



MULTI V™
Air Conditioning System **2011**
Enjoy a clean & comfortable life with MULTI V.

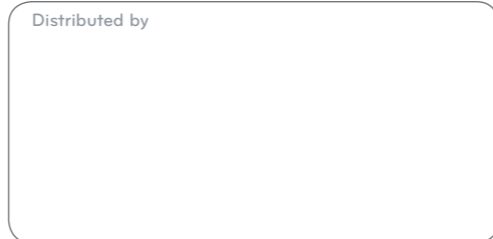
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Vitalize with **Good Air**

In today's modern world, optimal living often comes at the expense of causing harm to the environment. Yet our health and well being are two values that should never be compromised.

LG remains committed to providing reliable and energy-efficient air conditioning solutions for both your family and business so that you can live better without worrying about hurting Mother Nature.

Thanks to our innovative technology, our air conditioners are safe to use for your home and deliver cost-effective solutions for your office environment.

At LG we pride ourselves in protecting the planet. refrigerants and components to ensure our products keep the earth green for generations to come.

Comfortable living in a sustainable world that is at the heart of every LG product.



Eco-Design, Energy Efficient Reduce CO² Emissions



Enjoy Clean, Quiet, and Comfortable Air Conditioning with LG



10 Outdoor Unit

- MULTI V_{III} Heat Pump
- MULTI V_{III} Heat Recovery
- MULTI V_{III} MINI
- MULTI V_{III} SPACE
- MULTI V_{III} WATER Heat Pump
- MULTI V_{III} WATER Heat Recovery

42 Indoor Unit

- ARTCOOL
- Libero
- Wall mounted
- Console
- Ceiling Cassette
- Ceiling Concealed Duct
- Fresh Air Intake Unit
- Ceiling & Floor
- Ceiling Suspended
- Floor standing

70 eco V (Ventilation system)

- Energy Recovery Ventilator
- Energy Recovery Ventilator with DX Coil

80 V-net & Accessory

- Remote Controller
- Central Controller
- Accessory

MULTI V™ series

Outdoor unit

MULTI V Inverter units composed of serially arranged refrigerant pipes connected to a single outdoor unit are an 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.



2. Put the page number

12 MULTI V™ III Heat Pump 22 MULTI V™ III Heat Recovery



24 MULTI V™ MINI



26 MULTI V™ SPACE III



28 MULTI V™ WATER III





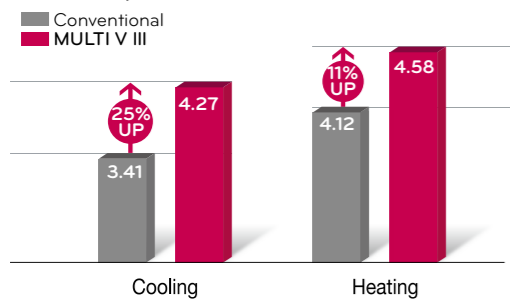
3. Put a star mark and a condition which is 'Continuous heating operation works only over 0 Celsius.'

Energy Saving & Environment

High cooling and heating COP

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

COP Comparison (based on 8HP)



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

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

Technical innovation for high COP

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



- 1 V-Scroll (LG BLDC inverter compressor)**
Improved the energy efficiency by 11%, compared with the AC inverter compressor, by using the high efficiency LG BLDC inverter compressor.
- 2 Sine wave inverter control**
Improved the efficiency of the compressor motor by using the sine wave DC inverter control technology.
- 3 Cyclone sub-cooling circuit**
Improved the cooling capability by using a cyclone sub-cooling circuit.
- 4 Newly designed propeller fan**
Achieved optimal heat exchange by using high air volume and low noise fan.
- 5 LG BLDC inverter fan motor**
Improved efficiency by using high efficiency BLDC inverter motor, compared with the AC motor.
- 6 Uniform distributor for the heat exchanger**
Improved heat exchange performance and efficiency by reducing greatly the heat exchanger's temperature deviation from 5°C to 1°C by applying an optimal distributor design to the heat exchanger.
- 7 Wide louver fins for the heat exchanger**
Improved efficiency by using wide louver fins with an increased heating area.
- 8 HiPOR™ (High Pressure Oil Return)**
Improved the system COP by 5%

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 Fan (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.

20HP Single Unit !!



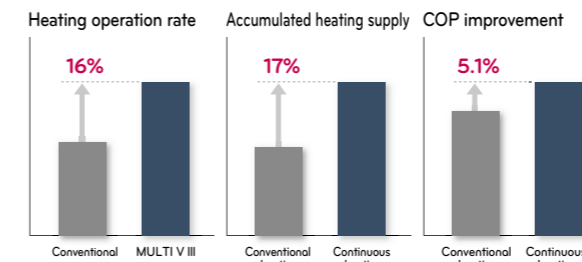
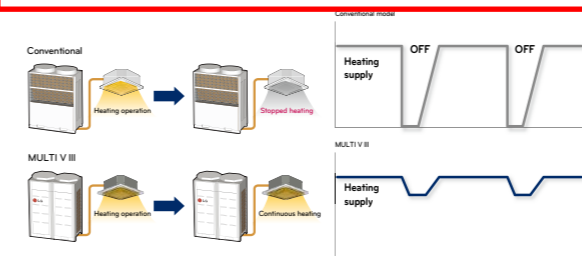
One Fan 8-12HP

Two Fan 14-20HP

Convenience and Comfort

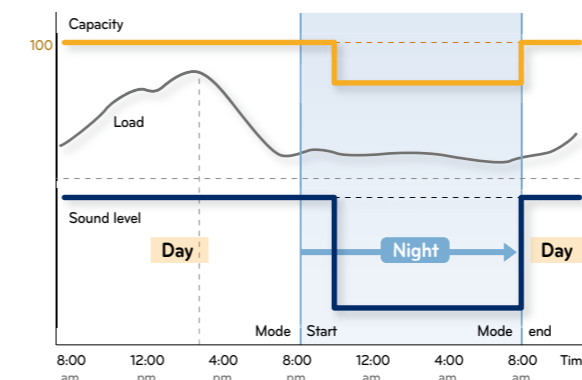
Continuous heating operation*

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.



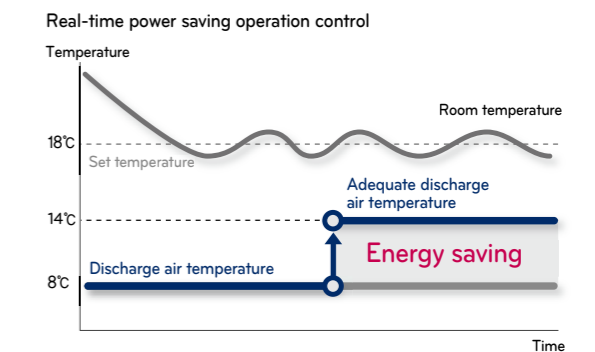
Night silent operation

By using, fan control technology and the real-time outdoor temperature detection technology, the product is equipped with the night low-noise operation function. 9 steps of low-noise operation are possible to provide more quiet operation during the night. More detailed information, please refer to the PDB



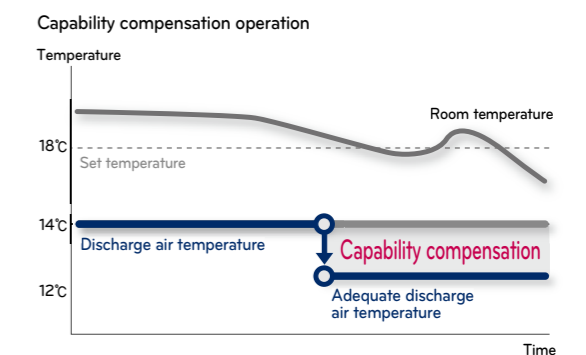
Real-time smart operation

Real-time power saving operation
In situations where the heating/cooling load difference is large, if performance of one side is high enough, performance of the other side can be overloaded. To control these situations, the product uses the real-time power saving operation algorithm, which enables the product to automatically decide on the operation status for the indoor units and automatically control them to maintain an 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. For example, if the refrigerant line that connects the indoor and outdoor units has been extended or the indoor heating or cooling load has increased and thus the capabilities of indoor units are not enough to accomplish the cooling or heating successfully, the product automatically performs the capability compensation operation on the indoor units to make them operate at an optimal level.

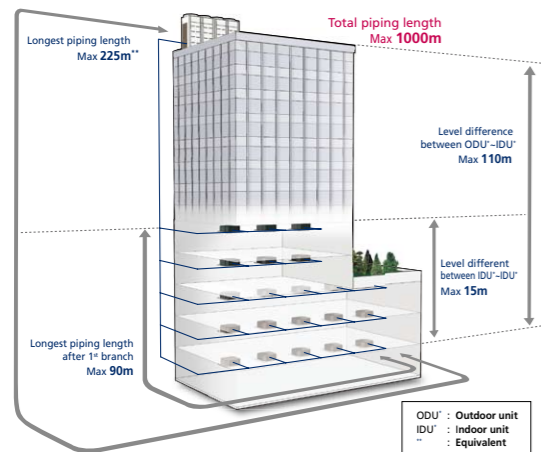




Wide & free HVAC design

Extended piping length and elevation

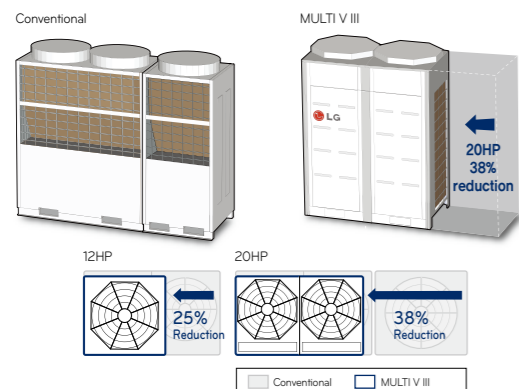
Because of the product's use of inverter control technology and sub-cooling control circuit technology, it is possible to design a system with longer piping length and world-class elevation difference. With this product, since a cooling and heating system can be designed more flexibly in a high-rise 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 (Equivalent)	200m (225m)
Longest piping length after 1st branch (Conditional application)	40m (90m)
Level difference between ODU-IDU	110m
Level difference between IDU-IDU	15m
Level difference between ODU-ODU	5m

Space utilization by smaller size

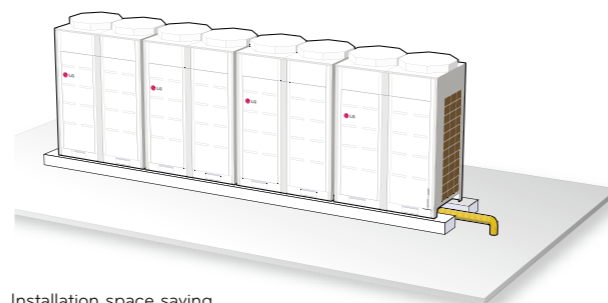
The product size is reduced by up to 38% compared to the conventional products, reducing the required installation space greatly. This gives you more free space and thus allows for easier HVAC design.



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



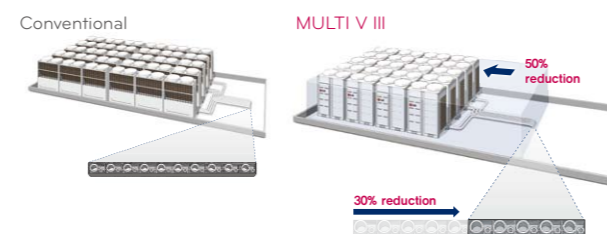
Installation space saving
 - Optimal space utilization

Single pipe
 - 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 by 50%
- Reduces the 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



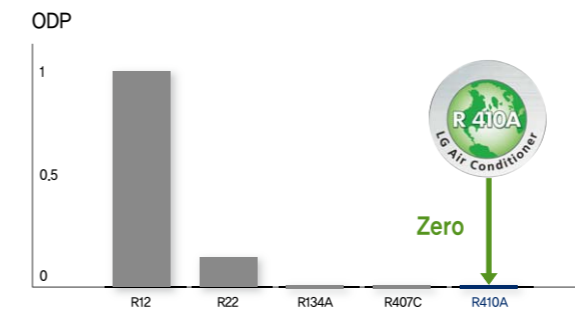
Wide & free HVAC design

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.

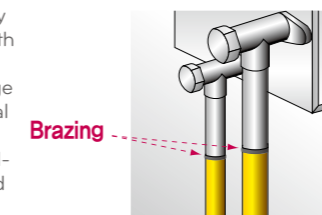
R410A Refrigerant

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.

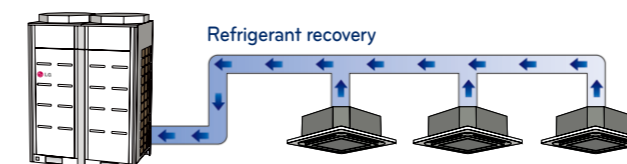


Auto leakage detection

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

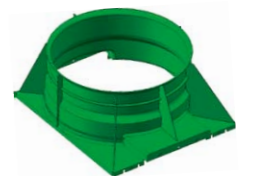
To provide our customers with high cooling and heating performance at a minimum size, and as well as a pleasant environment created with quiet operation, MULTI V III uses various low noise technologies. It has minimized operation noise by using a compressor with BLDC motors, low noise fan motors, new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



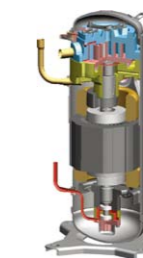
Robust structure design



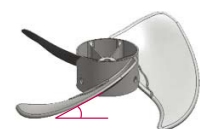
Octagonal grill air flow resistance reduction



Expanded bellmouth shaped shroud



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



Robust & S-shaped blade
 Increased pitch angle



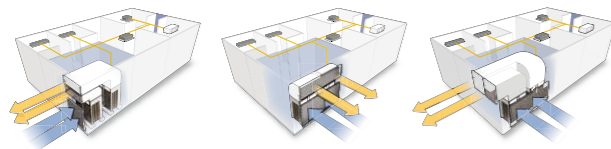
Wide & free HVAC design

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



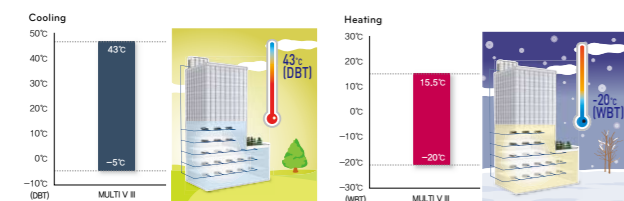
No stacking of high temperature air occurs due to powerful discharge of air currents even within a high-rise building



Conventional MULTI V III

Wide operating range

The product has more extended continuous Fin layer Salt Spray Test for 15 Days 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.

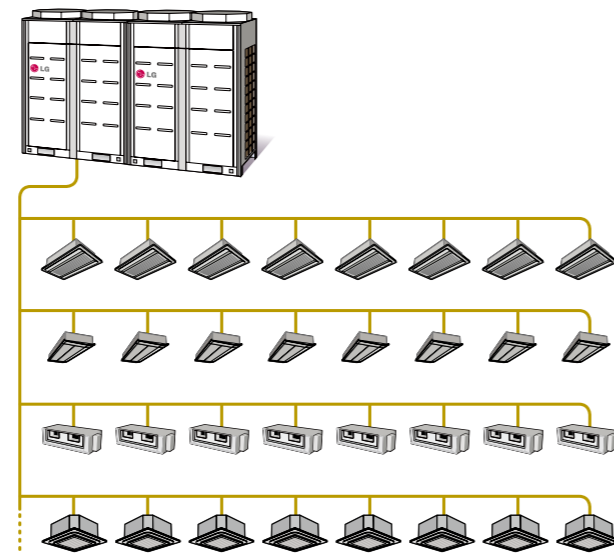


Flexible indoor unit combination

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 installation & maintenance

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 for installation. 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 transportations 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.



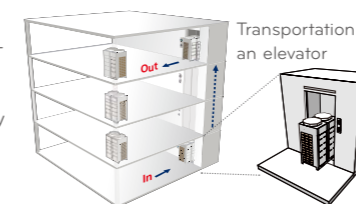
Safety design for crane use

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



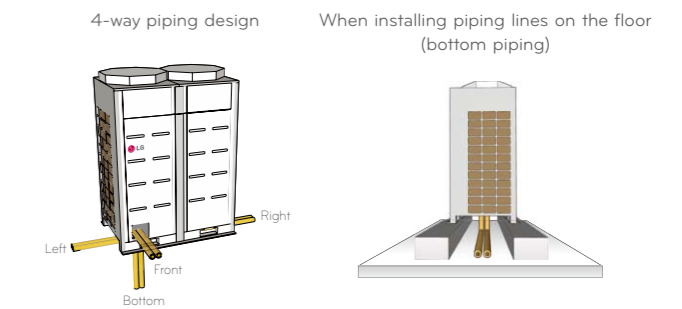
Compact product design allowing transportation by an elevator

Since the product size is reduced greatly compared to its performance, the product can be easily transported by an elevator.



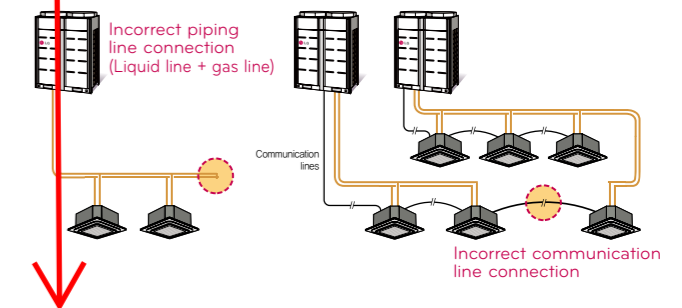
Free 4-way piping connection

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 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.

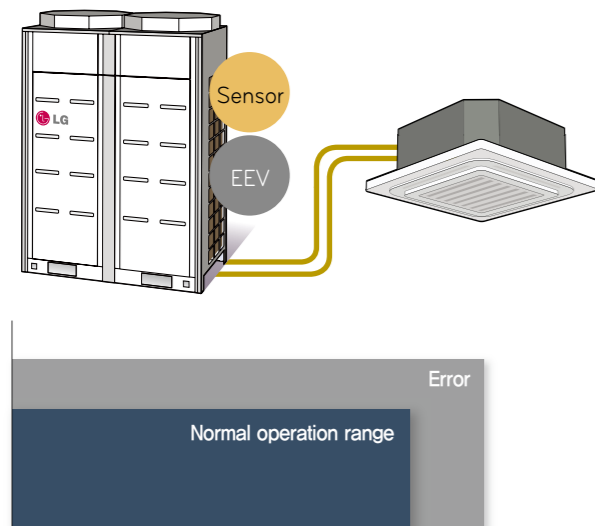




Easy installation & maintenance

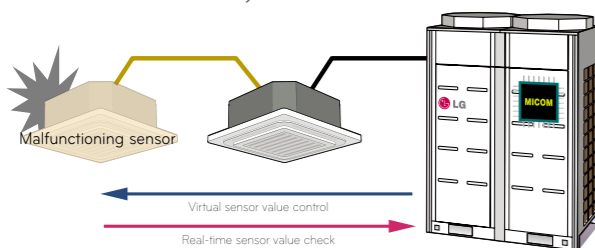
Real-time fault prediction function

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.



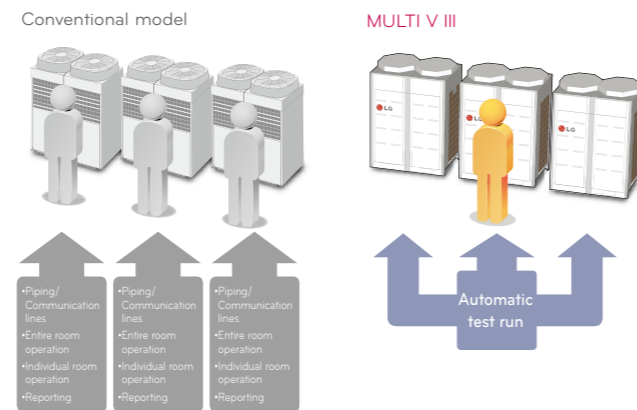
New virtual sensor back-up function

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.

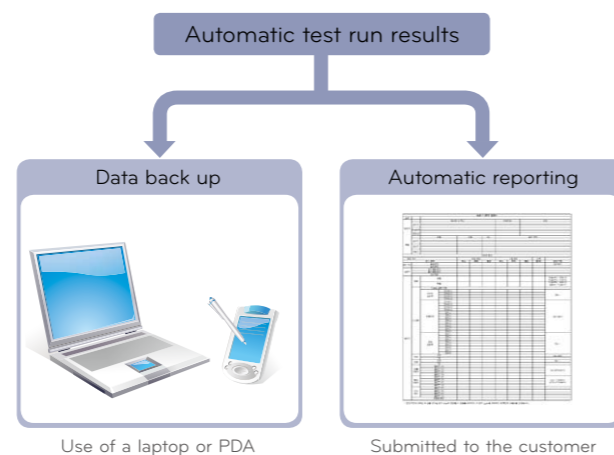


Intelligent simple test run

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 more easily and quickly.



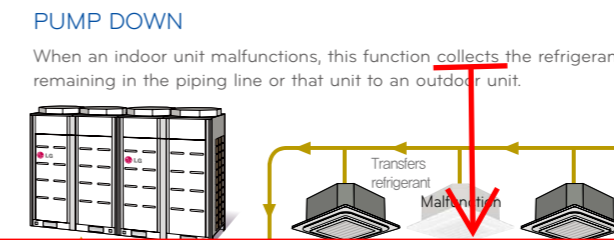
Automatic test run reduce test run time by more than 60% compared to the test run in an conventional product, and provides safe, reliable and convenient test run with various data backup functions. Since any general installation worker, not just a highly trained engineer, can perform a test run, the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



Easy installation & maintenance

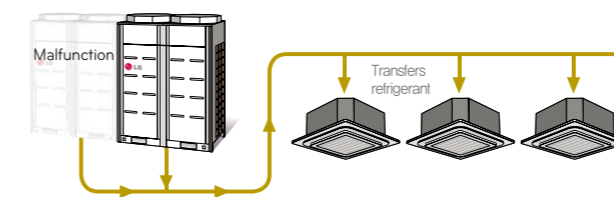
Pump down and pump out function

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.



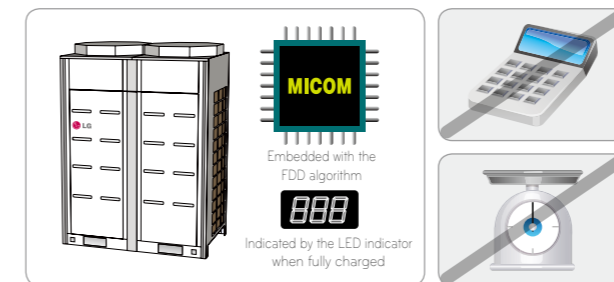
5. enables the pump to collect

PUMP OUT
 When an outdoor unit malfunctions, this function collects its refrigerant in another indoor unit or a piping line.



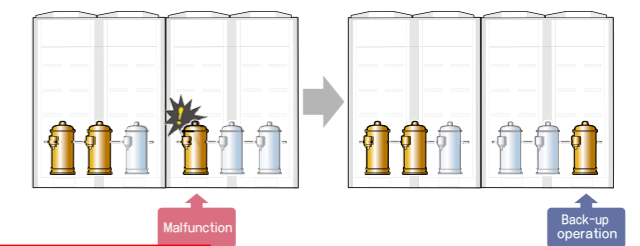
Automatic refrigerant charging function

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.

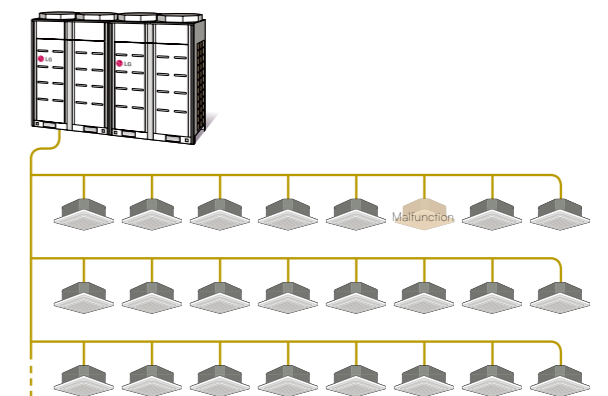


Automatic emergency back-up function

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.

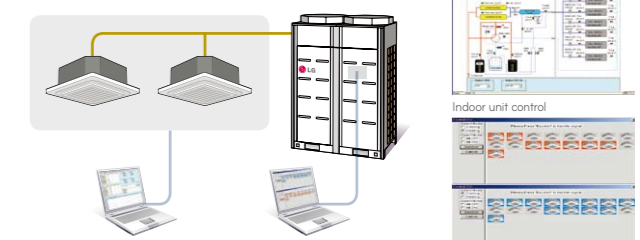


When an indoor unit malfunctions, the other indoor units operate normally because each indoor unit is operated individually by the Micom embedded in it.



