unit can be applied for outdoor unit's drain

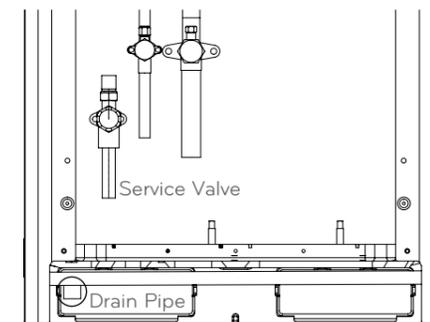
INSTALLATION



Tuck drain pan below base pan



Push drain pan in the direction of the arrow. Brackets can be fixed on the side panel



※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

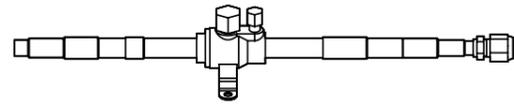
Model	L	Remark
PRODX20	920mm	UX2
PRODX30	1240mm	UX3

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)

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

Stopper Valves



FEATURES

	Spec
PRVT120	
PRVT780	
PRVT980	

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



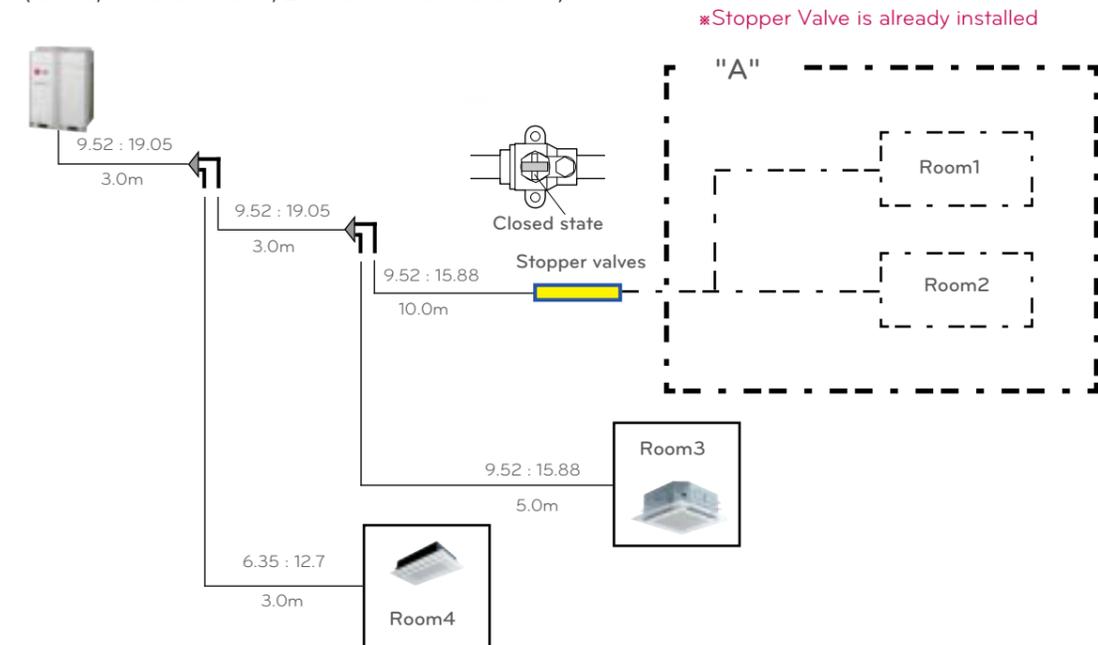
1. Cut inlet side of the connector, and weld the pipe
2. In case of the installation of additional indoor unit, outlet side connector should be cut according to installation pipe.
3. In case of installation of stopper valve, flare part should be facing towards additional indoor unit.
4. In case of installation of additional indoor unit, SVC valve should be in closed state