Powerful LGMV Program

This program allows you to monitor and control the operation status of the product. Since the program can be connected to either an outdoor unit or indoor unit, you can check the operation status of the product easily and conveniently any time and anywhere.



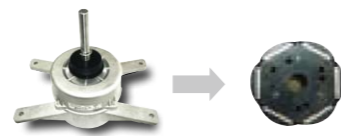
High technology

New & core technologies

1 New BLDC Inverter fan Motor

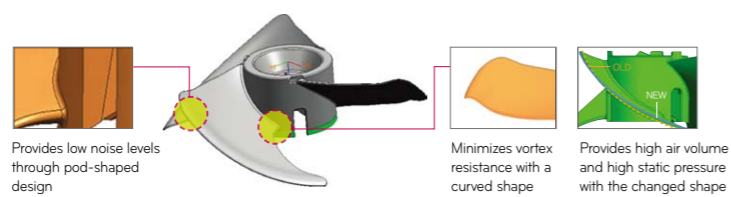
The product is equipped with highly efficient BLDC motor. The BLDC motor power consumption has been reduced and output has been improved, compared to the normal induction motor.

With strong torque with 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)

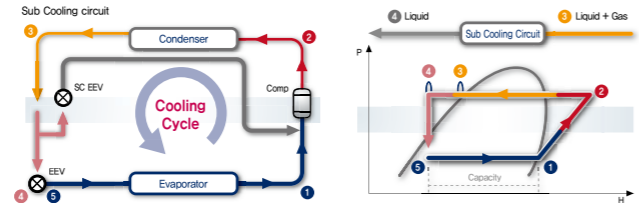
The Super Aero fan is a large air volume and high static pressure fan, and at the same time it produces low levels of noise.



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.

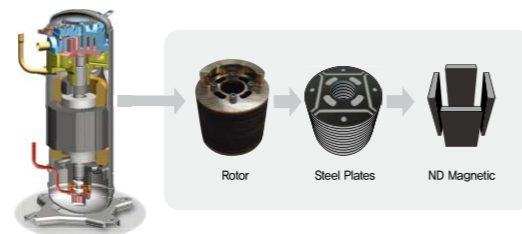


4 V-scroll (LG BLDC inverter compressor)

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 ND 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.

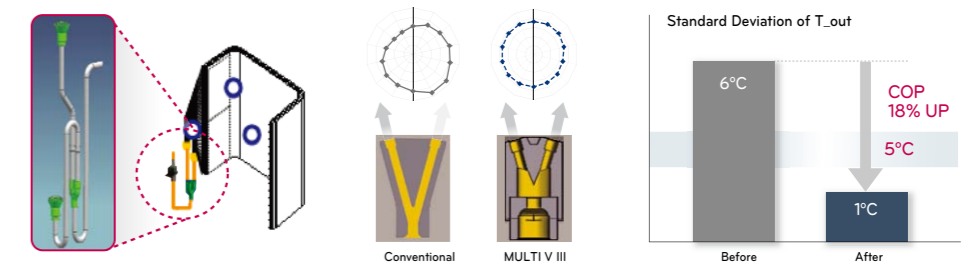
In addition, because the LG BLDC inverter compressor has the back pressure structure in which the interior of the compressor is maintained at a high pressure, the compression efficiency for refrigerant is improved. The compressor is also a high pressure type that makes oil lubrication smoother. Compared 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.

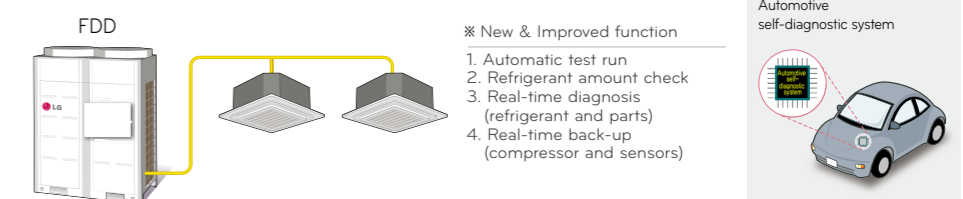
5 New optimized refrigerant distributor

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.



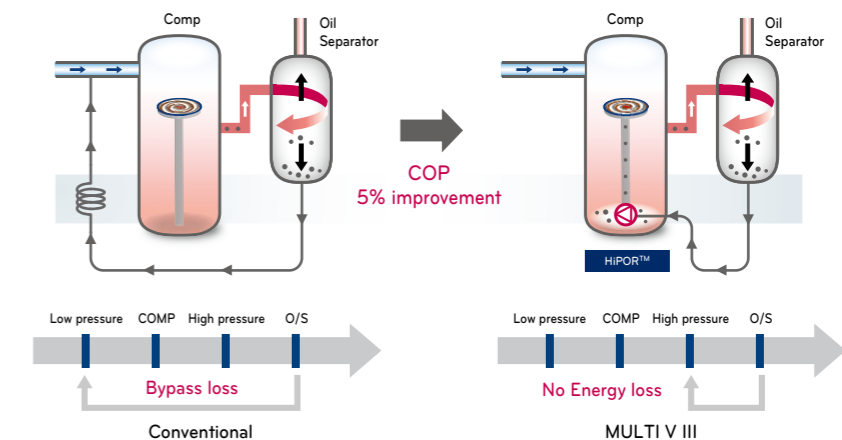
6 FDD (Fault Detection & Diagnosis)

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.



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.



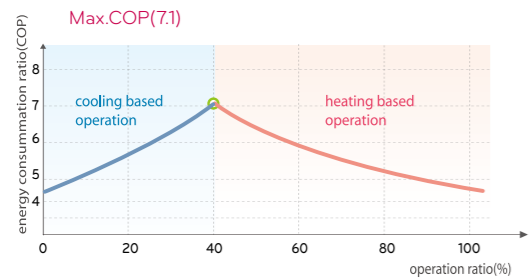
MULTI V III Heat Recovery

MULTI V III Heat recovery provides various applications and flexible control over free zoning for the user's convenience.

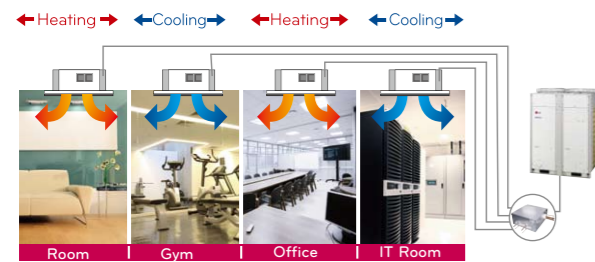
Outdoor Unit MULTI V III

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



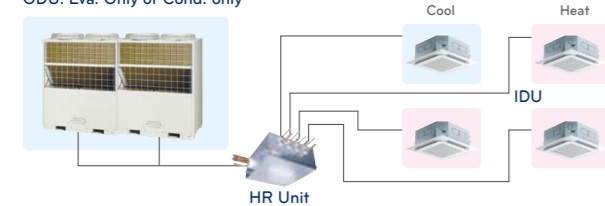
Simultaneous Operations of Outdoor Units

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)

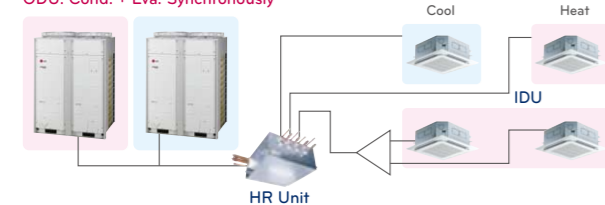
Conventional

ODU: Eva. Only or Cond. only



MULTI V III

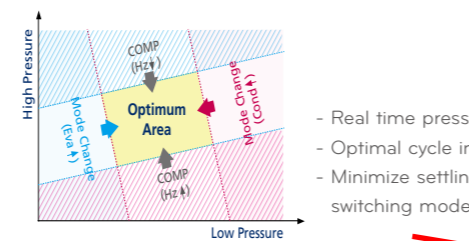
ODU: Cond. + Eva. Synchronously



AMC (Advanced Mode Change)

AMC control provides an optimal cycle operation under any conditions.

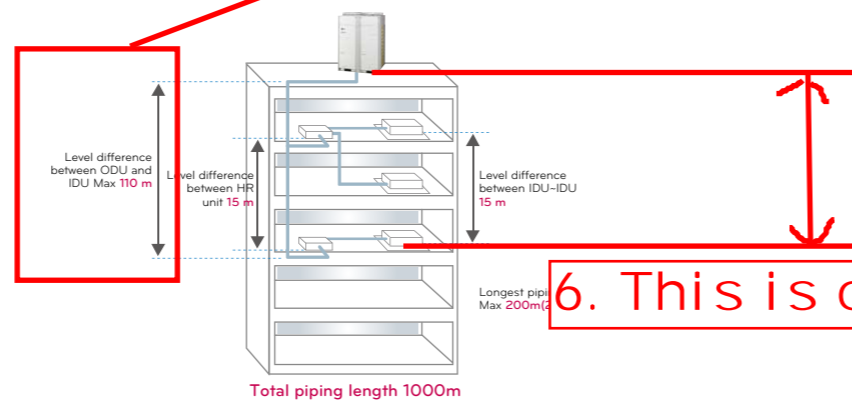
Through this mode, System Cycles can be more stable and maintain comfort for the customers



- Real time pressure control
- Optimal cycle in
- Minimize settling time during switching mode

6. The start point and the end point are wrong.

Long Piping Length

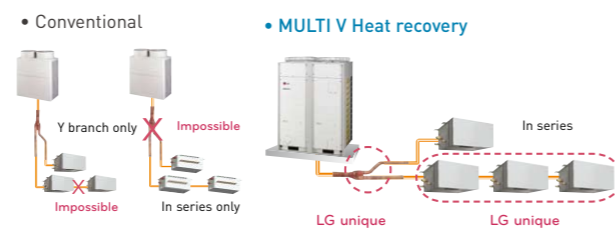


Total piping length	1000m
Actual longest pipe length	200m(250m*)
Longest piping length after 1st branch	40m(90m**)
Level difference between ODU-IDU	110m
Level difference between IDU-IDU	15m
Level difference between ODU-ODU	5m
HR Unit - Neighboring HR Unit	10m
Level difference between HR unit	15m

* Equivalent
 ** Conditional application

Flexible Connection of HR Unit

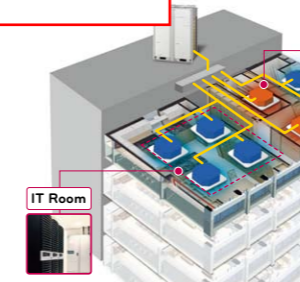
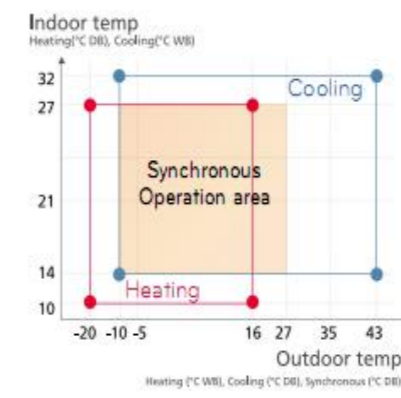
LG's heat recovery unit allows flexible connection both in series and in a row.



Convenient Free Zoning

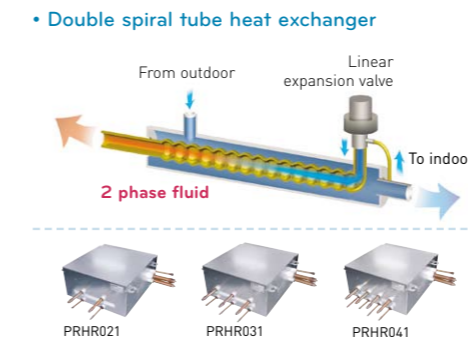
MULTI V III Heat recovery provides individual zones for the user's convenience.

- Individual Control
- Perfect individual control of each zone
- Zone Control
- Max. of 8 indoor units can be controlled in one zone
- Max. of 32 indoor units can be controlled in one building
- Same operational model can be applied to various building types



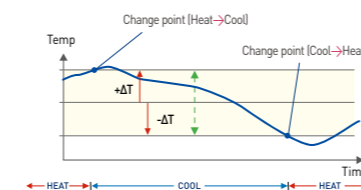
High Efficiency Heat Recovery Unit

- Double spiral tube type heat exchanger
- Maximum of 8 indoor units connectable
- Easy installation with auto piping detect function
- Access allowed to internal parts for SVC

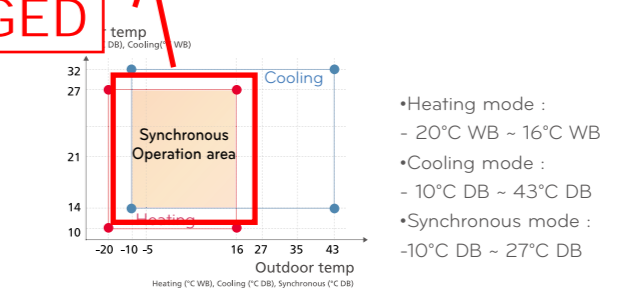


Auto Changeover

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.

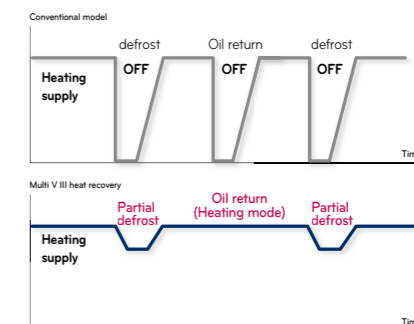


Expanded Low temperature Operation area through Condensate with Various Control



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.

Ventilation system

Vent & Accessory

MULTI V MINI

MULTI V MINI can be easily installed in small offices and shops. Designed for low-noise operation, it ensures a pleasant air conditioned environment.

Enhanced Comfort

- Night silent operation
- High COP

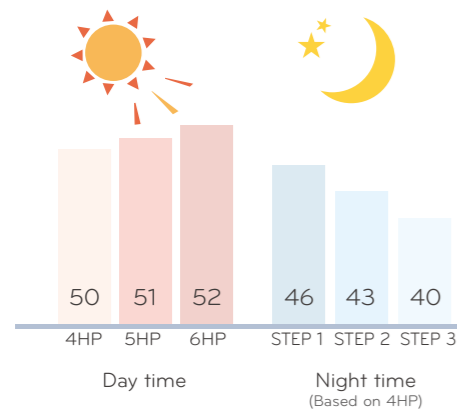
Mini	1Ø, 220V		3Ø, 380V	
	Cooling	Heating	Cooling	Heating
4HP	3.7	3.9	4.3	4.3
5HP	4.0	4.1	4.0	4.1
6HP	3.7	3.9	3.7	3.9

- 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
Level difference between ODU-ODU	5m

*Outdoor unit is lower than indoor unit.

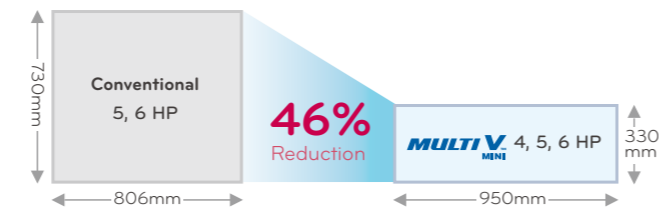
- Noise level (dBA)



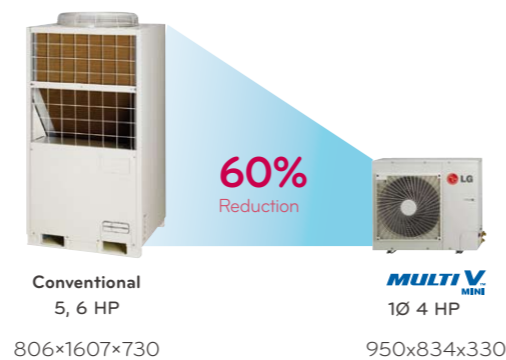
Slim & Compact Size

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

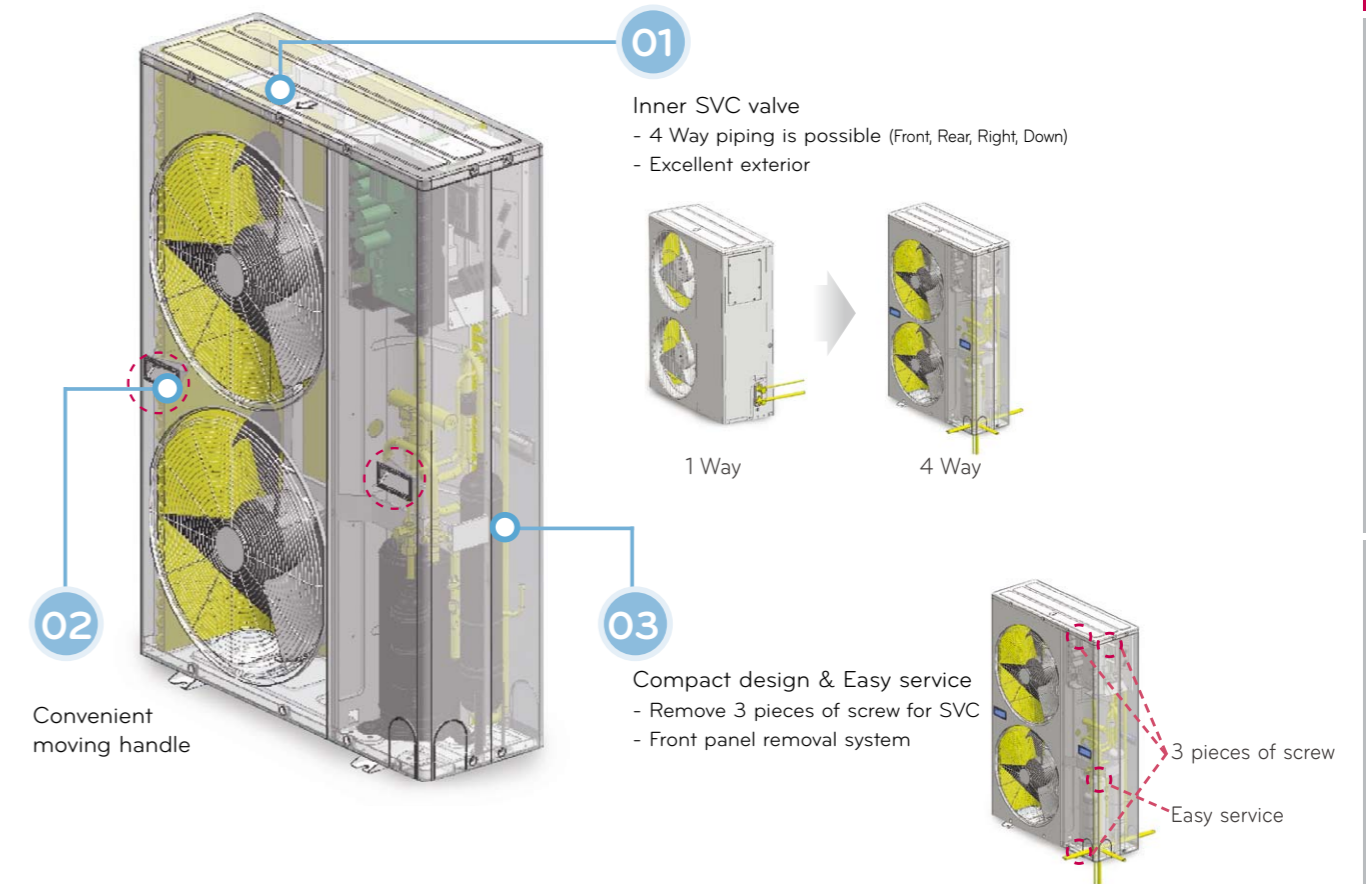
- Foot print area



- Volume



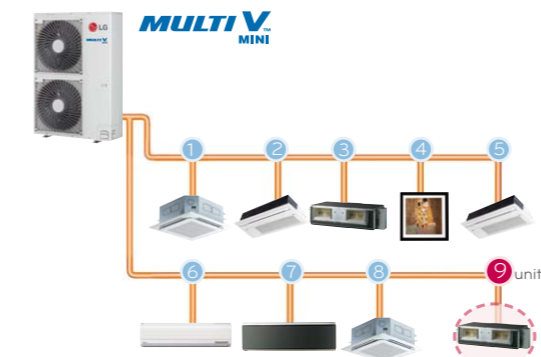
Easy to Service



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



*Based on 6 HP model

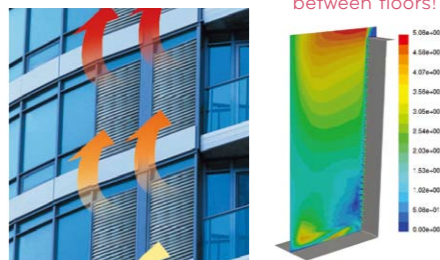
MULTI V SPACE II

MULTI V SPACE II is ideal for refined and luxurious living spaces with Economic and aesthetic space design .

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)

Conventional



MULTI V SPACE II



No efficiency reduction!

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

MULTI V SPACE II



Conventional

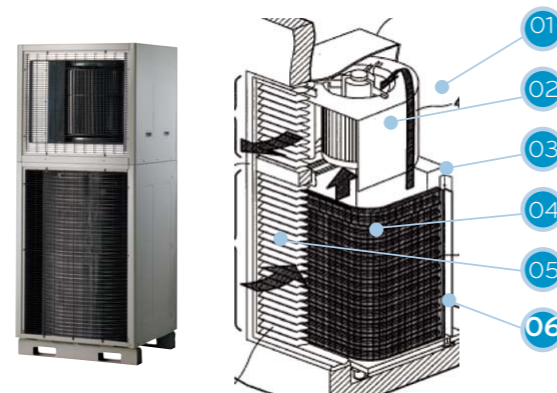


LG Patent For MULTI V SPACE II

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)

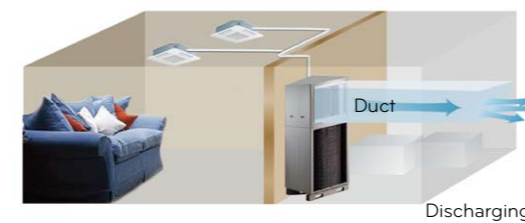
• LG patents : 57items



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)

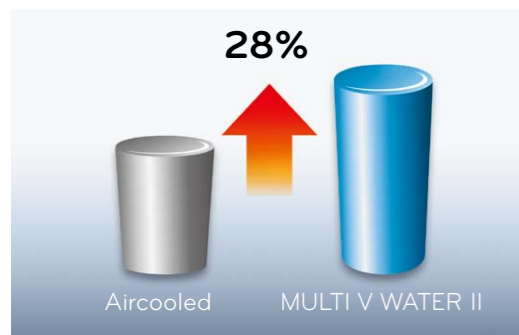


MULTI V WATER II represents both effective and safe system with great performance regardless of external conditions, such as ambient temperature, building wind effects in high rising building.

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.

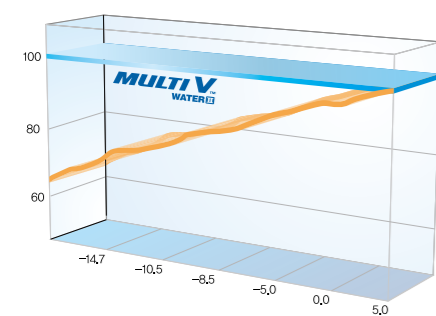
COP



- High efficiency system regardless of external conditions

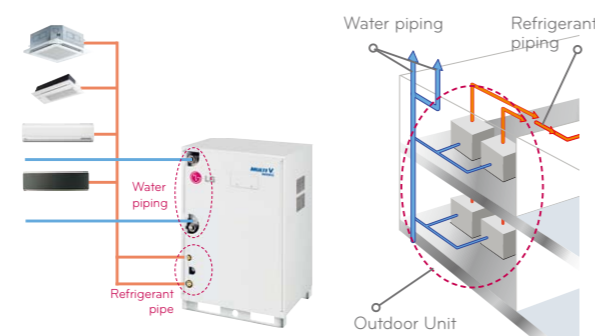


- Optimized control by variable load



Easy Installation

- Light weight & compact size
 - Installation space is reduced up to 60%
- Easy piping work
 - Refrigerant & water pipe connection at front side



A company



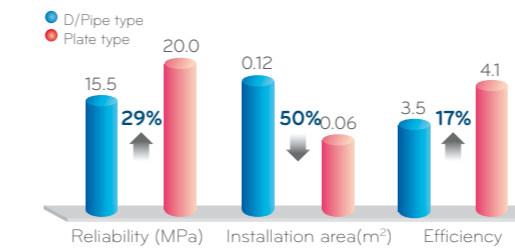
Wide View

The reduced installation space required for the outdoor unit has resulted in a more usable space.



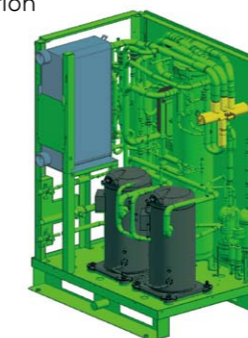
High Efficiency & Reliability

Comparison between plate type and double pipe type



Compressor back up operation

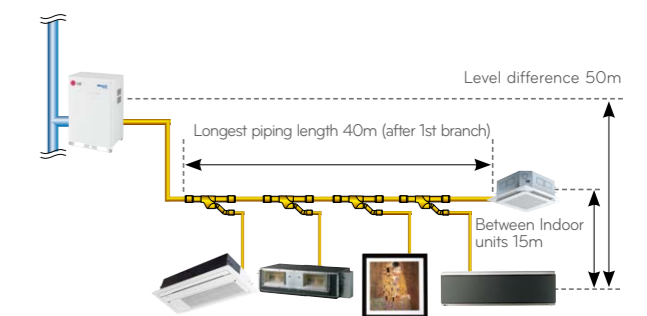
1. One compressor failure
2. Error code is displayed
3. Back-up by field setting (Dip S/W)
4. Continuous operation



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.

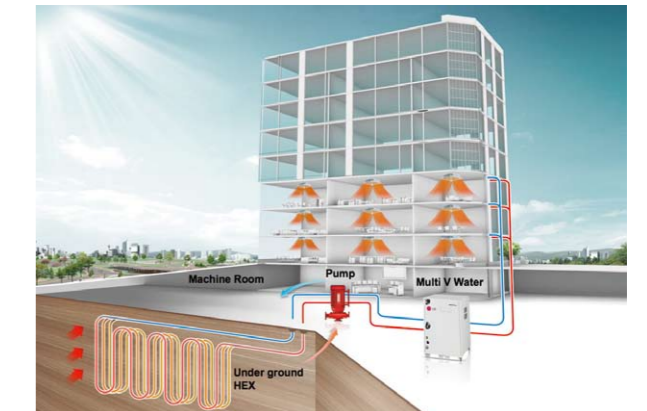


MULTI V Water II System for Geothermal application

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 anti-freeze 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





*** Specifications**

HP		8	10	12	14	16	18	20
Model	Combination unit	ARUN8OLT3	ARUN10OLT3	ARUN12OLT3	ARUN14OLT3	ARUN16OLT3	ARUN18OLT3	ARUN20OLT3
	Independent unit	ARUN8OLT3	ARUN10OLT3	ARUN12OLT3	ARUN14OLT3	ARUN16OLT3	ARUN18OLT3	ARUN20OLT3
Capacity	Cooling kW	22.4	28.0	33.6	39.2	44.8	50.4	56.0
	Heating kW	25.2	31.5	37.8	44.1	50.4	56.7	63.0
Power Input	Cooling kW	5.25	7.00	8.90	9.50	11.00	12.80	15.00
	Heating kW	5.50	7.25	9.00	9.70	11.50	13.50	15.50
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
Power Supply	Ø, V, Hz	3, 380-415, 50						
Dimensions(WxHxD)	mm	920x1,680x760		1,240x1,680x760			1,240x1,680x760	
Weight	kg	190x1	240x1	260x1			315x1	325x1
Color		Warm Gray, Morning Gray						
Noise level	dBA±3	57	58		61	62		
Fan	Type	Propeller fan						
	Air flow rate [CMM]	180	190		210	240		250
Compressor	Type	Hermetically Sealed Scroll						
	Number of compressors	1	2		3			
Heat Exchanger	Type	Gold fin						
Refrigerant	Type	R410A						
	Charge kg	5.0	6.4	7.0		7.5	9	
Oil	Type	EEV						
	Control	FVC68D(PVE)						
Piping Connections	Liquid Pipes mm(inch)	Ø9.52(3/8)		Ø12.7(1/2)		Ø15.88(5/8)		
	Gas Pipes 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(44)
Ratio of the connectable indoor units		50-200%						
Longest piping length / Level difference **		200m/110m						

HP		22	24	26
Model	Combination unit	ARUN22OLT3	ARUN24OLT3	ARUN26OLT3
	Independent unit	ARUN12OLT3	ARUN12OLT3	ARUN14OLT3
Capacity	Cooling kW	61.6	67.2	72.8
	Heating kW	69.3	75.6	81.9
Power Input	Cooling kW	15.90	17.80	18.40
	Heating kW	16.25	18.00	18.70
COP	Cooling	3.87	3.78	3.96
	Heating	4.26	4.20	4.38
Power Supply	Ø, V, Hz	3, 380-415, 50		
Dimensions(WxHxD)	mm	(920x1,680x760)×2		(920x1,680x760)×1+(1,240x1,680x760)×1
Weight	kg	240 × 2		240 × 1 + 260 × 1
Color		Warm Gray, Morning Gray		
Noise level	dBA±3	61		
Fan	Type	Propeller fan		
	Air flow rate [CMM]	380	400	
Compressor	Type	Hermetically Sealed Scroll		
	Number of compressors	4		
Heat Exchanger	Type	Gold fin		
Refrigerant	Type	R410A		
	Charge kg	12.8	13.4	
Oil	Type	EEV		
	Control	FVC68D(PVE)		
Piping Connections	Liquid Pipes mm(inch)	10,400	10,700	
	Gas Pipes mm(inch)	Ø15.88(5/8)	Ø19.05(3/4)	
Number of outdoor unit		2		
Number of maximum connectable indoor units *		35(44)	39(48)	42(52)
Ratio of the connectable indoor units		50-160%		
Longest piping length / Level difference **		200m/110m		

HP		28	30	32	34	36	38	40	
Model	Combination unit	ARUN28OLT3	ARUN30OLT3	ARUN32OLT3	ARUN34OLT3	ARUN36OLT3	ARUN38OLT3	ARUN40OLT3	
	Independent unit	ARUN16OLT3	ARUN16OLT3	ARUN16OLT3	ARUN18OLT3	ARUN20OLT3	ARUN20OLT3	ARUN20OLT3	
Capacity	Cooling kW	78.4	84.0	89.6	95.2	100.8	106.4	112.0	
	Heating kW	88.2	94.5	100.8	107.1	113.4	119.7	126.0	
Power Input	Cooling kW	19.90	20.50	22.00	23.80	26.00	27.80	30.00	
	Heating kW	20.50	21.20	23.00	25.00	27.00	29.00	31.00	
COP	Cooling	3.94	4.10	4.07	4.00	3.88	3.83	3.73	
	Heating	4.30	4.46	4.38	4.28	4.20	4.13	4.06	
Power Supply	Ø, V, Hz	3, 380-415, 50							
Dimensions(WxHxD)	mm	(920x1,680x760)×1		(1,240x1,680x760)×2					
Weight	kg	240x1+260x1		260 × 2		260x1+315x1	260x1+325x1	315x1+325x1	325 × 2
Color		Warm Gray, Morning Gray							
Noise level	dBA±3	61	62.8		63.5		65		
Fan	Type	Propeller fan							
	Air flow rate [CMM]	400	420		450	460	490	500	
Compressor	Type	Hermetically Sealed Scroll							
	Number of compressors	4		5			6		
Heat Exchanger	Type	Gold fin							
Refrigerant	Type	R410A							
	Charge kg	13.4	14.0		14.5	16.0	16.5	18.0	
Oil	Type	EEV							
	Control	FVC68D(PVE)							
Piping Connections	Liquid Pipes mm(inch)	10,700			12,700		14,400		
	Gas Pipes mm(inch)	Ø34.9(1 3/8)		Ø41.3(1 5/8)					
Number of outdoor unit		2							
Number of maximum connectable indoor units *		45(56)	49(60)	52(64)	55(64)	58(64)	61(64)	64	
Ratio of the connectable indoor units		50-160%							
Longest piping length / Level difference **		200m/110m							

HP		42	44	46	48	50
Model	Combination unit	ARUN42OLT3	ARUN44OLT3	ARUN46OLT3	ARUN48OLT3	ARUN50OLT3
	Independent unit	ARUN16OLT3	ARUN16OLT3	ARUN16OLT3	ARUN16OLT3	ARUN18OLT3
Capacity	Cooling kW	117.6	123.2	128.8	134.4	140.0
	Heating kW	132.3	139.0	144.9	151.2	157.5
Power Input	Cooling kW	29.40	30.90	31.50	33.00	34.80
	Heating kW	30.20	32.00	32.70	34.50	36.50
COP	Cooling	4.00	3.99	4.09	4.07	4.02
	Heating	4.38	4.33	4.43	4.38	4.32
Power Supply	Ø, V, Hz	3, 380-415, 50				
Dimensions(WxHxD)	mm	(920x1,680x760)+(1,240x1,680x760)×2		(1,240x1,680x760)×3		
Weight	kg	240x1 + 260x2		260 × 3		260x2 + 315x1
Color		Warm Gray, Morning Gray				
Noise level	dBA±3	62.8	64	64.5		65.4
Fan	Type	Propeller fan				
	Air flow rate [CMM]	610		630		660
Compressor	Type	Hermetically Sealed Scroll				
	Number of compressors	6			7	
Heat Exchanger	Type	Gold fin				
Refrigerant	Type	R410A				
	Charge kg	20.4		21.0		21.5
Oil	Type	EEV				
	Control	FVC68D(PVE)				
Piping Connections	Liquid Pipes mm(inch)	16,200		16,500		18,200
	Gas Pipes mm(inch)	Ø41.3(1 5/8)		Ø41.3(1 5/8)		
Number of outdoor unit		3				
Number of maximum connectable indoor units *		64				
Ratio of the connectable indoor units		50-130%				
Longest piping length / Level difference **		200m/110m				

* 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	kW	145.6	151.2	156.8	162.4	168.0
	Heating	kW	163.8	170.1	176.4	182.7	189.0
Power	Cooling	kW	37.00	39.50	41.00	42.80	45.00
	Input	kW	38.50	40.70	42.50	44.50	46.50
COP	Cooling		3.94	3.83	3.82	3.79	3.73
	Heating		4.25	4.18	4.15	4.11	4.06
Power Supply		Ø, V, Hz	3, 380-415, 50				
Dimensions(WxHxD)		mm	(1,240×1,680×760)×3				
Weight		kg	260×2 + 325×1	260×1 + 325×2		315×1 + 325×2	325 × 3
Color			Warm Gray, Morning Gray				
Noise level		dBA±3	65.8				
Fan	Type		Propeller fan				
	Air flow rate	[CMM]	670	710		740	750
Compressor	Type		Hermetically Sealed Scroll				
	Number of compressors		7	8		9	
Heat Exchanger			Gold fin				
Refrigerant	Type		R410A				
	Charge	kg	23.0	25.0		25.5	27.0
Oil	Control		EEV				
	Charge	cc	18,200	19,900		21,600	
Piping	Liquid Pipes	mm(inch)	Ø19.05(3/4)				
Connections	Gas Pipes	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			50-130%				
Longest piping length / Level difference **			200m/110m				

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	kW	201.6	207.2	212.8	218.4	224.0
	Heating	kW	226.6	233.1	239.4	245.7	252.0
Power	Cooling	kW	52.00	53.80	56.00	57.80	60.00
	Input	kW	54.00	56.00	58.00	60.00	62.00
COP	Cooling		3.88	3.85	3.80	3.78	3.73
	Heating		4.20	4.16	4.13	4.10	4.06
Power Supply		Ø, V, Hz	3, 380-415, 50				
Dimensions(WxHxD)		mm	(1,240×1,680×760)×4				
Weight		kg	260×2 + 325×2	260×1+315×1+325×2	260×1 + 325×3	315×1 + 325×3	325 × 4
Color			Warm Gray, Morning Gray				
Noise level		dBA±3	67.5				
Fan	Type		Propeller fan				
	Air flow rate	[CMM]	920	950	960	990	1,000
Compressor	Type		Hermetically Sealed Scroll				
	Number of compressors		10				12
Heat Exchanger			Gold fin				
Refrigerant	Type		R410A				
	Charge	kg	32.0			35.0	36.0
Oil	Control		EEV				
	Charge	cc	25,400		27,100		28,800
Piping	Liquid Pipes	mm(inch)	Ø22.2(7/8)				
Connections	Gas Pipes	mm(inch)	Ø53.98(2)				
Number of outdoor unit			4				
Number of maximum connectable indoor units *			64				
Ratio of the connectable indoor units			50-130%				
Longest piping length / Level difference **			200m/110m				

8.
53.98(2 1/8)

HP			62	64	66	68	70
Model	Combination unit		ARUN620LT3	ARUN640LT3	ARUN660LT3	ARUN680LT3	ARUN700LT3
	Independent unit		ARUN160LT3	ARUN160LT3	ARUN180LT3	ARUN180LT3	ARUN200LT3
			ARUN160LT3	ARUN160LT3	ARUN160LT3	ARUN180LT3	ARUN180LT3
			ARUN160LT3	ARUN160LT3	ARUN160LT3	ARUN160LT3	ARUN160LT3
			ARUN140LT3	ARUN160LT3	ARUN160LT3	ARUN160LT3	ARUN160LT3
Capacity	Cooling	kW	173.6	179.2	184.8	190.4	196.0
	Heating	kW	195.3	201.6	207.9	214.2	220.5
Power	Cooling	kW	42.50	44.00	45.80	47.60	49.80
	Input	kW	44.20	46.00	48.00	50.00	52.00
COP	Cooling		4.08	4.07	4.03	4.00	3.94
	Heating		4.42	4.38	4.33	4.28	4.24
Power Supply		Ø, V, Hz	3, 380-415, 50				
Dimensions(WxHxD)		mm	(1,240×1,680×760)×4				
Weight		kg	260×4		260×3 + 315×1	260×2 + 315×2	260×2+315×1+325×1
Color			Warm Gray, Morning Gray				
Noise level		dBA±3	66.4				
Fan	Type		Propeller fan				
	Air flow rate	[CMM]	840		870	900	910
Compressor	Type		Hermetically Sealed Scroll				
	Number of compressors		8		9		10
Heat Exchanger			Gold fin				
Refrigerant	Type		R410A				
	Charge	kg	28.0		28.5	29.0	30.5
Oil	Control		EEV				
	Charge	cc	22,000		23,700		25,400
Piping	Liquid Pipes	mm(inch)	Ø22.2(7/8)				
Connections	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			50-130%				
Longest piping length / Level difference **			200m/110m				

* The number of () means the number of max. connectable indoor units, when the connected capacity of indoor units is in the table below.

** Conditional Application
To make 40-90m of pipe length after first branch refer to the part of "installation of outdoor units" in PDB

Note :

- Capacities are based on the following conditions
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB
Interconnecting piping length 7.5m Interconnecting piping length 7.5m
Level difference of zero 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.



*** Specifications**

HP		8	10	12	14	16	18	20
Model	Combination unit	ARUB8OLT3	ARUB10OLT3	ARUB12OLT3	ARUB14OLT3	ARUB16OLT3	ARUB18OLT3	ARUB20OLT3
	Independent unit	ARUB8OLT3	ARUB10OLT3	ARUB12OLT3	ARUB14OLT3	ARUB16OLT3	ARUB18OLT3	ARUB20OLT3
Capacity	Cooling kW	22.4	28.0	33.6	39.2	44.8	50.4	56.0
	Heating kW	25.2	31.5	37.8	44.1	50.4	56.7	63.0
Power	Cooling kW	5.25	7.00	8.90	9.50	11.00	12.80	15.00
	Input Heating kW	5.50	7.25	9.00	9.70	11.50	13.50	15.50
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
Power Supply	Ø, V, Hz	3, 380-415, 50						
Dimensions(WxHxD)	mm	920x1,680x760			1,240x1,680x760			
Weight	kg	240 x 1		270x1			320x1	
Color		Warm Gray, Morning Gray						
Noise level	dB(A)±3	57		58		61		62
Fan	Type	Propeller fan						
	Air flow rate [CMM]	180	190		210	240	250	
Compressor	Type	HSS DC Scroll						
	Number of compressors			2			3	
Heat Exchanger	Type	Gold fin						
Refrigerant	Type	R410A						
	Charge kg		6.4		7.0	7.5	9	
	Control	EEV						
Oil	Type	FVC68D(PVE)						
	Charge cc		5,200		5,500	7,200		
Piping	Liquid Pipes mm(inch)	Ø9.52(3/8)		Ø12.7(1/2)		Ø15.88(5/8)		
Connections	Low Pressure Gas Pipes mm(inch)	Ø19.05(3/4)	Ø22.2(7/8)	Ø28.58(1 1/8)			Ø41.3(1 5/8)	
	High Pressure Gas Pipes mm(inch)	Ø15.88(5/8)	Ø19.05(3/4)	Ø22.2(7/8)			Ø34.9(1 3/8)	
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		50-200%						
Longest piping length / Level difference **		200m/110m						

HP		22	24	26
Model	Combination unit	ARUB22OLT3	ARUB24OLT3	ARUB26OLT3
	Independent unit	ARUB12OLT3	ARUB12OLT3	ARUB14OLT3
Capacity	Cooling kW	61.6	67.2	72.8
	Heating kW	69.3	75.6	81.9
Power	Cooling kW	15.90	17.80	18.40
	Input Heating kW	16.25	18.00	18.70
COP	Cooling	3.87	3.78	3.96
	Heating	4.26	4.20	4.38
Power Supply	Ø, V, Hz	3, 380-415, 50		
Dimensions(WxHxD)	mm	(920x1,680x760)×2		(920x1,680x760)×1+(1,240x1,680x760)×1
Weight	kg	240 x 2		240x1 + 270x1
Color		Warm Gray, Morning Gray		
Noise level	dB(A)±3	61		
Fan	Type	Propeller fan		
	Air flow rate [CMM]	380		400
Compressor	Type	HSS DC Scroll		
	Number of compressors		4	
Heat Exchanger	Type	Gold fin		
Refrigerant	Type	R410A		
	Charge kg		12.8	13.4
	Control	EEV		
Oil	Type	FVC68D(PVE)		
	Charge cc	10,400		10,700
Piping	Liquid Pipes mm(inch)	Ø15.88(5/8)		Ø19.05(3/4)
Connections	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)		Ø34.9(1 3/8)
Number of outdoor unit		2		
Number of maximum connectable indoor units *		35(44)	39(48)	42(52)
Ratio of the connectable indoor units		50-160%		
Longest piping length / Level difference **		200m/110m		

HP		28	30	32	34	36	38	40
Model	Combination unit	ARUB28OLT3	ARUB30OLT3	ARUB32OLT3	ARUB34OLT3	ARUB36OLT3	ARUB38OLT3	ARUB40OLT3
	Independent unit	ARUB16OLT3	ARUB16OLT3	ARUB16OLT3	ARUB18OLT3	ARUB20OLT3	ARUB20OLT3	ARUB20OLT3
Capacity	Cooling kW	78.4	84.0	89.6	95.2	100.8	106.4	112.0
	Heating kW	88.2	94.5	100.8	107.1	113.4	119.7	126.0
Power	Cooling kW	19.90	20.50	22.00	23.80	26.00	27.80	30.00
	Input Heating kW	20.50	21.20	23.00	25.00	27.00	29.00	31.00
COP	Cooling	3.94	4.10	4.07	4.00	3.88	3.83	3.73
	Heating	4.30	4.46	4.38	4.28	4.20	4.13	4.06
Power Supply	Ø, V, Hz	3, 380-415, 50						
Dimensions(WxHxD)	mm	(920x1,680x760)×1+(1,240x1,680x760)×1		(1,240x1,680x760)×2				
Weight	kg	270 x 2		270x1+320x1	270x1+330x1	320x1+330x1	330 x 2	
Color		Warm Gray, Morning Gray						
Noise level	dB(A)±3	61	62.8	63.5		65		
Fan	Type	Propeller fan						
	Air flow rate [CMM]	400	420	450	460	490	500	
Compressor	Type	HSS DC Scroll						
	Number of compressors		4		5	6		
Heat Exchanger	Type	Gold fin						
Refrigerant	Type	R410A						
	Charge kg	13.4	14.0	14.5	16.0	16.5	18.0	
	Control	EEV						
Oil	Type	FVC68D(PVE)						
	Charge cc	10,700	11,000	12,700	14,400			
Piping	Liquid Pipes mm(inch)	Ø19.05(3/4)		Ø28.58(1 1/8)			Ø41.3(1 5/8)	
Connections	Low Pressure Gas Pipes mm(inch)	Ø34.9(1 3/8)		Ø28.58(1 1/8)			Ø34.9(1 3/8)	
	High Pressure Gas Pipes mm(inch)	Ø28.58(1 1/8)		Ø34.9(1 3/8)			Ø34.9(1 3/8)	
Number of outdoor unit		2						
Number of maximum connectable indoor units *		45(56)	49(60)	52(64)	55(64)	58(64)	61(64)	64
Ratio of the connectable indoor units		50-160%						
Longest piping length / Level difference **		200m/110m						

HP		42	44	46	48	50
Model	Combination unit	ARUB42OLT3	ARUB44OLT3	ARUB46OLT3	ARUB48OLT3	ARUB50OLT3
	Independent unit	ARUB16OLT3	ARUB16OLT3	ARUB16OLT3	ARUB16OLT3	ARUB18OLT3
Capacity	Cooling kW	117.6	123.2	128.8	134.4	140.0
	Heating kW	132.3	139.0	144.9	151.2	157.5
Power	Cooling kW	29.40	30.90	31.50	33.00	34.80
	Input Heating kW	30.20	32.00	32.70	34.50	36.50
COP	Cooling	4.00	3.99	4.09	4.07	4.02
	Heating	4.38	4.33	4.43	4.38	4.32
Power Supply	Ø, V, Hz	3, 380-415, 50				
Dimensions(WxHxD)	mm	(920x1,680x760)×1+(1,240x1,680x760)×2		(1,240x1,680x760)×3		
Weight	kg	240x1 + 270x2	240 + 270 x 2	270 x 3	270 x 2 + 320 x 1	
Color		Warm Gray, Morning Gray				
Noise level	dB(A)±3	62.8	64	64.5		65.4
Fan	Type	Propeller fan				
	Air flow rate [CMM]		610		630	660
Compressor	Type	HSS DC Scroll				
	Number of compressors			6		7
Heat Exchanger	Type	Gold fin				
Refrigerant	Type	R410A				
	Charge kg		20.4		21.0	21.5
	Control	EEV				
Oil	Type	FVC68D(PVE)				
	Charge cc		16,200		16,500	18,200
Piping	Liquid Pipes mm(inch)	Ø19.05(3/4)		Ø28.58(1 1/8)		
Connections	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		3				
Number of maximum connectable indoor units *		64				
Ratio of the connectable indoor units		50-130%				
Longest piping length / Level difference **		200m/110m				

* 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	kW	145.6	151.2	156.8	162.4	168.0
	Heating	kW	163.8	170.1	176.4	182.7	189.0
Power	Cooling	kW	37.00	39.50	41.00	42.80	45.00
	Input	Heating	kW	38.50	40.70	42.50	44.50
COP	Cooling		3.94	3.83	3.82	3.79	3.73
	Heating		4.25	4.18	4.15	4.11	4.06
Power Supply	Ø, V, Hz		3, 380-415, 50				
Dimensions(WxHxD)	mm		(1,240×1,680×760)×3				
Weight	kg		270 × 2 + 330 × 1	270 × 1 + 330 × 2	320 × 1 + 330 × 2	330 × 3	
Color	Warm Gray, Morning Gray						
Noise level	dBA±3		65.8		66.5		66.8
Fan	Type		Propeller fan				
	Air flow rate	[CMM]	670	710	740		750
Compressor	Type		HSS DC Scroll				
	Number of compressors		7	8	9		
Heat Exchanger	Gold fin						
Refrigerant	Type		R410A				
	Charge	kg	23.0	25.0	25.5	27.0	
	Control		EEV				
Oil	Type		FVC68D(PVE)				
	Charge	cc	18,200	19,900	21,600		
Piping	Liquid Pipes	mm(inch)	Ø19.05(3/4)				
Connections	Low Pressure Gas Pipes	mm(inch)	Ø41.3(1 5/8)				
	High Pressure Gas Pipes	mm(inch)	Ø34.9(1 3/8)				
Number of outdoor unit	3						
Number of maximum connectable indoor units *	64						
Ratio of the connectable indoor units	50-130%						
Longest piping length / Level difference **	200m/110m						

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	kW	173.6	179.2	184.8	190.4	196.0
	Heating	kW	195.3	201.6	207.9	214.2	220.5
Power	Cooling	kW	42.50	44.00	45.80	47.60	49.80
	Input	Heating	kW	44.20	46.00	48.00	50.00
COP	Cooling		4.08	4.07	4.03	4.00	3.94
	Heating		4.42	4.38	4.33	4.28	4.24
Power Supply	Ø, V, Hz		3, 380-415, 50				
Dimensions(WxHxD)	mm		(1,240×1,680×760)×4				
Weight	kg		270 × 4		270×3 + 320×1	270 × 2 + 320× 2	270×2+320×1+330×1
Color	Warm Gray, Morning Gray						
Noise level	dBA±3		66.4	67	67.3		67.5
Fan	Type		Propeller fan				
	Air flow rate	[CMM]	840		870	900	910
Compressor	Type		HSS DC Scroll				
	Number of compressors		8		9	10	
Heat Exchanger	Gold fin						
Refrigerant	Type		R410A				
	Charge	kg	28.0	28.5	29.0	30.5	
	Control		EEV				
Oil	Type		FVC68D(PVE)				
	Charge	cc	22,000	23,700	25,400		
Piping	Liquid Pipes	mm(inch)	Ø22.2(7/8)				
Connections	Low Pressure Gas Pipes	mm(inch)	Ø44.5(1 3/4)		Ø53.98(2 1/8)		
	High Pressure Gas Pipes	mm(inch)	Ø41.3(1 5/8)		Ø44.5(1 3/4)		
Number of outdoor unit	4						
Number of maximum connectable indoor units *	64						
Ratio of the connectable indoor units	50-130%						
Longest piping length / Level difference **	200m/110m						

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
Capacity	Cooling	kW	201.6	207.2	212.8	218.4	224.0
	Heating	kW	226.8	233.1	239.4	245.7	252.0
Power	Cooling	kW	52.00	53.80	56.00	57.80	60.00
	Input	Heating	kW	54.00	56.00	58.00	60.00
COP	Cooling		3.88	3.85	3.80	3.78	3.73
	Heating		4.20	4.16	4.13	4.10	4.06
Power Supply	Ø, V, Hz		3, 380-415, 50				
Dimensions(WxHxD)	mm		(1,240×1,680×760)×4				
Weight	kg		270×2+330×2	270×1+320 ×1+330×2	270×1 + 330×3	320×1 + 330×3	330 × 4
Color	Warm Gray, Morning Gray						
Noise level	dBA±3		67.5	67.8		68	
Fan	Type		Propeller fan				
	Air flow rate	[CMM]	920	950	960	990	1,000
Compressor	Type		HSS DC Scroll				
	Number of compressors		10	11		12	
Heat Exchanger	Gold fin						
Refrigerant	Type		R410A				
	Charge	kg	32.0	32.5	34.0	34.5	36.0
	Control		EEV				
Oil	Type		FVC68D(PVE)				
	Charge	cc	25,400	27,100		28,800	
Piping	Liquid Pipes	mm(inch)	Ø22.2(7/8)				
Connections	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	50-130%						
Longest piping length / Level difference **	200m/110m						

* The number of () means the number of max. connectable indoor units, when the connected capacity of indoor units is in the table below.