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

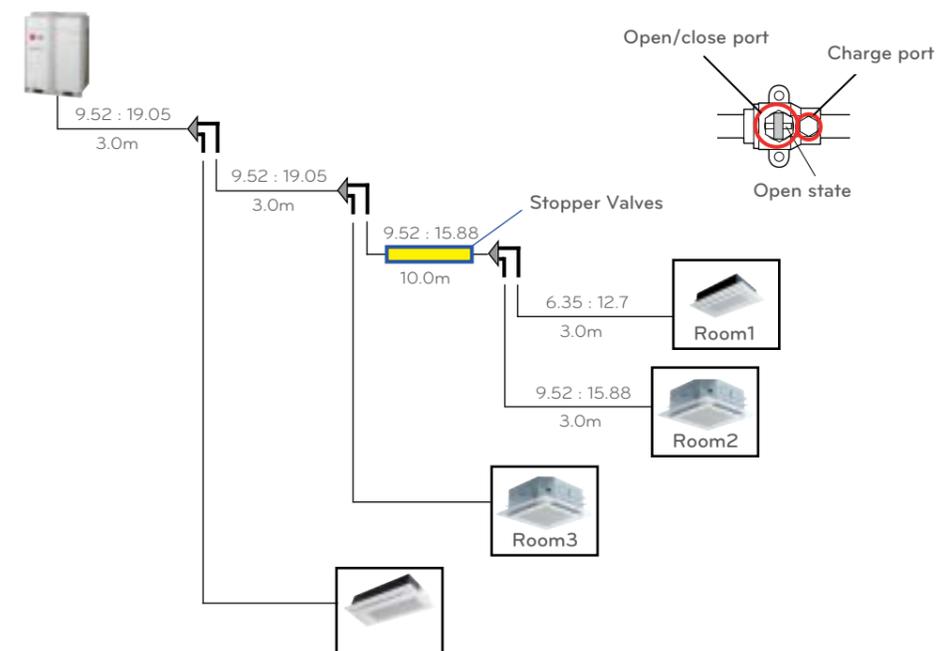
SPECIFICATION

case1

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

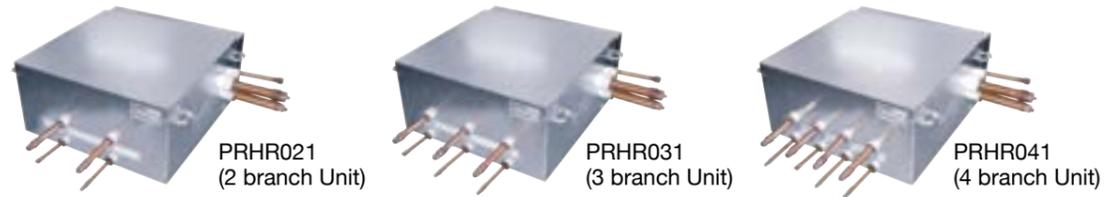


- In case of installation of additional indoor unit, refrigerant of used indoor unit must be discharged.(Room3 & Room4)
- If stopper valve is already installed, you can install additional indoor unit without refrigerant loss from the entire system.
- After installation of additional indoor unit, you 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



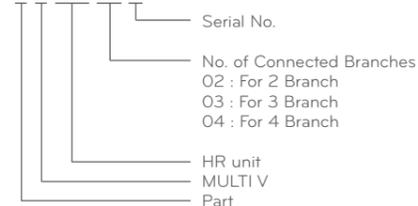
ACCESSORY MODEL NAME AND SPECIFICATION

		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)
		High Pressure	mm(inch)	22.2(7/8)	28.58(11/8)	28.58(11/8)
Power Supply	ø /V/Hz	1 / 220-240 / 50	1 / 220-240 / 50	1 / 220-240 / 50		

DETAILS OF MODEL NAME

1 2 3 4 5 6 7

PRHR041



DIMENSION

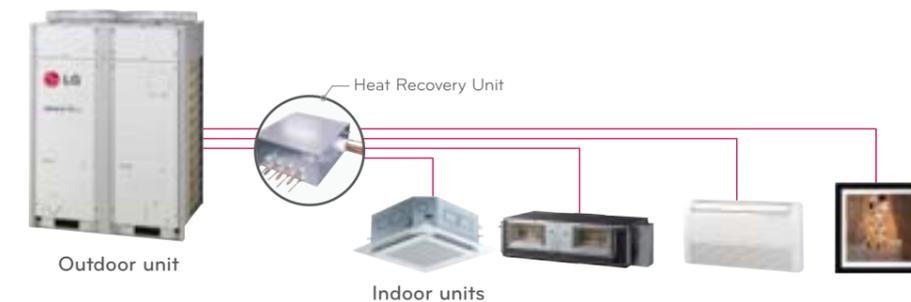
- HR unit (1EA)
- Hanging bolts M10 or M8 (4EA)
- Nut M8 or M10 (8EA)
- Flat washers M10 (8EA)
- Reducers