** Conditional Application
To make 40-90m of pipe length after first branch refer to the part of "Installation of outdoor units" in PDB

Note :

- Capacities are based on the following conditions
Cooling-Indoor temp. 27°C[80.6°F]DB / 19°C[66.2°F]WB Heating-Indoor temp. 20°C[68°F]DB / 15°C[59°F]WB
Outdoor temp. 35°C[95°F]DB / 24°C[75.2°F]WB Outdoor temp. 7°C[44.6°F]DB / 6°C[42.8°F]WB
Interconnecting piping length 7.5m Interconnecting piping length 7.5m
Level difference of zero 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.



*** Specifications**

*1Ø, 220V

*3Ø, 380V

HP	4			5			6			
Model	Combination unit			Independent unit			Independent unit			
Model	ARUN40GS2A			ARUN50GS2A			ARUN60GS2A			
Capacity	Cooling	kW		11.2	14.0	15.5	11.2	14.0	15.5	
	Heating	kW		12.5	16.0	18.0	12.5	16.0	18.0	
Power Input	Cooling	kW		3.0	3.5	4.2	2.6	3.5	4.2	
	Heating	kW		3.2	3.9	4.6	2.9	3.9	4.6	
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	
Power Supply	Ø/V/Hz	1 / 220 - 240 / 50, 1 / 220 / 60						3 / 380 - 415 / 50, 3 / 380 / 60		
Dimensions(WxHxD)	mm	950×834×330			950×1380×330			950×1380×330		
Weight	kg	77			106			107		
Color		Warm Gray			Warm Gray			Warm Gray		
Noise Level	Cooling	dBA±3	50	51	52	50	51	52		
	Heating	dBA±3	52	53	54	52	53	54		
Fan	Type		BLDC			BLDC				
	Air flow rate	[CMM]	60	110			110			
Compressor	Type		DC INV Rotary			DC INV Rotary				
	Number of compressors		1			1				
Heat Exchanger	Type		Gold Fin			Gold Fin				
Refrigerant	Type		R410A			R410A				
	Charge	kg	1.8	3.0			3.0			
	Control		EEV			EEV				
Refrigerant Oil	Oil Type		FVC68D			FVC68D				
	Oil Charge Amount	cc	1,300			1,300				
Pipe Connctions	Liquid Pipes	mm(inch)	ø9.52(3/8)			ø9.52(3/8)				
	Gas Pipes	mm(inch)	ø15.88(5/8)			ø19.05(3/4)				
Number of outdoor unit		1			1					
Number of connectable indoor units		6			8			9		
Ratio of the connectable indoor units		50-130%			50-130%					
Longest piping length / Level difference		150m/50m			150m/50m					

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
- Capacities are net capacities
- Due to our policy of innovation some specifications may be changed without notification
- EEV : Electronic Expansion Valve

*** Specifications**

HP	6			8				
Model	Independent unit			Independent unit				
Model	ARUN60LR2 (Right Discharge) ARUN60LL2 (Left Discharge)			ARUN80LR2 (Right Discharge) ARUN80LL2 (Left Discharge)				
Capacity	Cooling	kW		16.0	21.7			
	Heating	kW		18.0	23.0			
Power Input	Cooling	kW		4.7	6.7			
	Heating	kW		4.9	7.1			
COP	Cooling			3.40	3.24			
	Heating			3.67	3.23			
Power Supply	Ø/V/Hz	3, 380-415, 50						
Dimensions(WxHxD)	mm	750 x 1790 x 650						
Weight	kg	200						
Color		Warm Gray						
Noise Level	dBA±3	49			53			
Fan	Type	Sirocco Fan						
	Air flow rate	[CMM]	100			120		
Compressor	Type	DC Scroll						
	Number of compressors	1						
Heat Exchanger	Type	Gold Fin			Wide Lower fin (Gold-Coating)			
Refrigerant	Type	R410A						
	Charge	kg	5.2			6.4		
	Control	EEV						
Refrigerant Oil	Oil Type	FVC68D(PVE)						
	Oil Charge Amount	cc	2,300					
Pipe Connctions	Liquid Pipes	mm(inch)	9.52(3/8)			19.05(3/4)		
	Gas Pipes	mm(inch)	19.05(3/4)			19.05(3/4)		
Number of outdoor unit		1						
Number of connectable indoor units		9			13			
Ratio of the connectable indoor units		50-130%						
Longest piping length / Level difference		150m/50m						

* Preliminary data (8HP model)

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
- Capacities are net capacities
- Due to our policy of innovation some specifications may be changed without notification
- EEV : Electronic Expansion Valve



* Specifications

HP			10	20	30	40	50	60
Model	Combination unit		ARWN100LA2	ARWN200LA2	ARWN300LA2	ARWN400LA2	ARWN500LA2	ARWN600LA2
	Independent unit		ARWN100LA2	ARWN200LA2	ARWN100LA2	ARWN200LA2	ARWN200LA2	ARWN200LA2
Capacity	Cooling	kW	28.0	56.0	84.0	112.0	140.0	168.0
	Heating	kW	31.5	63.0	94.5	126.0	157.5	189.0
Power Input	Cooling	kW	5.6	11.2	16.8	22.4	28.0	33.6
	Heating	kW	5.8	11.7	17.5	23.4	29.2	35.1
COP	Cooling		5.00	5.00	5.00	5.00	5.00	5.00
	Heating		5.43	5.38	5.40	5.38	5.39	5.38
Power Supply	Ø/V/Hz		3, 380-415, 50					
Dimensions(WxHxD)	mm		772x1,120x547		(772x1,120x547)x2		(772x1,120x547)x3	
Weight	kg		163	223	223+163	223+223	223+223+163	223+223+223
Color			Warm Gray					
Noise Level	dBA		51		53	54	55	56
Heat Exchanger	Type		Stainless Steel Plate					
	Max. pressure resistance	kgf/cm ²	45					
	Head loss	kPa	26.5	43	26.5+43	43+43	43+43+26.5	43+43+43
	Rated Water flow	LPM	96	192	192+96	192+192	192+192+96	192+192+192
Compressor	Type		Hermetic Scroll					
	Number of compressors		1	2	3	4	5	6
Refrigerant	Type		R410A					
	Charge	kg	7.3	8.8	8.8+7.3	8.8+8.8	8.8+8.8+7.3	8.8+8.8+8.8
Refrigerant Oil	Control		EEV					
	Oil Type		FVC68D(PVE)					
Pipe Connctions	Liquid Pipes	mm(inch)	9.52(3/8)	12.7(1/2)	15.88(5/8)	19.05(3/4)		
	Gas Pipes	mm(inch)	22.2(7/8)	28.58(1 1/8)	34.9(1 3/8)	41.3(1 5/8)		
Water Connection	Inlet		PT32A	PT40A	PT40A, PT32A	(PT40A)x2	(PT40A)x2, PT32A	(PT40A)x3
	Outlet		PT32A	PT40A	PT40A, PT32A	(PT40A)x2	(PT40A)x2, PT32A	(PT40A)x3
	Drain Outlet				20			
Number of outdoor unit			1		2		3	
Number of connectable indoor units			16	32	49		64	
Ratio of the connectable indoor units			50-130%					
Longest piping length / Level difference			150m/50m					

Notes:

1. 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]
 Heating : Indoor temp. 20°C[68°F]DB, Water inlet temp. 20°C[68°F]
 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



* Specifications

HP			10	20	30	40	50	60
Model	Combination unit		ARWB100LA2	ARWB200LA2	ARWB300LA2	ARWB400LA2	ARWB500LA2	ARWB600LA2
	Independent unit		ARWB100LA2	ARWB200LA2	ARWB100LA2	ARWB200LA2	ARWB200LA2	ARWB200LA2
Capacity	Cooling	kW	28.0	56.0	84.0	112.0	140.0	168.0
	Heating	kW	31.5	63.0	94.5	126.0	157.5	189.0
Power Input	Cooling	kW	5.6	11.2	16.8	22.4	28.0	33.6
	Heating	kW	5.8	11.7	17.5	23.4	29.2	35.1
COP	Cooling		5.00	5.00	5.00	5.00	5.00	5.00
	Heating		5.43	5.38	5.40	5.38	5.39	5.38
Power Supply	Ø/V/Hz		3, 380-415, 50					
Dimensions(WxHxD)	mm		772x1,120x547		(772x1,120x547)x2		(772x1,120x547)x3	
Weight	kg		163	223	223+163	223+223	223+223+163	223+223+223
Color			Warm Gray					
Noise Level	dBA		51		53	54	55	56
Heat Exchanger	Type		Stainless Steel Plate					
	Max. pressure resistance	kgf/cm ²	45					
	Head loss	kPa	26.5	43	26.5+43	43+43	43+43+26.5	43+43+43
	Rated Water flow	LPM	96	192	192+96	192+192	192+192+96	192+192+192
Compressor	Type		Hermetic Scroll					
	Number of compressors		1	2	3	4	5	6
Refrigerant	Type		R410A					
	Charge	kg	7.3	8.8	8.8+7.3	8.8+8.8	8.8+8.8+7.3	8.8+8.8+8.8
Refrigerant Oil	Control		EEV					
	Oil Type		FVC68D(PVE)					
Pipe Connctions	Liquid Pipes	mm(inch)	9.52(3/8)	12.7(1/2)	15.88(5/8)	19.05(3/4)		
	Gas Pipes	mm(inch)	22.2(7/8)	28.58(1 1/8)	34.9(1 3/8)	41.3(1 5/8)		
Water Connection	Inlet		PT32A	PT40A	PT40A, PT32A	(PT40A)x2	(PT40A)x2, PT32A	(PT40A)x3
	Outlet		PT32A	PT40A	PT40A, PT32A	(PT40A)x2	(PT40A)x2, PT32A	(PT40A)x3
	Drain Outlet				20			
Number of outdoor unit			1		2		3	
Number of connectable indoor units			16	32	49		64	
Ratio of the connectable indoor units			50-130%					
Longest piping length / Level difference			150m/50m					

Notes:

1. 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]
 Heating : Indoor temp. 20°C[68°F]DB, Water inlet temp. 20°C[68°F]
 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

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.



50 ARTCOOL

52 Libero

53 Wall mounted

54 Console

56 Ceiling Cassette

60 Ceiling Concealed Duct

64 Fresh Air Intake Unit

66 Ceiling & Floor

67 Ceiling Suspended

68 Floor standing

MULTI V™

Outdoor Unit MULTI V series

Indoor Unit MULTI V series

ECO V (Ventilation system)

V-NET & Accessory

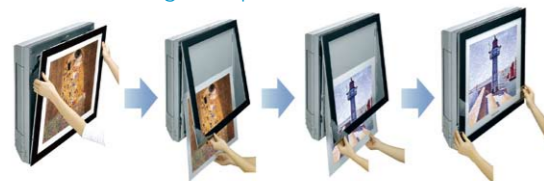
Aesthetic Design

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

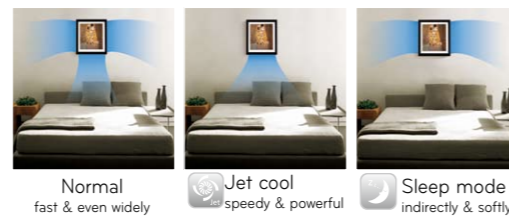


- ARTCOOL Mirror



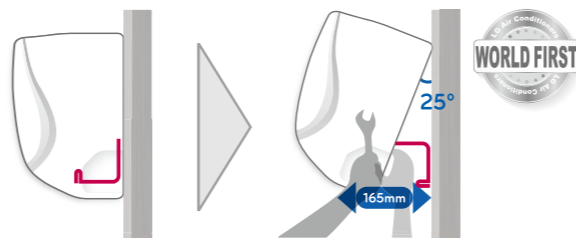
Digital Air Flow Control

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



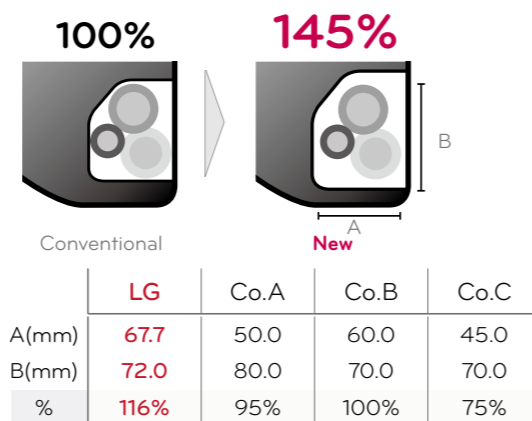
Installation support clip

Installation support clip makes installation easier
 *Only Libero



Bigger tubing space

Wider installation space can make you installation much easier.



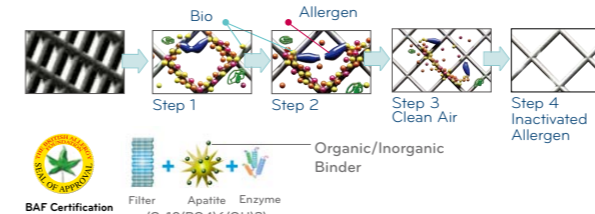
LG has been able to create a design conscious indoor unit that compliments any interior decoration. And they have improved air flow innovatively to realize world's lowest noise, and provide a more pleasant and convenient indoor environment.

Filtering

Dust floating in the air is sucked into the air conditioner and caught in the air filter

Virus & Allergy Safe 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.



Deodorizing

Triple filter eliminates discomfort and pain of eye and throat.

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.



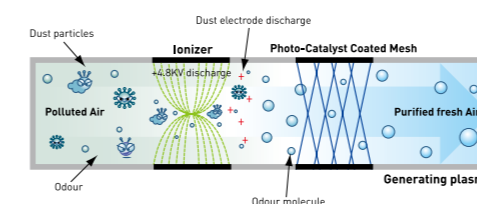
- VOC filter removes odor and hazardous VOCs that is discharged from household materials made with chemical substances (carpet, paint, cleaners, furniture, etc.) (VOC= Volatile Organic Chemical)
- Formaldehyde filter cuts off formaldehyde, a leading cause of new-house syndrome, and prevents dermatitis,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

Eliminating

Tiny dust is burned and eliminated when it is captured by electric field

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

Air conditioner is kept clean not to develop germs by self cleaning

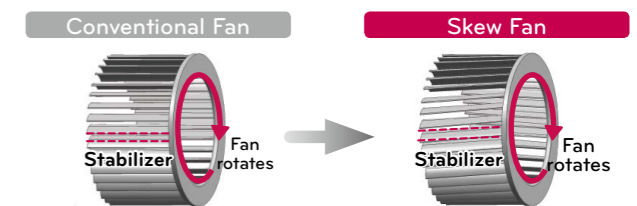
Auto Cleaning

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.

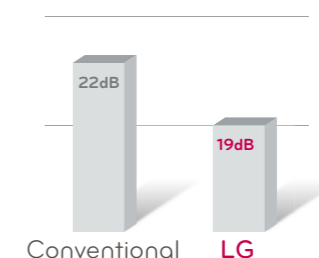
Low Noise Level

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 CA09AWR, CA12AWR in sleep mode is only 19dB. In addition, the outdoor units have reduced vibration and noise thanks to a super quiet fan and motor.



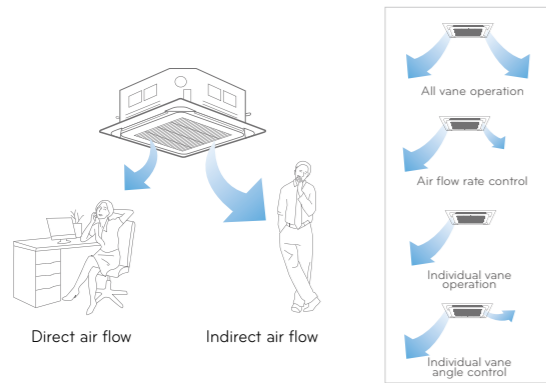
When the fan rotates, the stabilizer and the fan blade are in parallel (= the contact of lines) → Instantaneous pressure change is great.

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



4 Vanes Independent Operation

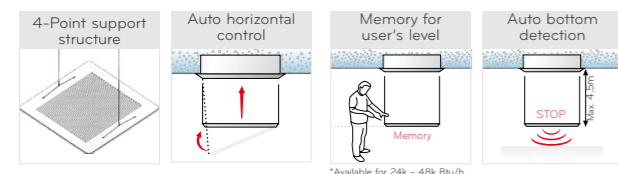
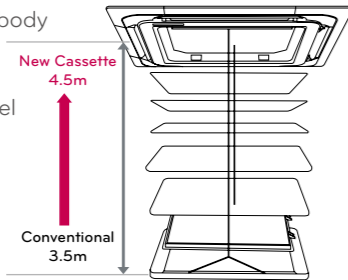
Vane angle control satisfies both users who like direct wind and indirect wind, and also it prevents cold air draft.



Auto Elevation Grille

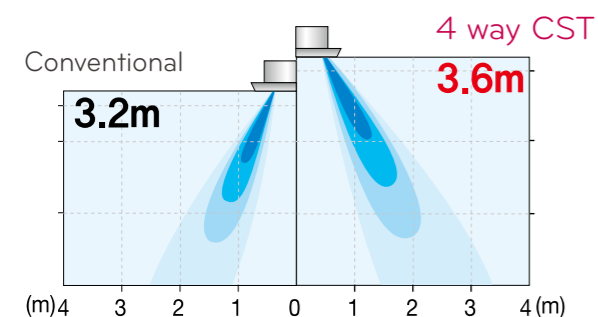
Easy filter cleaning with elevation grille

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



High Ceiling Mode

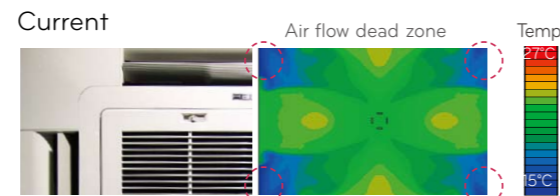
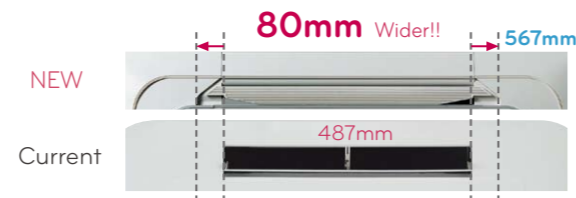
High ceiling mode with phase-control algorithm is possible to apply as high as 3.6m of ceiling.



Wide Jet Vane

Improved wide and narrow vane will provide comfortable temperature distribution without air flow dead zone.

- Air flow improvement

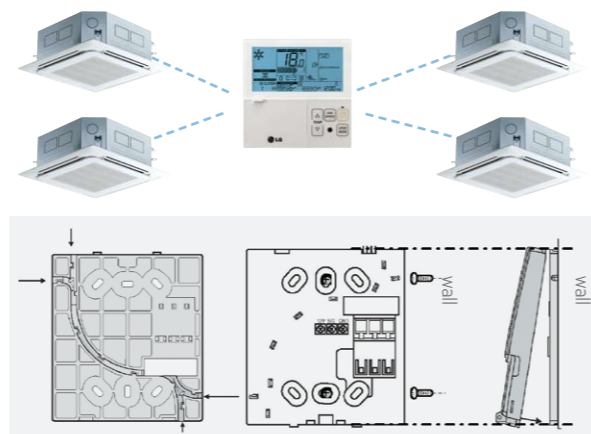


Flexible Connection

Flexible connection of remote controller

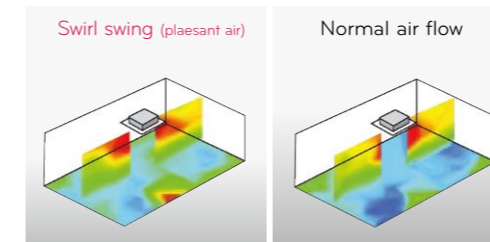
- Group control : 1 remote controller to several indoor units
- Second remote control : 2 remote controllers to 1 indoor unit

Easy & solid attachment to the wall

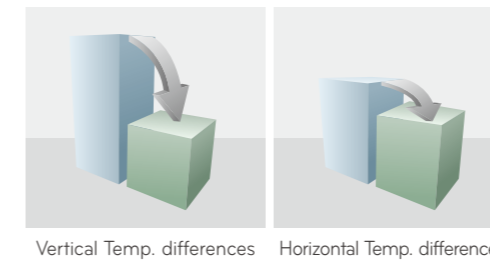


Swirl Swing

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

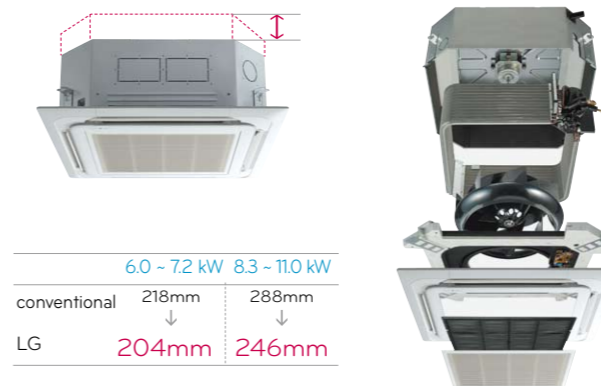


- Comparison of temperatures



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

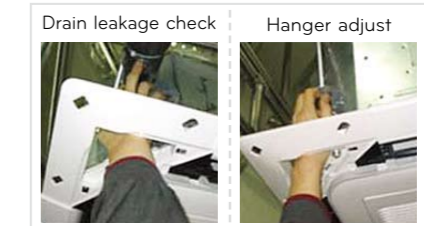
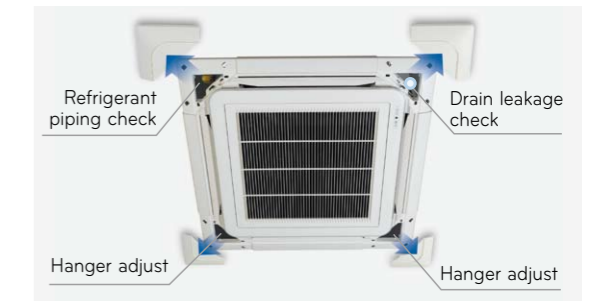
It provides easy installation with a one-touch detachable panel.



Convenient Installation

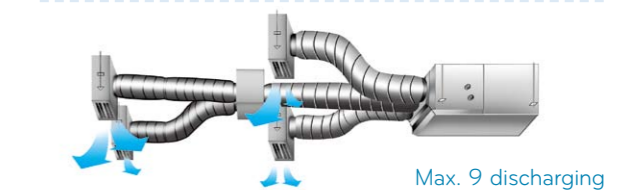
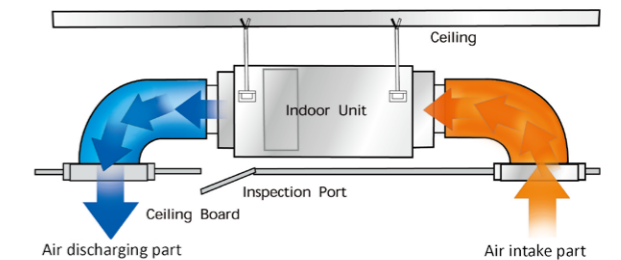
Easy installation with corner detachable decoration panel.

- Corner detachable design



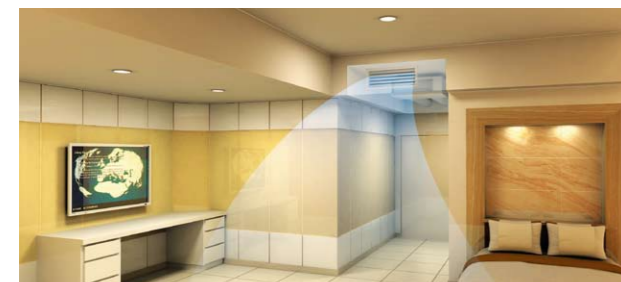
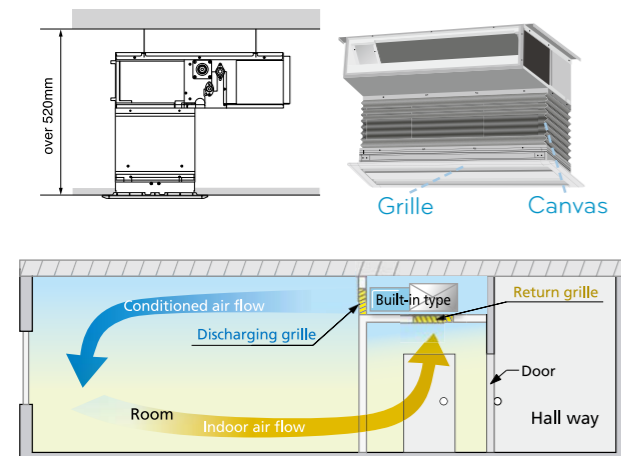
Application of Ceiling Concealed Duct

It is possible to make each rooms 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.



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.

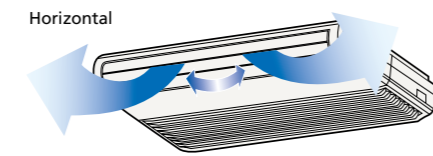


*Floor is only for DC inverter

Airflow Direction Control

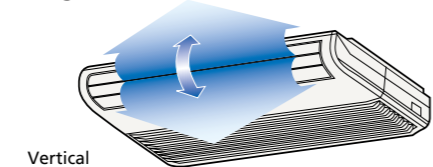
Horizontal Airflow Direction Control.

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.

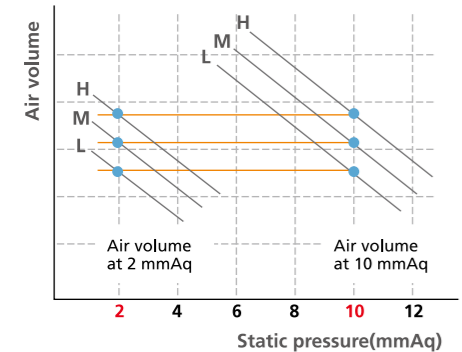


Linear E.S.P Control

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

LG Unique design

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

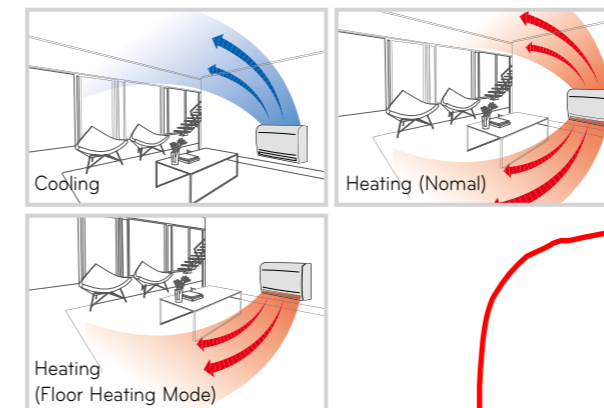
- Full front panel
- 3 dimensional round design



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.



Weekly Program

You can set the daily temperature and automatic on/off times for one week. Weekly reservation keeps operating until it is cancelled by the user.

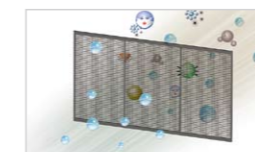


*Indoor unit is turned on to the desired temperature, the TEMP up/down buttons can be used to set the desired present or preset temperature. (Temperature selection range : 18°C~30°C)
 *When desired temperature is not set, it is turned on automatically with the desired temperature of the previous operation

9

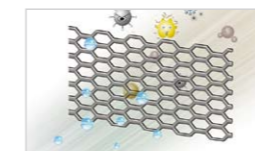
Healthy Air (3 stage air filter system)

1st Advanced pre filter :



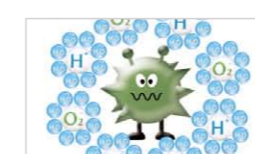
The antibacterial pre-filter primarily reduces large dust, mould and quilt dust.

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.

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.



Anti-biotic filter



Easy cleaning



Sliding type

ART COOL Gallery

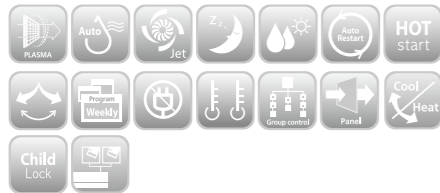
- ARNU07GSF*2
- ARNU09GSF*2
- ARNU12GSF*2



* Photo changeable

* Panel type

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

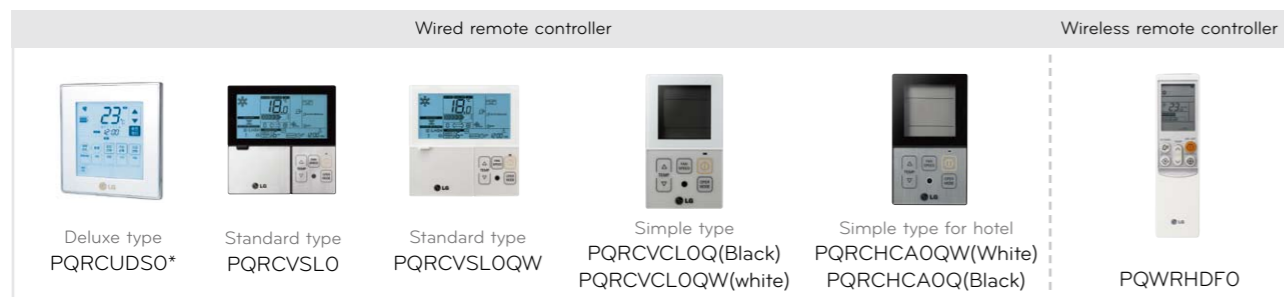


Specifications

Model	Unit	ARNU07GSF*2	ARNU09GSF*2	ARNU12GSF*2	
Capacity	Cooling	kW	2.2	2.8	3.6
		Btu/h	7,500	9,600	12,300
	Heating	kW	2.5	3.2	4.0
		Btu/h	8,500	10,900	13,600
Power Input	Cooling	W			
	Heating	W			
Power Supply	Ø, V, Hz	1, 220-240, 50			
Dimensions(WxDxH)	mm	600x146x600			
Weight	kg	15			
Noise level	dB(A)±3	38 / 32 / 27		44 / 38 / 32	
Air flow rate	H/M/L	CMM		9.3 / 7.7 / 6.0	
Neo Plasma air purifying filter		o			
Piping	Liquid	mm(inch)			
Connection	Gas	mm(inch)			
	Drain(ID)	mm			

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	



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

ART COOL MIRROR



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



Specifications

Model	Unit	ARNU07GSE*2	ARNU09GSE*2	ARNU12GSE*2	ARNU15GSE*2	ARNU18GS8*2	ARNU24GS8*2		
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	
		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200	
	Heating	kW	2.5	3.2	4.0	5.0	6.3	8.0	
		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300	
Power Input	Cooling	W							
	Heating	W							
Power Supply	Ø, V, Hz	1, 220-240, 50							
Dimensions(WxDxH)	mm	915x165x282				1,107x200x299			
Weight	kg	11.2				15			
Noise level	dB(A)±3	37 / 33 / 23	39 / 35 / 25	41 / 36 / 27	42 / 36 / 27	37 / 34 / 31	43 / 37 / 32		
Air flow rate	H/M/L	CMM		7 / 6 / 4	8 / 7 / 5	10 / 8 / 6	10.5 / 8 / 6	14.4 / 13 / 11	17.9 / 14.4 / 12
Neo Plasma air purifying filter		o							
Piping	Liquid	mm(inch)				Ø9.52(3/8)			
Connection	Gas	mm(inch)				Ø12.7(1/2)			
	Drain(ID)	mm							

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				

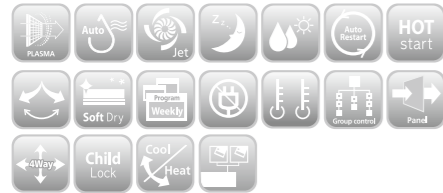


- ARNU07GSBL2
- ARNU09GSBL2
- ARNU12GSBL2
- ARNU15GSBL2
- ARNU18GSCL2
- ARNU24GSCL2

LIBERO



*To be launched



Specifications

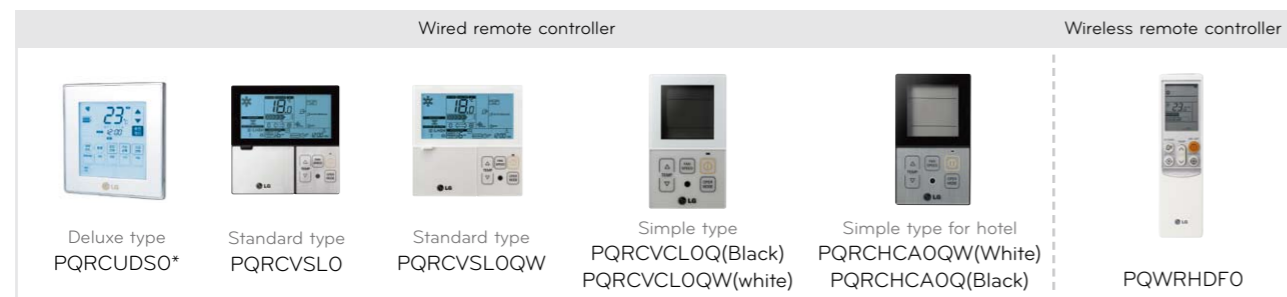
Model	Unit	ARNU07GSBL2	ARNU09GSBL2	ARNU12GSBL2	ARNU15GSBL2	ARNU18GSCL2	ARNU24GSCL2	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
	Heating	kW	2.5	3.2	4	5	6.3	8
		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
Power Input	Cooling	W						40
	Heating	W						40
Power Supply	Ø, V, Hz	1, 220 ~240, 50						
Dimensions(WxDxH)	mm	885x210x285				1030x250x325		
Weight	kg	11				18		
Noise level	dBA±3	31/28/25	34/31/24	37/33/27	39/33/27	44/40/36	45/40/35	
Air flow rate	H/M/L	CMM	5.6/5.0/4.6	7.0/6.5/6.0	9.5/9.0/8.5	10.5/9.0/8.5	16.2/14.2/12.3	20.4/17.0/13.2
Neo Plasma air purifying filter		o						
Piping	Liquid	mm(inch)				Ø6.35(1/4)		Ø9.52(3/8)
	Gas	mm(inch)				Ø12.7(1/2)		Ø15.88(5/8)
Connection	Drain(ID)	mm						16

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
- 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				



- ARNU07GSEL2
- ARNU09GSEL2
- ARNU12GSEL2
- ARNU15GSEL2
- ARNU18GS5L2
- ARNU24GS5L2

Wall Mounted



Specifications

Model	Unit	ARNU07GSEL2	ARNU09GSEL2	ARNU12GSEL2	ARNU15GSEL2	ARNU18GS5L2	ARNU24GS5L2	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
	Heating	kW	2.5	3.2	4.0	5.0	6.3	8.0
		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
Power Input	Cooling	W						40
	Heating	W						40
Power Supply	Ø, V, Hz	1, 220-240, 50						
Dimensions(WxDxH)	mm	895x165x282				1090x178x300		
Weight	kg	9				12		
Noise level	dBA±3	37 / 33 / 23	39 / 35 / 25	41 / 36 / 27	42 / 36 / 27	44 / 40 / 36	46 / 41 / 38	
Air flow rate	H/M/L	CMM	5.6 / 5 / 4.6	7 / 6.5 / 6	9.5 / 9 / 8.5	10.5 / 9 / 8.5	12 / 10.5 / 9	14 / 13 / 10
Neo Plasma air purifying filter		o						
Piping	Liquid	mm(inch)				Ø6.35(1/4)		Ø9.52(3/8)
	Gas	mm(inch)				Ø12.7(1/2)		Ø15.88(5/8)
Connection	Drain(ID)	mm						20/16

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

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				



CONSOLE

- ARNU07GQAA2
- ARNU09GQAA2
- ARNU12GQAA2
- ARNU15GQAA2



Specifications

Model	Unit	ARNU07GQAA2	ARNU09GQAA2	ARNU12GQAA2	ARNU15GQAA2	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5
		Btu/h	7,500	9,600	12,300	15,400
	Heating	kW	2.5	3.2	4.0	5.0
		Btu/h	8,500	10,900	13,600	17,100
Power Input	Cooling	W				48
	Heating	W				48
Power Supply	Ø, V, Hz	1, 220 ~ 240, 50				
Dimensions(WxDxH)	mm	700x210x600				
Weight	kg	14				
Noise level	dBA±3	37/34/28		39/34/28	42/37/31	
Air flow rate	H/M/L CMM	6.7/5.9/4.8		7.5/5.9/4.8	8.7/6.7/5.9	
Neo Plasma air purifying filter		o				
Piping	Liquid mm(inch)	Ø6.35(1/4)				
Connection	Gas mm(inch)	Ø12.7(1/2)				
	Drain(ID) mm	12.2				

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 PQRCUDS0*	Standard type PQRCVSLO	Standard type PQRCVSLOQW	Simple type PQRCVLOQ(Black) PQRCVLOQW(white)	Simple type for hotel PQRCHCAQW(White) PQRCHCAQ(Black)	PQWRHDF0



- ARNU05GTRC2
- ARNU07GTRC2
- ARNU09GTRC2
- ARNU12GTRC2
- ARNU15GTQC2
- ARNU18GTQC2

4 Way Cassette (570*570)

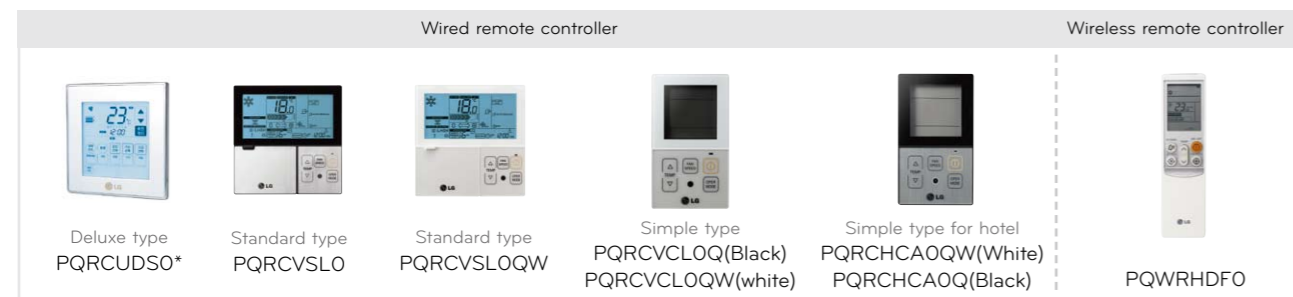


Specifications

Model	Unit	ARNU05GTRC2	ARNU07GTRC2	ARNU09GTRC2	ARNU12GTRC2	ARNU15GTQC2	ARNU18GTQC2	
Capacity	Cooling	kW	1.6	2.2	2.8	3.6	4.5	
		Btu/h	5,500	7,500	9,600	12,300	15,400	19,100
Heating		kW	1.8	2.5	3.2	4.0	5.0	6.3
		Btu/h	6,100	8,500	10,900	13,600	17,100	21,500
Power Input	Cooling	W	45					
	Heating	W	45					
Power Supply	Ø, V, Hz	1, 220 - 240, 50						
Dimensions (WxDxH)	Body	mm	570 x 570 x 214				570 x 570 x 256	
	Front Panel	mm	700x700x30					
Weight	Body	kg	13.1	14.2			15.5	
	Front Panel	kg	3.2					
Panel Color		Morning Fog						
Noise level	dBA±3	29 / 27 / 26	30 / 29 / 27		32 / 30 / 27	36 / 34 / 32	37 / 35 / 34	
Air flow rate	H/M/L	CMM	7.5 / 7 / 6.6	8 / 7.5 / 7.1		8.7 / 8 / 7	11 / 10 / 9.3	11.2 / 11 / 10
Neo Plasma air purifying filter		Option						
Piping	Liquid	mm(inch)	Ø6.35(1/4)					
Connection	Gas	mm(inch)	Ø12.7(1/2)					
	Drain(ID)	mm	25					

Accessories

Model	ARNU05GTRC2	ARNU07GTRC2	ARNU09GTRC2	ARNU12GTRC2	ARNU15GTQC2	ARNU18GTQC2
Dry Contact	Without case(1 contact point)	10. PT-UQC				
	With case(1 contact point)	10. PT-UQC				
	With case(2 contact point)	10. PT-UQC				
Front panel	PT-HLC					



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4 Way Cassette (840*840)



- ARNU24GTPC2
- ARNU28GTPC2
- ARNU36GTNC2
- ARNU42GTM C2
- ARNU48GTM C2



Specifications

Model	Unit	ARNU24GTPC2	ARNU28GTPC2	ARNU36GTNC2	ARNU42GTM C2	ARNU48GTM C2		
Capacity	Cooling	kW	7.1	8.2	10.6	12.3	14.1	
		Btu/h	24,200	28,000	36,200	42,000	48,100	
Heating		kW	8.0	9.2	11.9	13.8	15.9	
		Btu/h	27,300	31,500	40,600	43,800	51,200	
Power Input	Cooling	W	33					
	Heating	W	33					
Power Supply	Ø, V, Hz	1, 220 - 240, 50						
Dimensions (WxDxH)	Body	mm	840x840x204		840x840x246	840x840x288		
	Front Panel	mm	950x950x25					
Weight	Body	kg	20.8		23.5	25.6		
	Front Panel	kg	5.6					
Panel Color		Morning Fog						
Noise level	dBA±3	36 / 34 / 31	39 / 35 / 33		43 / 40 / 37	44 / 41 / 38	46 / 43 / 41	
Air flow rate	H/M/L	CMM	17 / 15 / 13	19 / 16 / 14		25 / 21 / 19	30 / 27 / 24	31 / 29 / 27
Neo Plasma air purifying filter		Option						
Piping	Liquid	mm(inch)	Ø9.52(3/8)					
Connection	Gas	mm(inch)	Ø15.88(5/8)					
	Drain(ID)	mm	25					

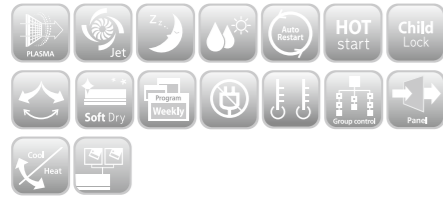
Accessories

Model	ARNU24GTPC2	ARNU28GTPC2	ARNU36GTNC2	ARNU42GTM C2	ARNU48GTM C2
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				



2 Way Cassette

- ARNU18GTLC2
- ARNU24GTLC2

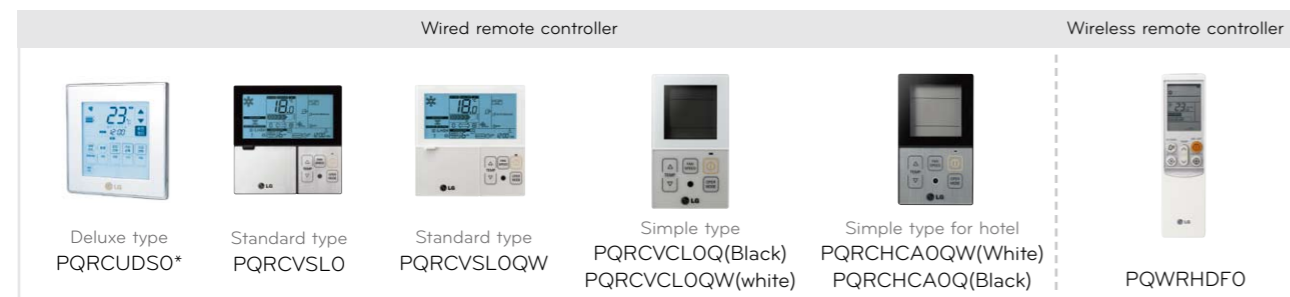


Specifications

Model	Unit	ARNU18GTLC2	ARNU24GTLC2	
Capacity	Cooling	kW	5.6	7.1
		Btu/h	19,100	24,200
	Heating	kW	6.3	8.0
		Btu/h	21,500	27,300
Power Input	Cooling	70		
	Heating	70		
Power Supply	Ø, V, Hz	1, 220 - 240, 50		
Dimensions (WxDxH)	Body	830x550x225		
	Front Panel	1050x640x28.5		
Weight	Body	22		
	Front Panel	4.5		
Panel Color		Morning Fog		
Noise level	dBA±3	40/36/32	42/38/34	
Air flow rate	H/M/L CMM	13 / 12 / 10	17 / 15 / 13	
Neo Plasma air purifying filter		Option		
Piping Connection	Liquid	Ø6.35(1/4)	Ø9.52(3/8)	
	Gas	Ø12.7(1/2)	Ø15.88(5/8)	
Drain(ID)	mm	25		

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
Front panel	PT-HLC	



1 Way Cassette

- ARNU07GTUC2
- ARNU09GTUC2
- ARNU12GTUC2
- ARNU18GTTC2
- ARNU24GTTC2



Grill Type



Specifications

Model	Unit	ARNU07GTUC2	ARNU09GTUC2	ARNU12GTUC2	ARNU18GTTC2	ARNU24GTTC2	
Capacity	Cooling	kW	2.2	2.8	3.6	5.6	7.1
		Btu/h	7,500	9,600	12,300	19,100	24,200
	Heating	kW	2.5	3.2	4.0	6.3	7.1
		Btu/h	8,500	10,900	13,600	21,500	24,200
Power Input	Cooling	40				70	
	Heating	40				70	
Power Supply	Ø, V, Hz	1, 220-240, 50					
Dimensions (WxDxH)	Body	860x450x132			1,180x450x132		
	Front Panel	1,100x500x34			1,420x500x34		
Weight	Body	14.7			18.7		
	Front Panel	5.3/4.4			6.5/5.5		
Panel Color		White					
Noise level	dBA±3	32 / 29 / 25	35 / 34 / 32	38 / 35 / 32	40 / 37 / 35	43 / 40 / 36	
Air flow rate	H/M/L CMM	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	
Neo Plasma air purifying filter		Option					
Piping Connection	Liquid	Ø6.35(1/4)				Ø9.52(3/8)	
	Gas	Ø12.7(1/2)				Ø15.88(5/8)	
Drain(ID)	mm	25					

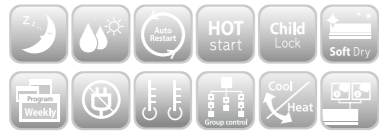
Accessories

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
Front panel	PT-UUD/ PT-UUC			PT-UTD/PT-UTC	