REDUCERS FOR INDOOR UNIT AND HR UNIT

(Unit : mm)

Models	Liquid pipe	High pressure	Low pressure
Indoor unit reducer			
HR unit reducer			
PRHR031/PRHR041			

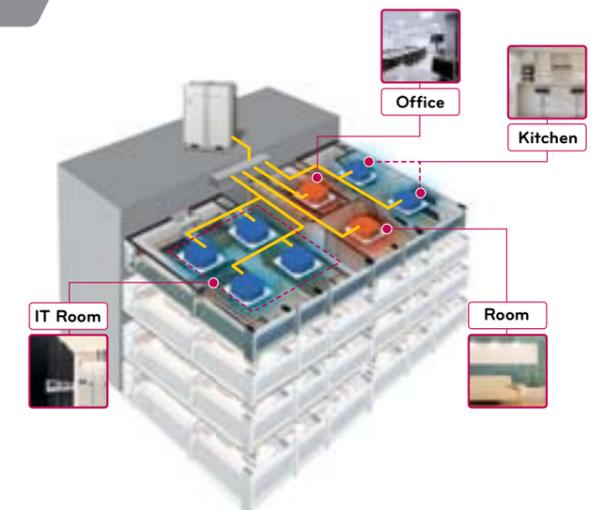
INSTALLATION



CONVENIENT FREE ZONING

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

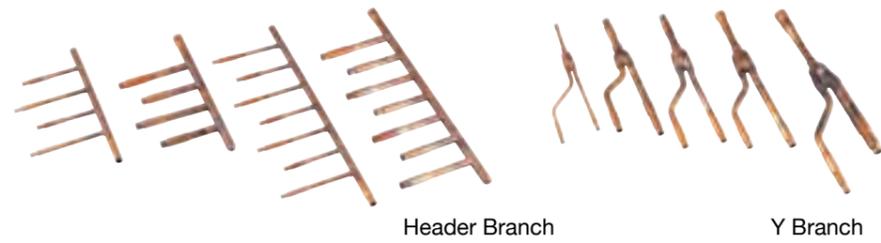
- Individual Control
 - Perfect individual control over spaces ventilation needed
- Zone Control
 - Max. of 8 indoor units can be connected for one branch
 - Max. of 32 indoor units can be connected for one HR unit
 - Same operational model can be operated by indoor units with zone control function installed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



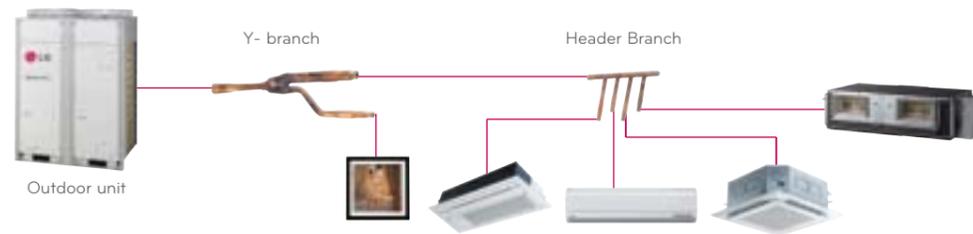
Header Branch

Y Branch

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™ SPACE**
- **MULTI V™ SYNC**
- **MULTI V™ MINI**
- **MULTI V™ PLUS II**
- **MULTI V™ SYNC II**
- **MULTI V™ SPACE II**
- **MULTI V™ WATER II**
- **MULTI V™ III Heat Pump**
- **MULTI V™ III Heat Recovery**

ACCESSORY MODEL NAME

Header Branch

• R410A

(Unit : mm)

Models	Gas pipe	Liquid pipe
4 branch / ARBL054 (under 22.4kW)		
7 branch / ARBL057 (under 22.4kW)		
4 branch / ARBL104 (under 44.8kW)		
7 branch / ARBL107 (under 44.8kW)		
10 branch / ARBL1010 (under 44.8kW)		
10 branch / ARBL2010 (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 (under 22.4kW)		
ARBLN03321 (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. WATER** Heat Pump (Unit : mm)

Models	Gas pipe	Liquid pipe
ARBLN07121 (under 95.2kW)		
ARBLN14521 (under 168kW)		
ARBLN23220 (over 168kW)		

• R410A / **MULTI V. SYNC** **MULTI V. SYNC** **MULTI V. SYNC** **MULTI V. WATER** Heat Recovery (Unit : mm)

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



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