- ARNU07GB1G2
- ARNU09GB1G2
- ARNU12GB1G2
- ARNU15GB1G2
- ARNU18GB2G2
- ARNU24GB2G2

Low Static Duct

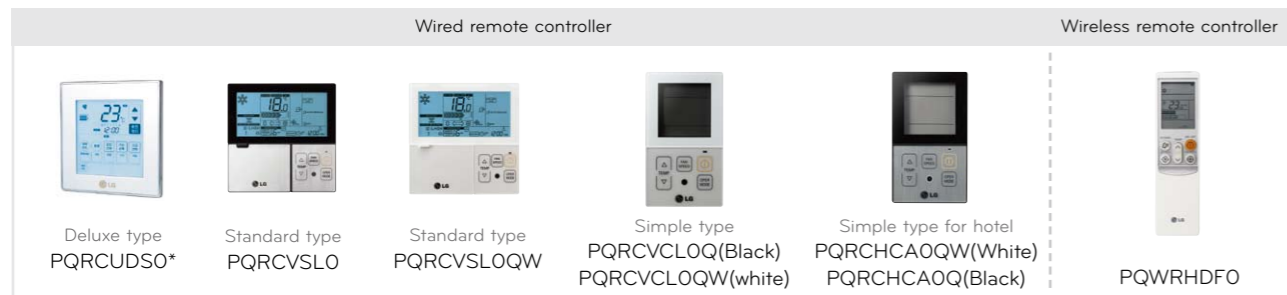


Specifications

Model	Unit	ARNU07GB1G2	ARNU09GB1G2	ARNU12GB1G2	ARNU15GB1G2	ARNU18GB2G2	ARNU24GB2G2	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
	Heating	kW	2.5	3.2	4.0	5.0	6.3	8.0
		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
Power Input	Cooling	W					30	80
	Heating	W					30	80
Power Supply	Ø, V, Hz	1, 220 - 240, 50						
Dimensions(WxDxH)	mm	820x575x190			1100x575x190			
Weight	kg	21			26			
Noise level	dBA±3	29 / 26 / 24	31 / 29 / 26	33 / 30 / 29	34 / 33 / 31	40 / 37 / 34	43 / 40 / 37	
E.S.P range	mmAq	0~4						
Air flow rate	H/M/L	CMM	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 / 14 / 12	19 / 17 / 15
Neo Plasma air purifying filter								
Piping	Liquid	mm(inch)	Ø6.35(1/4)			Ø9.52(3/8)		
	Gas	mm(inch)	Ø12.7(1/2)			Ø15.88(5/8)		
Connection	Drain(ID)	mm	25.4					

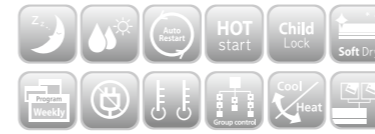
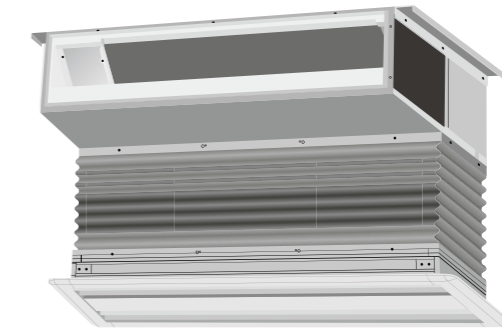
Accessories

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				



- ARNU07GB3G2
- ARNU09GB3G2
- ARNU12GB3G2
- ARNU15GB3G2
- ARNU18GB4G2
- ARNU24GB4G2

Built-in Duct



Specifications

Model	Unit	ARNU07GB3G2	ARNU09GB3G2	ARNU12GB3G2	ARNU15GB3G2	ARNU18GB4G2	ARNU24GB4G2	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
	Heating	kW	2.5	3.2	4.0	5.0	6.3	8.0
		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
Power Input	Cooling	W					30	80
	Heating	W					30	80
Power Supply	Ø, V, Hz	1, 220- 240, 50						
Dimensions(WxDxH)	mm	820x575x190			1100x575x190			
Suction grille (WxDxH)		910x359x56			1188x359x56			
Suction canvas (WxHxD)		821x274x(45-250)			1100x274x(45-250)			
Weight	kg	21			26			
Noise level	dBA±3	33 / 32 / 29	34/33/32	35 / 34 / 33	41 / 40 / 37	43 / 40 / 37	46 / 43 / 37	
E.S.P range	mmAq	0~4						
Air flow rate	H/M/L	CMM	8 / 6.5 / 5.5	9 / 7 / 6	10 / 8 / 6.5	11 / 10 / 8	14 / 12 / 10	17 / 15 / 10
Neo Plasma air purifying filter								
Piping	Liquid	mm(inch)	Ø6.35(1/4)			Ø9.52(3/8)		
	Gas	mm(inch)	Ø12.7(1/2)			Ø15.88(5/8)		
Connection	Drain(ID)	mm	25.4					

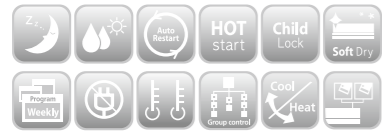
Accessories

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		



- ARNU07GBHA2
- ARNU09GBHA2
- ARNU12GBHA2
- ARNU15GBHA2
- ARNU18GBHA2
- ARNU24GBHA2

High Static Duct

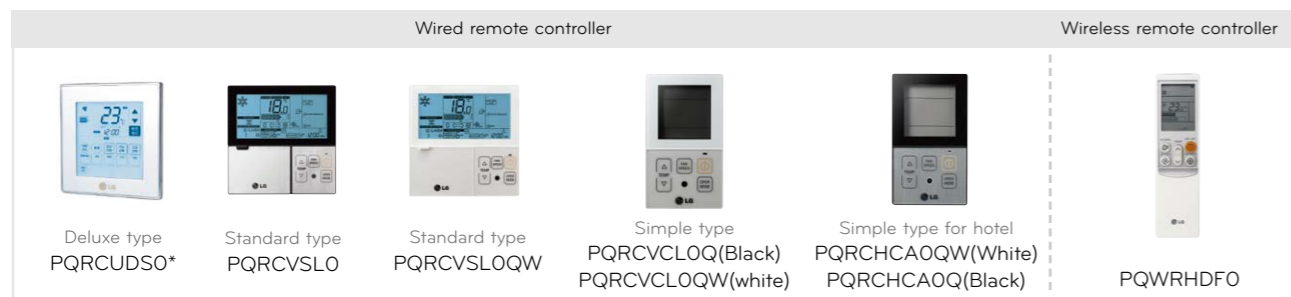


Specifications

Model	Unit	ARNU07GBHA2	ARNU09GBHA2	ARNU12GBHA2	ARNU15GBHA2	ARNU18GBHA2	ARNU24GBHA2	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
Capacity	Heating	kW	2.5	3.2	4.0	5.0	6.3	8.0
		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
Power Input	Cooling	W	150					
	Heating	W	150					
Power Supply	Ø, V, Hz	1, 220 ~240, 50						
Dimensions(WxDxH)	mm	882x450x260						
Weight	kg	26			26.5			
Noise level	dB(A)±3	34 / 33 / 32	35 / 34 / 33	37 / 35 / 34	39 / 37 / 34	40 / 38 / 37	42 / 41 / 40	
E.S.P range	mmAq	3-12						
Air flow rate	H/M/L	CMM	8.5 / 7.5 / 6	10 / 8.5 / 7.5	12 / 10 / 8.5	13.5 / 12 / 8.5	15.5 / 13.5 / 12.4	18.3 / 16.9 / 15.5
Neo Plasma air purifying filter								
Piping	Liquid	mm(inch)	Ø6.35(1/4)			Ø9.52(3/8)		
	Gas	mm(inch)	Ø12.7(1/2)			Ø15.88(5/8)		
Connection	Drain(ID)	mm	25					

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				



- ARNU28GBGA2
- ARNU36GBGA2
- ARNU42GBGA2
- ARNU48GBRA2
- URNU76GB8A2
- URNU96GB8A2

High Static Duct



Specifications

Model	Unit	ARNU28GBGA2	ARNU36GBGA2	ARNU42GBGA2	ARNU48GBRA2	URNU76GB8A2	URNU96GB8A2		
Capacity	Cooling	kW	8.2	10.6	12.3	14.1	22.4	28.0	
		Btu/h	28,000	36,200	42,000	48,100	76,400	95,900	
Capacity	Heating	kW	9.2	11.9	13.8	15.9	25.2	31.5	
		Btu/h	31,500	40,600	43,800	51,200	86,000	107,500	
Power Input	Cooling	W	450				800		
	Heating	W	450				800		
Power Supply	Ø, V, Hz	1, 220 ~240, 50							
Dimensions(WxDxH)	mm	1182x450x298			1230x590x380		1562x688x460		
Weight	kg	38			53		87		
Noise level	dB(A)±3	42 / 41 / 40	44 / 43 / 42	45 / 44 / 44	44 / 42 / 41	50 / 48 / 48	52 / 50 / 50		
E.S.P range	mmAq	5-16				5-20		6-25	
Air flow rate	H/M/L	CMM	25.9 / 24.1 / 21.8	32.3 / 29 / 25.3	34.5 / 32.3 / 30.7	44.8 / 40.6 / 33.3	60 / 50 / 50	72 / 64 / 64	
Neo Plasma air purifying filter									
Piping	Liquid	mm(inch)	Ø9.52(3/8)				Ø19.05(3/4)		
	Gas	mm(inch)	Ø15.88(5/8)				Ø22.2(7/8)		
Connection	Drain(ID)	mm	25						

Accessories

Model	ARNU28GBGA2	ARNU36GBGA2	ARNU42GBGA2	ARNU48GBRA2	URNU76GB8A2	URNU96GB8A2
Dry Contact	Without case(1 contact point)	PQDSA				
	With case(1 contact point)	PQDSB/ PQDSB1				
	With case(2 contact point)	PQDSBC				



Fresh Air Intake Unit

Fresh Air Intake Unit

- ARNU48GBRZ2
- URNU76GB8Z2
- URNU96GB8Z2



ARNU48GBRZ2



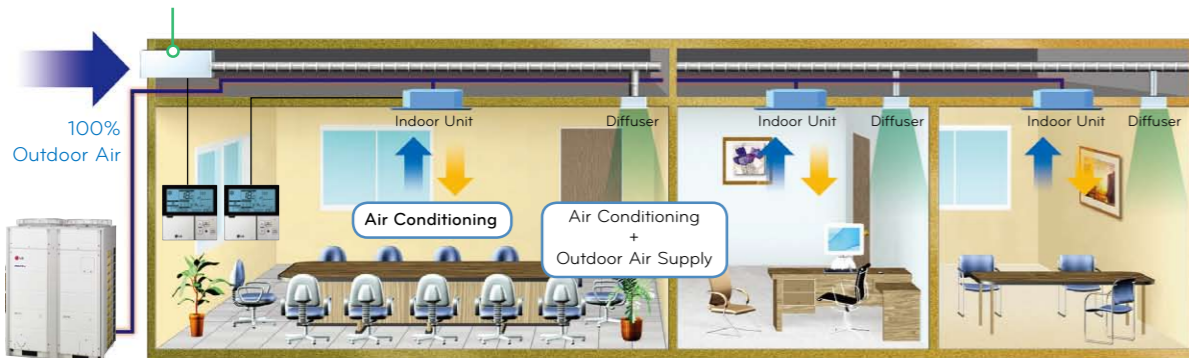
URNU76GB8Z2



URNU96GB8Z2

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

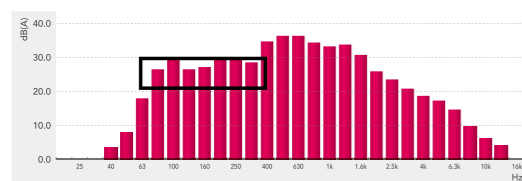
Spring Season

MULTI V III Outdoor Units

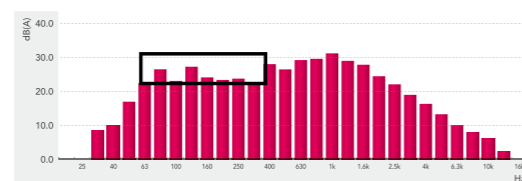
Autumn Season

BLDC Fan Motor

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



AC Tap motor



BLDC motor

Specifications

Model	Unit	ARNU48GBRZ2	URNU76GB8Z2	URNU96GB8Z2
Cooling	Capacity	14.1	22.4	28
	kcal/h	12,100	19,300	24,100
	Btu/h	48,100	76,400	95,900
Heating	kW	13.5	21.4	26.7
	Capacity	14.1	22.4	28
Casing Dimension (WxDxH)		460x600x310	660x600x310	860x600x310
Coil		4.0	6.0	8.0
Fan		1	1	1
Drive		BLDC	BLDC	BLDC
Motor Type		BLDC	BLDC	BLDC
Temperature		5~43°C	5~43°C	5~43°C
Sound Level		20~30dB(A)	20~30dB(A)	20~30dB(A)
Air Filter		1	1	1
Safety Device		1	1	1
Pipe		1	1	1
Connection		1	1	1
Net Weight		12.5kg	18.5kg	23.5kg
Noise Level		20~30dB(A)	20~30dB(A)	20~30dB(A)
Power Supply		220V/50Hz	220V/50Hz	220V/50Hz
Refrigerant		R410A	R410A	R410A
Power Consumption		13.5kW	21.4kW	26.7kW
Transmission		1	1	1

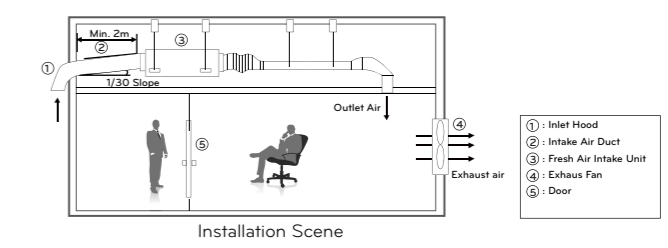
Cooling: Outdoor temp. 33°C(91.4°F)DB / 28°C(82.4°F)WB
Interconnecting Piping Length : 7.5m
Level Difference of Zero

Heating: Outdoor temp. 0°C(32°F)DB / -2.9°C(26.78°F)WB
Interconnecting Piping Length : 7.5m
Level Difference of Zero

11.Changed

Cooling: Indoor/Outdoor temp. 33°C(91.4°F)DB / 28°C(82.4°F)WB
Interconnecting Piping Length : 7.5m
Level Difference of Zero

Heating: Indoor temp. 0°C(32°F)DB / 28°C(26.78°F)WB
Interconnecting Piping Length : 7.5m
Level Difference of Zero



- Capacities are net capacities
 - Noise Level is under standard mode(For actual High Mode(Factory set) condition, Noise Level may exceed the standard level by 1.5dB(A))
 - Due to our policy of innovation some specifications may be changed without prior notification
- CAUTION**
- Operation range (Cooling : 5°C ~ 43°C, Heating : -5°C ~ 43°C)
 - Installation of exhaust fan is recommended for a sealed room.
 - Indoor Unit Connection

No	Connection Condition	Combination
1	Fresh Air Intake Units only are connected with outdoor units	1) The total capacity of Fresh Air Intake Unit should be 50-100% of outdoor unit. 2) The max quantity of Fresh Air Intake is 2 units.
2	Mixture connection with general indoor unit and Fresh Air Intake Unit	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.

Ceiling & Floor

- ARNU09GVEA2
- ARNU12GVEA2

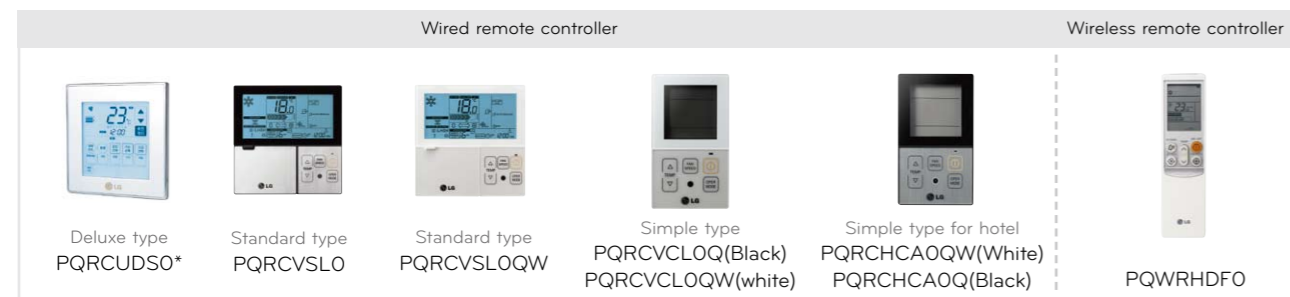


Specifications

Model	Unit	ARNU09GVEA2	ARNU12GVEA2	
Capacity	Cooling	kW	2.8	3.6
		Btu/h	9,600	12,300
	Heating	kW	3.2	4.0
		Btu/h	10,900	13,600
Power Input	Cooling	W	30	
	Heating	W	30	
Power Supply	Ø, V, Hz	1, 220 ~ 240, 50		
Dimensions(WxDxH)	mm	900x200x490		
Weight	kg	13.7		
Noise level	dBA±3	36 / 32 / 28	38 / 36 / 30	
Air flow rate	H/M/L CMM	7.6 / 6.9 / 6.2	9.2 / 7.6 / 6.9	
Plasma air purifying filter		-		
Piping	Liquid	mm(inch)	Ø6.35(1/4)	
Connection	Gas	mm(inch)	Ø12.7(1/2)	
	Drain(ID)	mm	16	

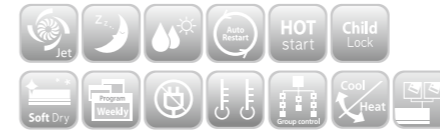
Accessories

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



Ceiling Suspended

- URNU18GVJA2
- URNU24GVJA2



Specifications

Model	Unit	URNU18GVJA2	URNU24GVJA2	
Capacity	Cooling	kW	5.6	7.1
		Btu/h	19,100	24,200
	Heating	kW	6.3	8.0
		Btu/h	21,500	27,300
Power Input	Cooling	W	63	
	Heating	W	63	
Power Supply	Ø, V, Hz	1, 220-240, 50		
Dimensions(WxDxH)	mm	950x220x650		
Weight	kg	24.6		
Noise level	dBA±3	42 / 40 / 37	43 / 41 / 39	
Air flow rate	H/M/L CMM	16 / 14 / 12	18 / 16 / 14	
Plasma air purifying filter		-		
Piping	Liquid	mm(inch)	Ø6.35(1/4)	
Connection	Gas	mm(inch)	Ø12.7(1/2)	
	Drain(ID)	mm	16	

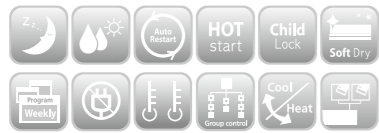
Accessories

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



- ARNU07GCEA2
- ARNU09GCEA2
- ARNU12GCEA2
- ARNU15GCEA2
- ARNU18GCFA2
- ARNU24GCFA2

Floor Standing with Case

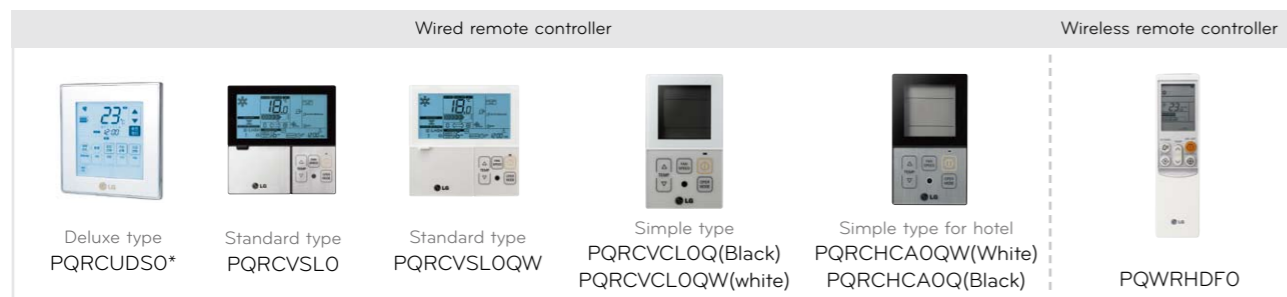


Specifications

Model	Unit	ARNU07GCEA2	ARNU09GCEA2	ARNU12GCEA2	ARNU15GCEA2	ARNU18GCFA2	ARNU24GCFA2	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
Capacity	Heating	kW	2.5	3.2	4.0	5.0	6.3	8.0
		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
Power Input	Cooling	W	30				80	
	Heating	W	30				80	
Power Supply	Ø, V, Hz	1, 220-240, 50						
Dimensions(WxDxH)	mm	1067x203x635				1345x203x635		
Weight	kg	27				34		
Noise level	dB(A)±3	35 / 33 / 31	36 / 34 / 32	37 / 35 / 33	38 / 37 / 35	40 / 37 / 34	43 / 40 / 37	
Air flow rate	H/M/L	CMM	8.5 / 7.5 / 6.5	9.5 / 8.5 / 7.5	10.5 / 9.5 / 8.5	11.5 / 10 / 9.5	16 / 14 / 12	18 / 16 / 14
Plasma air purifying filter								
Piping	Liquid	mm(inch)	Ø6.35(1/4)				Ø9.52(3/8)	
	Gas	mm(inch)	Ø12.7(1/2)				Ø15.88(5/8)	
Connection	Drain(ID)	mm	12					

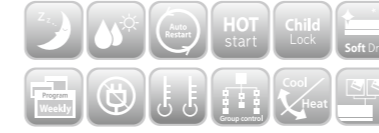
Accessories

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				



- ARNU07GCEU2
- ARNU09GCEU2
- ARNU12GCEU2
- ARNU15GCEU2
- ARNU18GCFU2
- ARNU24GCFU2

Floor Standing without Case



Specifications

Model	Unit	ARNU07GCEU2	ARNU09GCEU2	ARNU12GCEU2	ARNU15GCEU2	ARNU18GCFU2	ARNU24GCFU2	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
Capacity	Heating	kW	2.5	3.2	4.0	5.0	6.3	8.0
		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
Power Input	Cooling	W	30				80	
	Heating	W	30				80	
Power Supply	Ø, V, Hz	1, 220-240, 50						
Dimensions(WxDxH)	mm	978x190x639				1256x190x639		
Weight	kg	20				27		
Noise level	dB(A)±3	35 / 33 / 31	36 / 34 / 32	37 / 35 / 33	38 / 37 / 35	40 / 37 / 34	43 / 40 / 37	
Air flow rate	H/M/L	CMM	8.5 / 7.5 / 6.5	9.5 / 8.5 / 7.5	10.5 / 9.5 / 8.5	11.5 / 10 / 9.5	16 / 14 / 12	18 / 16 / 14
Plasma air purifying filter								
Piping	Liquid	mm(inch)	Ø6.35(1/4)				Ø9.52(3/8)	
	Gas	mm(inch)	Ø12.7(1/2)				Ø15.88(5/8)	
Connection	Drain(ID)	mm	12					

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				





ecoVTM

Ventilation system

With today's concern for a healthy indoor environment, eco V is an integral component of HVAC system. Using eco V in the HVAC system allows contaminants to be removed quickly and effectively from the air conditioned space.

72 Energy Recovery Ventilator

78 Energy Recovery Ventilator with DX Coil

High Efficiency Heat Exchanger

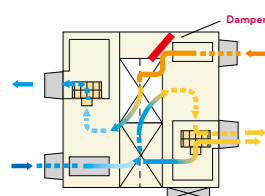
Efficiency and comfort is ensured by the high-efficiency energy recovery central core which recovers energy from the indoor air and transfers it to the fresh incoming air without mixing airstream.



Bypass Ventilation

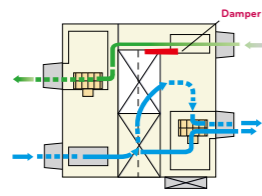
It switches automatically the ventilation mode (Enthalpy Heat Exchange Mode / Bypass Mode) according to the indoor/outdoor temperature.

• Enthalpy Heat Exchange Mode



[Summer / Winter]

• Bypass Mode

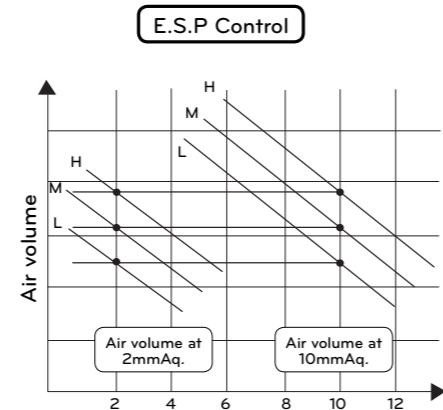


[A change of season]

E-Tuning

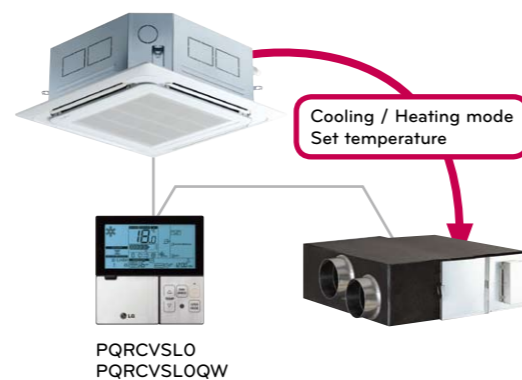
: (External Static Pressure Control)

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 **ecoV** units feature BLDC Motor.



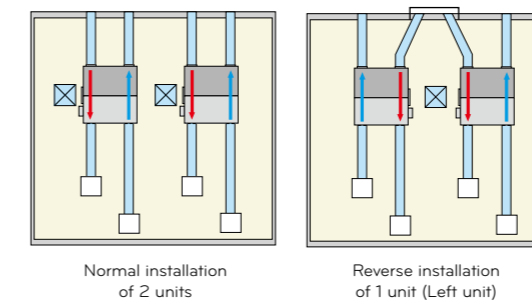
Interlocking with Air Conditioning System

- It is able to install the ventilation system being interlocking with the air conditioner. It can be also controlled individually or integral with the air condition.
- This function can be operated when connecting with specified Remote controller.

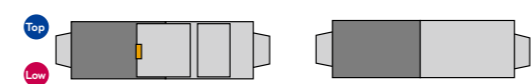


Flexibility of Installation

It's possible to install the opposite direction of upper and lower part. It needs the only one inspection hole.

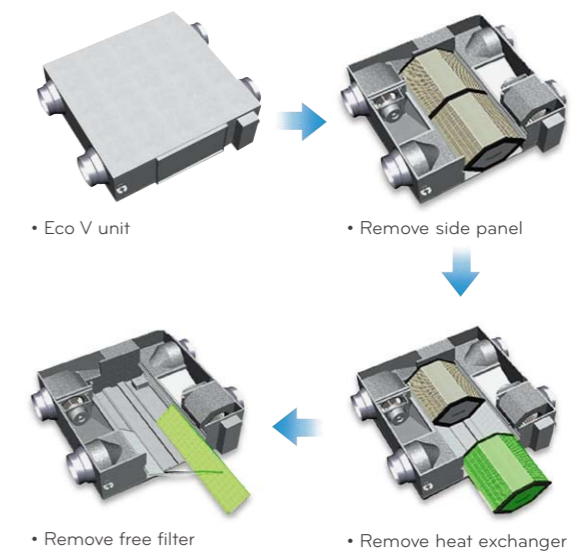


• Inspection hole



Easy Cleaning and Changing Filter

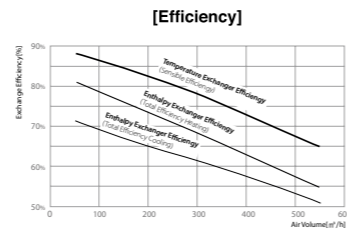
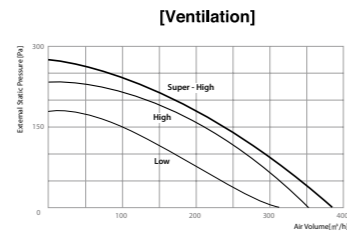
Door attached side panel and slide removable Enthalpy heat exchanger filter can be changed without additional maintenance.



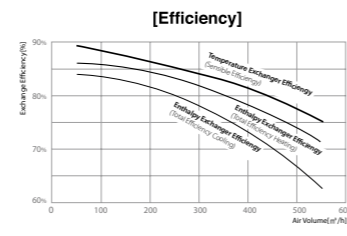
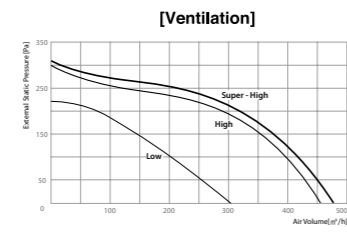
Feature

- High Efficiency Heat Exchanger
- Bypass Ventilation
- Flexibility of Installation
- Easy Cleaning and changeable Filter
- BLDC Fan Motor
- Linear E.S.P Control by remote controller

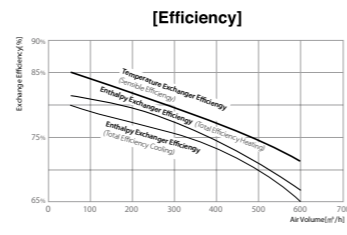
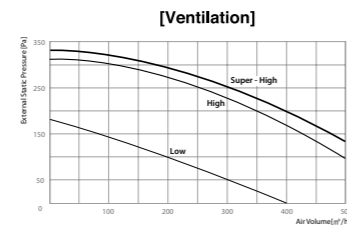
LZ-H025GBA2



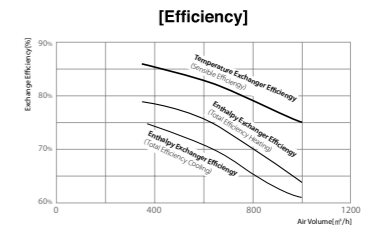
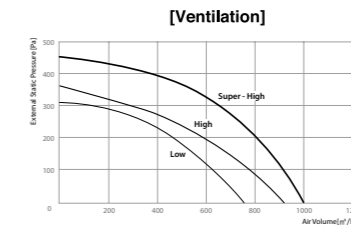
LZ-H035GBA2



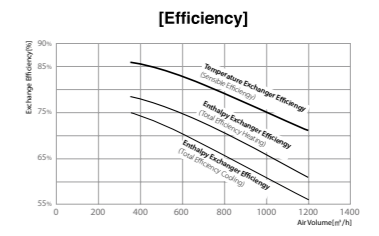
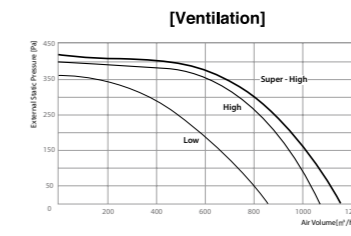
LZ-H050GBA2



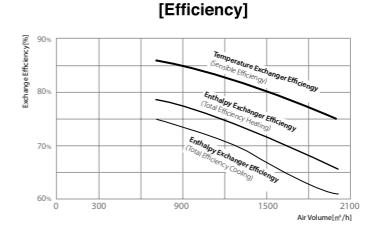
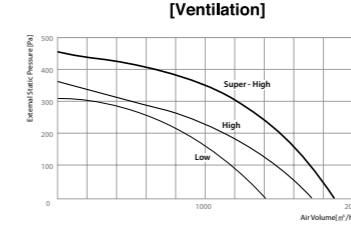
LZ-H080GBA2



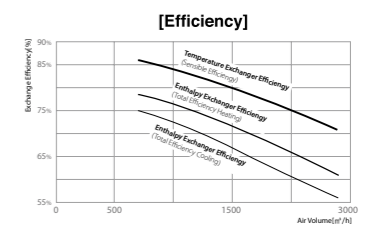
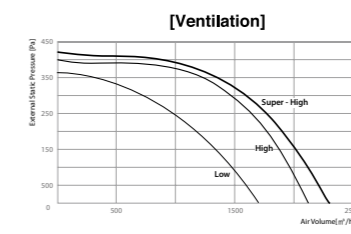
LZ-H100GBA2



LZ-H150GBA2



LZ-H200GBA2



Energy Recovery Ventilator



Specifications

Item	Unit	LZ-H025GBA2	LZ-H035GBA2	LZ-H050GBA2
Nominal Capacity	CMH(CFM)	250(147)	350(206)	500(294)
Power Supply	eV,Hz	1, 220-240, 50-60	1, 220-240, 50-60	1, 220-240, 50-60
Step	-	SUPER-HIGH / HIGH / LOW	SUPER-HIGH / HIGH / LOW	SUPER-HIGH / HIGH / LOW
Current	Amps	1.04/0.97/0.7	1.73/1.58/0.77	1.92/1.58/0.79
Power Input	W	110/105/75	200/180/80	230/220/85
Air Flow	CMH(CFM)	250/250/150(147/147/88)	350/350/210(206/206/124)	500/500/320(294/294/124)
External Static Pressure	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	%	80/80/85	83/83/87	75/75/79
Enthalpy Exchange Efficiency	%	70/70/78	80/80/85	72/72/77
Noise Level(Sound Level, 1.5m)	dBA	32/28/21	33/28/23	34/32/25
Step	-	- / - / -	- / - / -	SUPER-HIGH / HIGH / LOW
Current	Amps	- / - / -	- / - / -	1.92/1.58/0.79
Power Input	W	- / - / -	- / - / -	230/220/85
Air Flow	CMH(CFM)	- / - / -	- / - / -	500/500/320(294/294/124)
External Static Pressure	Pa(In.wg)	- / - / -	- / - / -	150/100/50(0.60/0.40/0.2)
Temperature Exchange Efficiency	%	- / - / -	- / - / -	- / - / -
Enthalpy Exchange Efficiency	%	- / - / -	- / - / -	- / - / -
Noise Level(Sound Level, 1.5m)	dBA	- / - / -	- / - / -	34/32/25
Heat Exchanger	Type	-	Crossflow	-
Weight	kg(lb)	32(70.5)	-	44(97)
Dimension	WxHxD	750x250x680(29.52x9.84x26.77)	-	988x273x1014(38.9x10.75x39.92)
Duct work	Qty	EA	4	EA
	Size(Ø)	mm(inch)	Ø150(Ø5.91)	Ø200(Ø7.87)
Supply Air Fan	Qty	EA	1	EA
	Type	-	Direct-Drive	-
Exhaust Air Fan	Qty	EA	1	EA
	Type	-	Direct-Drive	-
Filters	Qty	EA	2	EA
	Type	-	Cleanable	-
	Size(WxHxD)	mm(inch)	600x10x150(23.62x0.39x5.91)	855x10x166(33.66x0.39x6.54)
Remote Controller	-	-	PQRCVSLO / PQRCVSLQW	-
Dry Contact	-	-	PQDSB / PQDSB1	-

Notes:

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

Energy Recovery Ventilator

Specifications

Item	Unit	LZ-H080GBA2	LZ-H100GBA2	LZ-H150GBA2	LZ-H200GBA2
Nominal Capacity	CMH(CFM)	800(471)	1000(589)	1500(883)	2000(1177)
Power Supply	eV,Hz	1, 220-240, 50-60	1, 220-240, 50-60	1, 220-240, 50-60	1, 220-240, 50-60
Step	-	SUPER-HIGH / HIGH / LOW	SUPER-HIGH / HIGH / LOW	SUPER-HIGH / HIGH / LOW	SUPER-HIGH / HIGH / LOW
Current	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	W	360/370/165	470/385/210	720/540/340	930/770/420
Air Flow	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	Pa	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	%	79/79/82	75/75/78	79/79/82	75/75/78
Enthalpy Exchange Efficiency	%	70/70/75	66/66/71	70/70/75	66/66/71
Noise Level(Sound Level, 1.5m)	dBA	36/34/30	37/35/31	39/37/33	39/37/33
Step	-	SUPER-HIGH / HIGH / LOW	SUPER-HIGH / HIGH / LOW	SUPER-HIGH / HIGH / LOW	SUPER-HIGH / HIGH / LOW
Current	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	W	360/370/165	470/385/210	720/540/340	930/770/420
Air Flow	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	Pa	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	%	- / - / -	- / - / -	- / - / -	- / - / -
Enthalpy Exchange Efficiency	%	- / - / -	- / - / -	- / - / -	- / - / -
Noise Level(Sound Level, 1.5m)	dBA	36/34/30	-	37/35/31	-
Heat Exchanger	Type	-	Crossflow	-	-
Weight	kg(lb)	60(132)	-	140(308)	-
Dimension	WxHxD	mm(inch)	1062x365x1140(41.9x14.4x44.9)	1313x737x1140(51.7x29.0x44.9)	-
Duct work	Qty	EA	4	4+2	EA
	Size(Ø)	mm(inch)	Ø250(Ø9.84)	Ø250(Ø9.84)+Ø350(Ø13.77)	-
Supply Air Fan	Qty	EA	1	2	EA
	Type	-	Direct-Drive	-	-
Exhaust Air Fan	Qty	EA	1	2	EA
	Type	-	Direct-Drive	-	-
Filters	Qty	EA	2	4	EA
	Type	-	Cleanable	-	-
	Size(WxHxD)	mm(inch)	1056x10x212.5(41.57x0.39x8.37)	1056x10x212.5(41.57x0.39x8.37)	-
Remote Controller	-	-	PQRCVSLO / PQRCVSLQW	-	-
Dry Contact	-	-	PQDSB / PQDSB1	-	-

Notes:

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

Feature

- High Efficiency Heat Exchanger
- Interlocking with MULTI V
- Humidification function
- BLDC Fan motor
- Linear E.S.P Control by remote controller



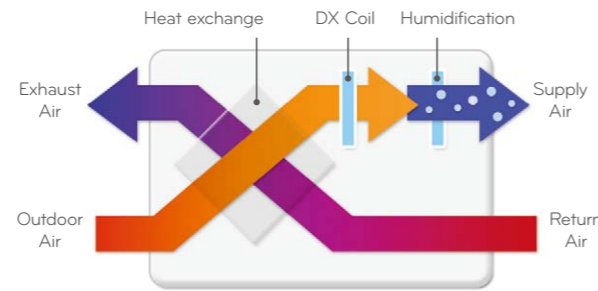
Provide cool (Warm) Fresh air

LG Heat Recovery Ventilator with DX coil can be used just like indoor unit. So we can prevent cold draft when fresh air is coming to indoor by cooling incoming air in summer season or heating incoming air in winter season with this ventilator connected with Multi V outdoor.



Total Air conditioning Solution

LG Energy Recovery Ventilator with DX coil can be used as Total Air conditioning Solution. It match intake fresh air to indoor condition with Heat exchanger and DX coil connected with Multi V outdoor. In summer season, this unit controls indoor condition to cool and dehumidify incoming air and in winter season, it provides warmer fresh air by heating and humidifying incoming air.



Interlocking with Multi V

LG Energy Recovery Ventilator with DX coil can be used with interlocking function. It can be controlled by wired remote controller interlocking with Multi V indoor units. So it control its operating mode (cooling or heating mode) according to setting temperature and Outdoor temperature.



Specifications

Item	Unit	LZ-H050GXHO	LZ-H080GXHO	LZ-H100GXHO	LZ-H050GXNO	LZ-H080GXNO	LZ-H100GXNO
Fresh air conditioning load	Cooling kW	4.93	7.46	9.12	4.93	7.46	9.12
	Heating kW	6.73	9.80	11.72	6.73	9.80	11.72
Temperature exchange efficiency	SH/H/L %	86/86/87	84/84/86	82/82/84	86/86/87	84/84/86	82/82/84
	Enthalpy exchange efficiency %	68/68/69	64/64/66	60/60/63	68/68/69	64/64/66	60/60/63
Air flow rate	Heat exchange mode SH/H/L CMH	500/500/440	800/800/640	1000/1000/820	500/500/440	800/800/640	1000/1000/820
	Bypass mode SH/H/L CMH	500/500/440	800/800/640	1000/1000/820	500/500/440	800/800/640	1000/1000/820
Fan	External static pressure SH/H/L Pa	160/120/100	140/90/70	110/70/60	180/150/110	170/120/80	150/100/70
Humidifier	System	Natural evaporating Type					
	Amount kg/h	2.7	4	5.4	-		
	Feed water pressure MPa	0.02-0.49	0.02-0.49	0.02-0.49	-		
Noise Level	Heat Exchange mode dB(A)	38/36/33	39/37/34	40/38/35	39/37/35	41/38/36	41/39/36
	Bypass mode dB(A)	39/37/34	40/38/35	40/38/35	39/37/35	41/38/36	41/39/36
	Refrigerant	R410A					
Power Supply	ØV/Hz	1,220-240,50					
Power input (nominal)	Heat exchange mode SH/H/L kW	0.25/0.2/0.15	0.42/0.35/0.25	0.48/0.42/0.27	0.25/0.2/0.15	0.42/0.35/0.25	0.48/0.42/0.27
	Bypass mode SH/H/L kW	0.25/0.2/0.15	0.42/0.35/0.25	0.48/0.42/0.27	0.25/0.2/0.15	0.42/0.35/0.25	0.48/0.42/0.27
Nominal Running current (RLA)	Heat exchange mode SH/H/L A	1.5/1.3/1	2.5/2/1.5	3.6/3.2/2.3	1.5/1.3/1	2.5/2/1.5	3.6/3.2/2.3
	Bypass mode SH/H/L A	1.5/1.3/1	2.5/2/1.5	3.6/3.2/2.3	1.5/1.3/1	2.5/2/1.5	3.6/3.2/2.3
Dimensions	HxWxD mm	365x1667x1140					
Weight (Net)	kg	105			98		
	Pipe connections	Liquid mm	Ø6.35				Ø12.7
	Gas mm					Ø12.7	
	Water mm	Ø6.35				-	
	Drain mm					Ø25.4	
Connection duct diameter	mm	Ø250					
Remote Controller		PQRCVSLO / PQRCVSLOQW					
Dry Contact (1 contact point)		PQDSB / PQDSB1					
Dry Contact (2 contact point)		PQDSBC					

Notes:

- Noise level :
 - The operating conditions are assumed to be standard.
 - Sound measured at 1.5m below the center 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.

V-NET & Accessory













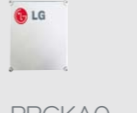




(LG Network Solution)



84 Remote Controller

87 Central Controller

102 Accessory

Remote Controller	Wired Remote Controller	<p>Standard</p>  <p>PQRCVSLO PQRCVSLOQW</p> <p>PZRCUSBO</p> <p>Deluxe</p>  <p>PQRCUDSO (White) PQRCUDSOB (Blue) PQRCUDSOS (Silver)</p> <p>Simple</p>  <p>PQRCVLOQW(White,Simple) PQRCVLOQ (Black, Simple) PQRCHCAOQW(White, Simple for Hotel) PQRCHCAOQ(Black, Simple for Hotel)</p>		
	Wireless Remote Controller	 <p>PQWRH(C)DFO</p>		
Central Controller	Simple Controller	<p>Simple Central Controller</p>  <p>PQCSB101SO</p> <p>Scheduler</p>  <p>PQCSB101SO+ PQCSD130A0</p> <p>Function Controller</p>  <p>PQCSB101SO +PQCSC101SO</p> <p>AC EZ</p>  <p>PQCSZ250SO</p>	BNU	 <p>PQNFB16A1 (LonWorks®) PQNFB17B0 (BACnet)</p>
	AC Smart II, Option Kit & 128 Unit Expansion Kit	<p>AC Smart II & Option Kit</p>  <p>PQCSW320A1E PQCSE341A0 PQCSE342A0</p> <p>Expansion Kit</p>  <p>PQCSE440U0</p>	AHU Application kit	<p>Control kit</p>  <p>PRCKD20E PRCKD40E</p> <p>Comm. kit</p>  <p>PRCKA0 PUCKA0</p> <p>EEV kit</p>  <p>PRLK048A0</p> <p>Expansion kit</p>  <p>PATX13AOE PATX20AOE PATX25AOE PATX35AOE PATX50AOE</p>
	ACP & AC Manager	 <p>PQCPA11A0E(Without IO) PQCPB11A0E(With IO) PQCSS520A0E (AC Manager)</p>	DO Kit	 <p>PMNFP14A1 / PMNFP14A0 PHNFP14A0 / PSNFP14A0 PQNFPO0T0</p>
Accessory	PDI, Dry Contact, Cool/Heat Selector, Suction Grille/Canvas, Ventilation kit (Fresh kit) for new Cassette, Air Guide, Heat Recovery Unit, Refrigerant charging kit, Cassette Cover, Y Branch			

Standard Wired Remote Controller

- PQRCVSLO
- PQRCVSLOQW
- PVRCUSZO



PQRCVSLO



PQRCVSLOQW

The standard remote controller can be used by various means. It can control an indoor units or group of indoor units.

For Air conditioner FEATURES

	PQRCVSLO / PQRCVSLOQW
Operating mode	On_Off / Fan speed / Mode / Temp.
On / Off LED	✓
Room temp.	✓
Fan / Plasma / Swirl / Heater	✓
Vane control / Auto swing / Fan auto	✓
E.S.P function	✓
Reservation	Weekly / Simple
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 units	★
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	★★



PQRCVSLO



PQRCVSLOQW

★ Applicable for MULTI V II and III 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.

Deluxe Wired Remote Controller

- PQRCUDSO
- PQRCUDSOB
- PQRCUDSOS



With the future-oriented design more suitable for the high-end interior, the deluxe wired remote controller makes a perfect match with interior.

FEATURES

	PQRCUDSO / PQRCUDSOB / PQRCUDSOS
Operating mode	On_Off / Fan speed / Mode / Temp.
Touch screen / LCD back_light	✓
Room temp	✓
Fan / Plasma / Swirl / Heater	✓
Vane control / Auto swing	✓
E.S.P function	✓
Reservation	Weekly / Simple
Timer function	✓
Child lock	✓

※Refer to each model PDB for applicable models.



PQRCUDSO
(White)



PQRCUDSOB
(Blue)



PQRCUDSOS
(Silver)

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For **ecoV™** (0 series only)

	PZRCUSBO
On / Off LED	✓
Ventilation mode setting	✓
Rapid ventilation	✓
Power saving ventilation	✓
Reservation	Weekly / Simple
Electric failure compensation	Max 2 hours
Child lock	✓
Optional function	Plasma / Heater / Humidifier / Operating air volume



PZRCUSBO

Simple Wired Remote Controller

- PQRCVLOQ(Black)
- PQRCVLOQW(White)
- PQRCHCAOQ(Black)
- PQRCHCAOQW(White)



PQRCVLOQ(Black)
PQRCVLOQW(white)
Simple



PQRCHCAOQW(White)
PQRCHCAOQ(Black)
Simple For Hotel

The simple wired remote controller with handy design is suitable for hotel or office applications because user can control air conditioner easily.

FEATURES

	PQRCVLOQ / PQRCVLOQW	PQRCHCAOQ / PQRCHCAOQW
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 Change-able by Central Controller
Back Light	✓	✓

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

Simple Central Controller

- PQCSB101SO



Simple and easy central control for 16 indoor units is made by this controller, a distinctive product.

For LGAP applied models FEATURES

	PQCSB101SO
Max. no. of indoor units	16 indoor units
Individual control	On_Off control
Lock function	Total / Individual
Mode change	Cooling / Heating
Malfunction indicator	LED lamp
Dimension(mm)	120x120x20
Power(V)	DC 10V

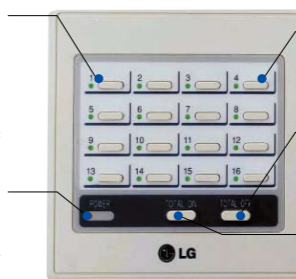
NAME AND DESCRIPTION OF THE SYSTEM

On/Off Display LED (TOTAL 16EA)

On pressing individual on/off button, display the present operation state.
- Cool / Dry / Fan : Green.
- Heat : Orange
- Error mode : Red
- Stop : Off

Power indication LED

Indicate the state of DC Power supply in central control unit.
- On : Red(Heating), Green(Cooling)
- Off : no signal
- Error mode : blinking with red color



Individual button

Control On/OFF of a single unit

'TOTAL Off' button

Stop all linked units sequentially.

'TOTAL On' button

Operate all linked units sequentially.

- PQWRH(C)DFO

Wireless Remote Controller



PQWRH(C)DFO

The wireless remote controller allows the operation air conditioner from any corner of the room.

FEATURES

	PQWRH(C)DFO
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)	★
ΔT setting (for Auto Changeover)	MULTI V SYNC II / MULTI V III Heat Recovery

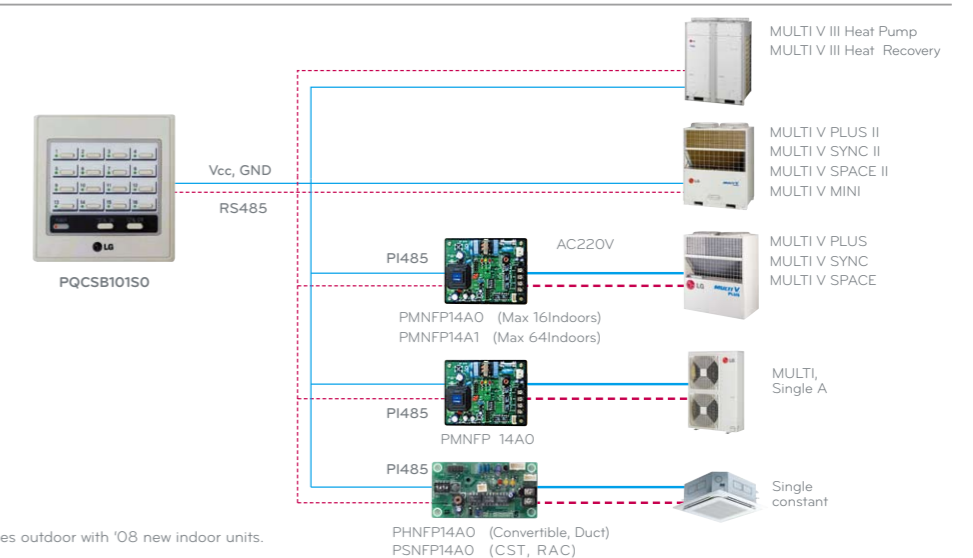
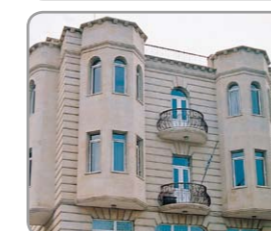
★ Applicable for MULTI V II and III series.
* Refer to each model PDB for applicable models.

MODEL NAME & APPLICABLE MODELS

Type	CST, SRAC, CVT, Duct, Floor Standing
PQWRHDF0	H/P ✓
PQWRCDF0	C/O ✓

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COMBINATION



* No need of PI 485, when use MULTI V II series outdoor with '08 new indoor units.

•PQCSB101S0
+
PQCSC101S0
•PQCSB101S0
+
PQCSD130A0

Function Controller & Scheduler



PQCSB101S0+PQCSC101S0
SCC + Function Controller



PQCSB101S0+PQCSD130A0
SCC + Scheduler

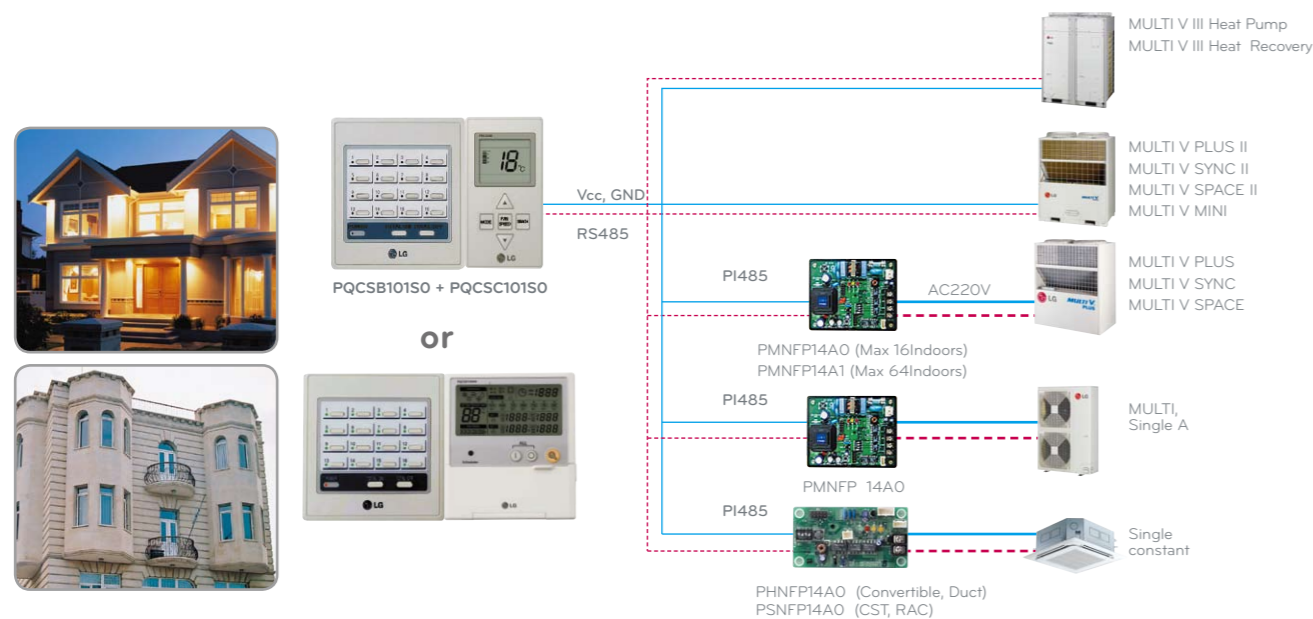
Apart from on/off control, operation mode, fan speed, schedule, additional functions can be displayed and easily controlled.

For LGAP applied models FEATURES

	PQCSB101S0+PQCSC101S0	PQCSB101S0+PQCSD130A0
Max. no. of indoor units	16 indoor units	16 indoor units
Individual control	On_Off / Fan speed / Mode / Temp.	On_Off / Fan speed / Mode / Temp.
Lock function	Total / Individual	Total / Individual
Mode change	Cooling / Heating / Fan	Cooling/Heating/Dehumidification/Fan/Auto
Malfunction indicator	Error display on LCD	Error display on LCD
Schedule	-	Weekly
Dimension(mm)	(120x120x20)+(70x120x14)	(120x120x20)+(120x133x20)
Power(V)	DC 10V	DC 10V

※1 function controller or scheduler can be combined with 8 simple central controllers.

COMBINATION



※No need of PI 485, when use MULTI V II series outdoor with '08 new indoor units.

•PQCSZ250S0

AC EZ

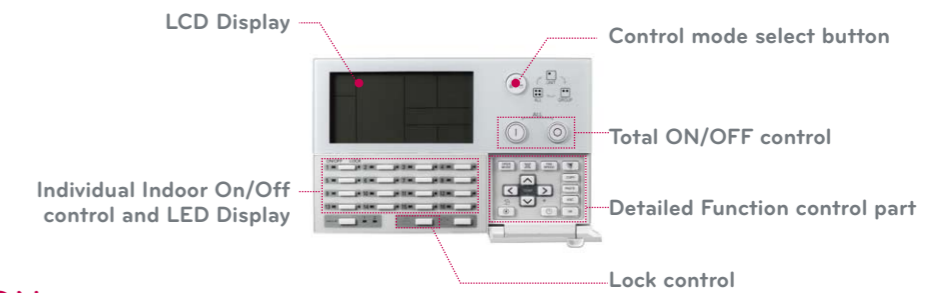


Apart from On/Off control, operation mode, fan speed, scheduling, additional functions can be displayed and easily controlled.

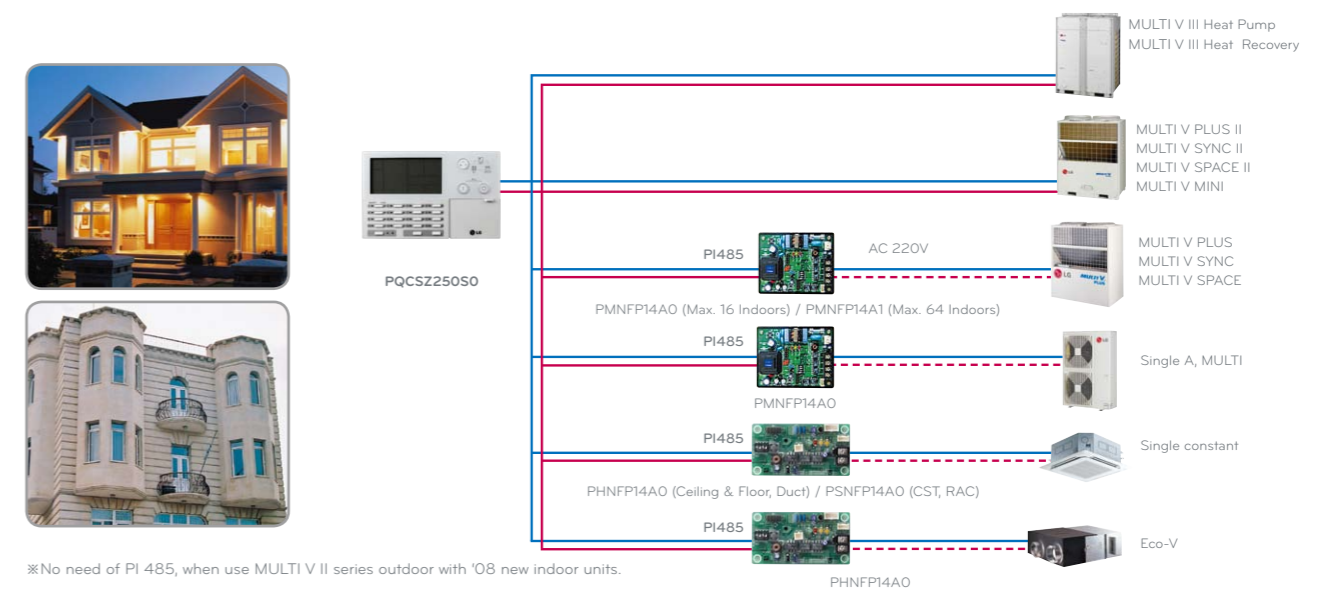
For LGAP applied models FEATURES

	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
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



※No need of PI 485, when use MULTI V II series outdoor with '08 new indoor units.

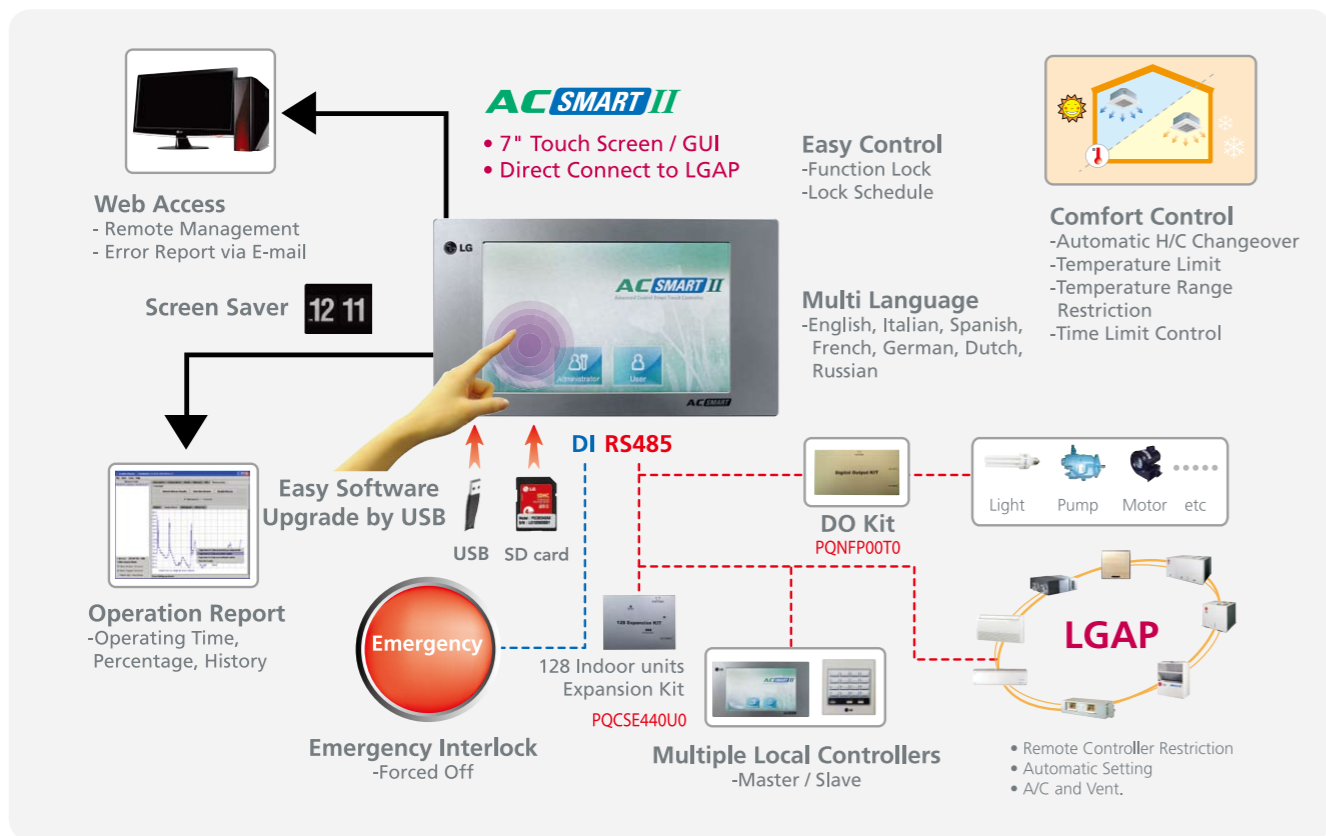
- AC Smart II : PQCSE320A1E
- Option Kit : PQCSE341A0 PQCSE342A0
- 128unit Expansion Kit : PQCSE440U

AC Smart II, Option Kit & 128 Unit Expansion Kit



For the mid sized buildings up to 64 or 128 indoor units can be controlled and monitored by touch screen central controller. It's possible to control and monitor the air conditioning system through web access, anywhere with PC.

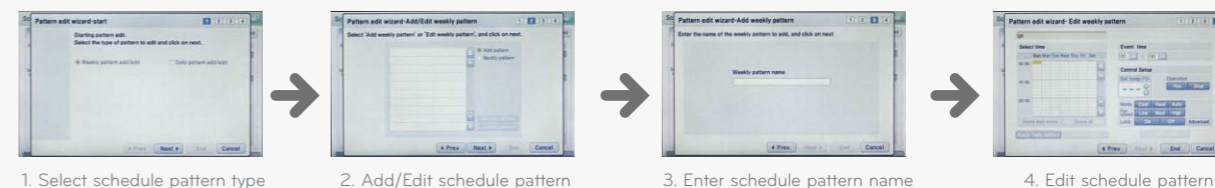
For LGAP applied models **AC SMART II**



FEATURES

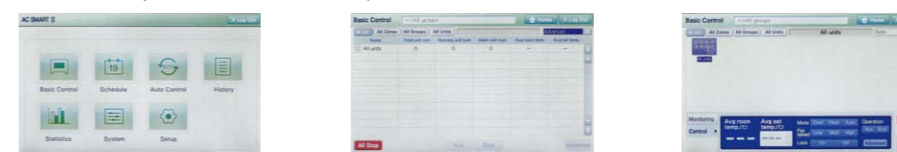
Schedule Wizard Function

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.



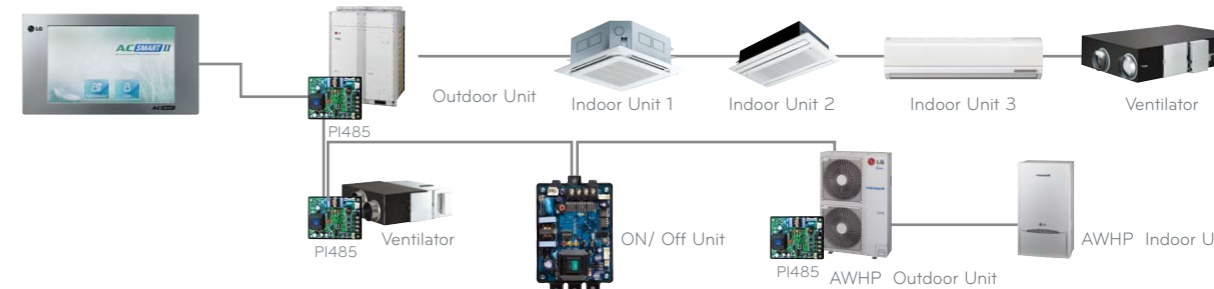
New GUI

It is more easy to use and control the products.



AWHP / Eco-V DX

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

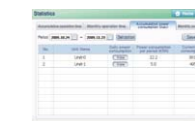
- Web schedule + Power consumption statistics function (PQCSE342A0)
- Web schedule function (PQCSE341A0)

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 where he or she is 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.



ACP

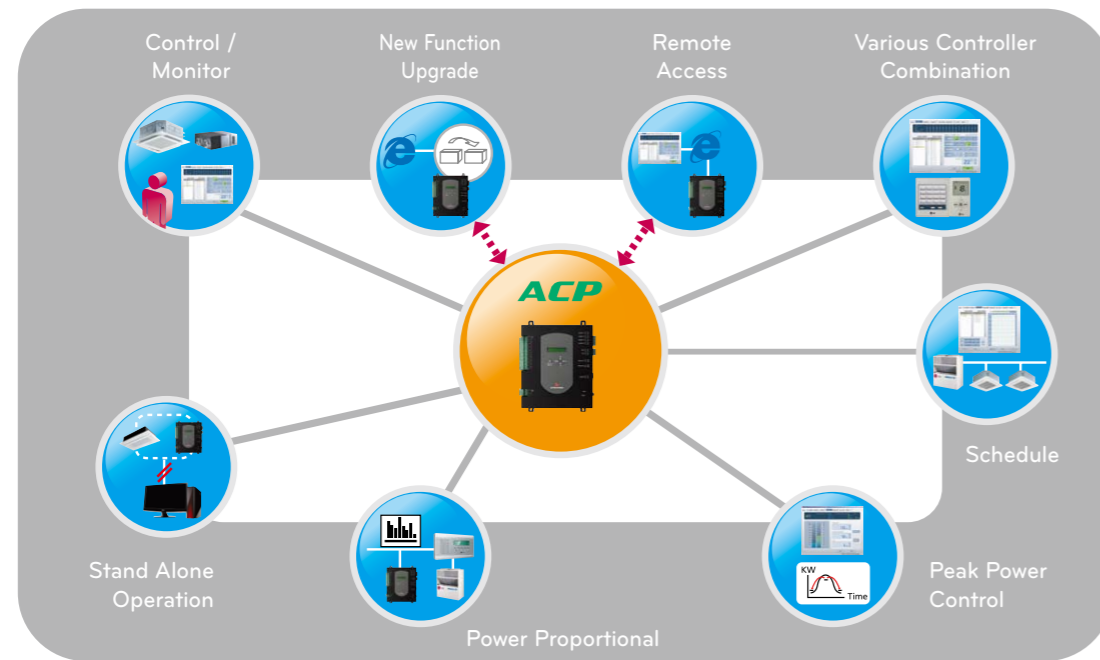


- PQCPA11A0E (Without IO)
- PQCPB11A0E (With IO)

Through embedded web control function in ACP one can control and monitor various functions of air conditioner such as temperature setting, schedule, peak power control, etc.

For LGAP applied models

ACP

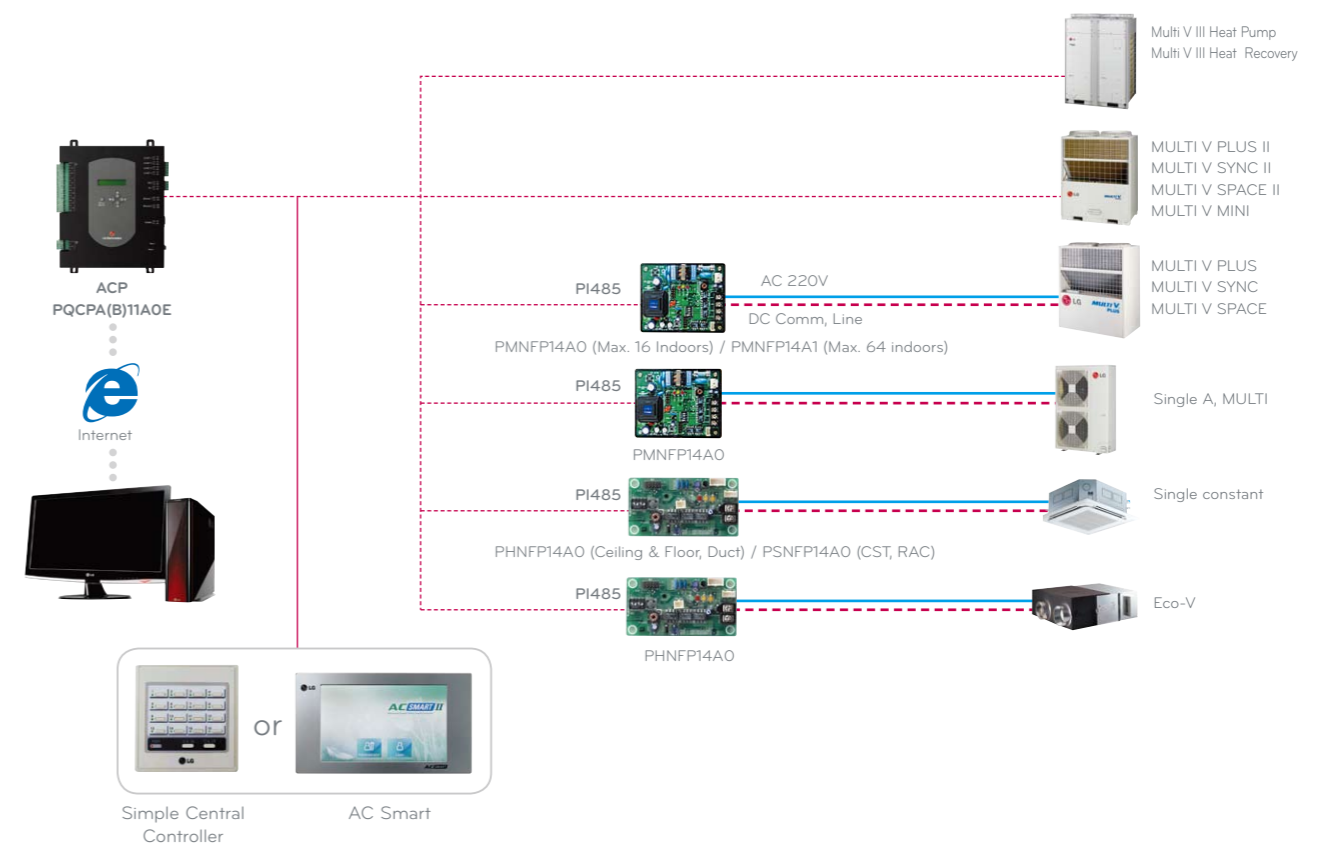


FEATURES

	PQCPA(B)11A0E
Max.no. of indoor units	256 indoor units
Control / Monitoring	✓
Schedule management	✓
Lock function	Temperature
Temperature range restriction	-
Temperature limit function	-
Auto Changeover function	-
History function	Monitoring
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	-

COMBINATION

▶ ACP

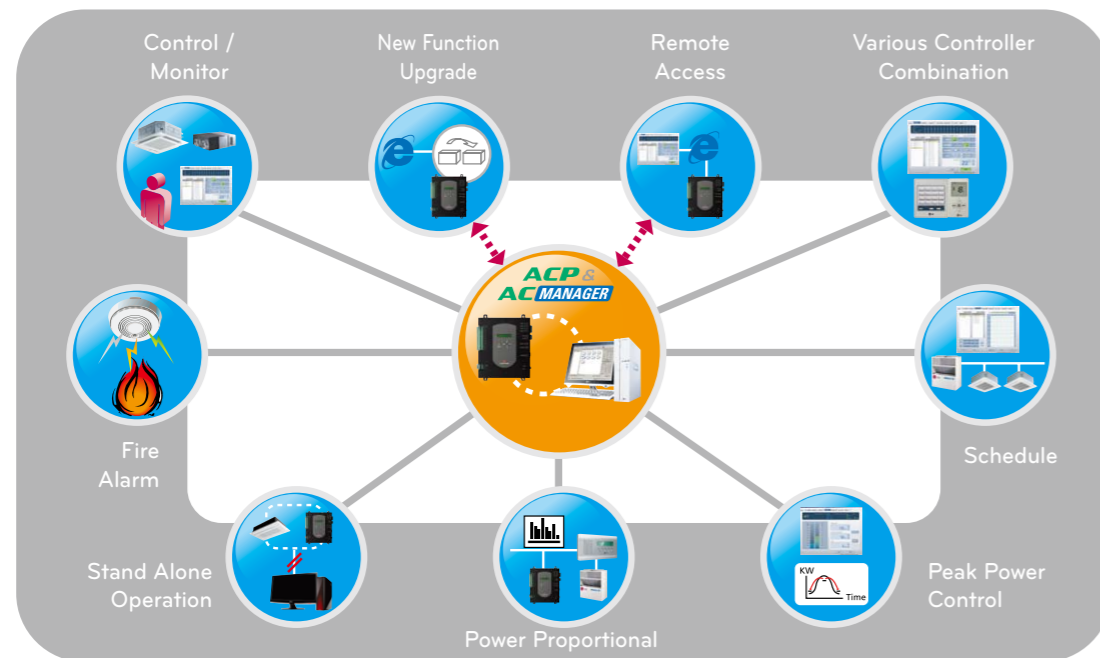


AC Manager



•PQCSS520A0E

ACP & AC MANAGER

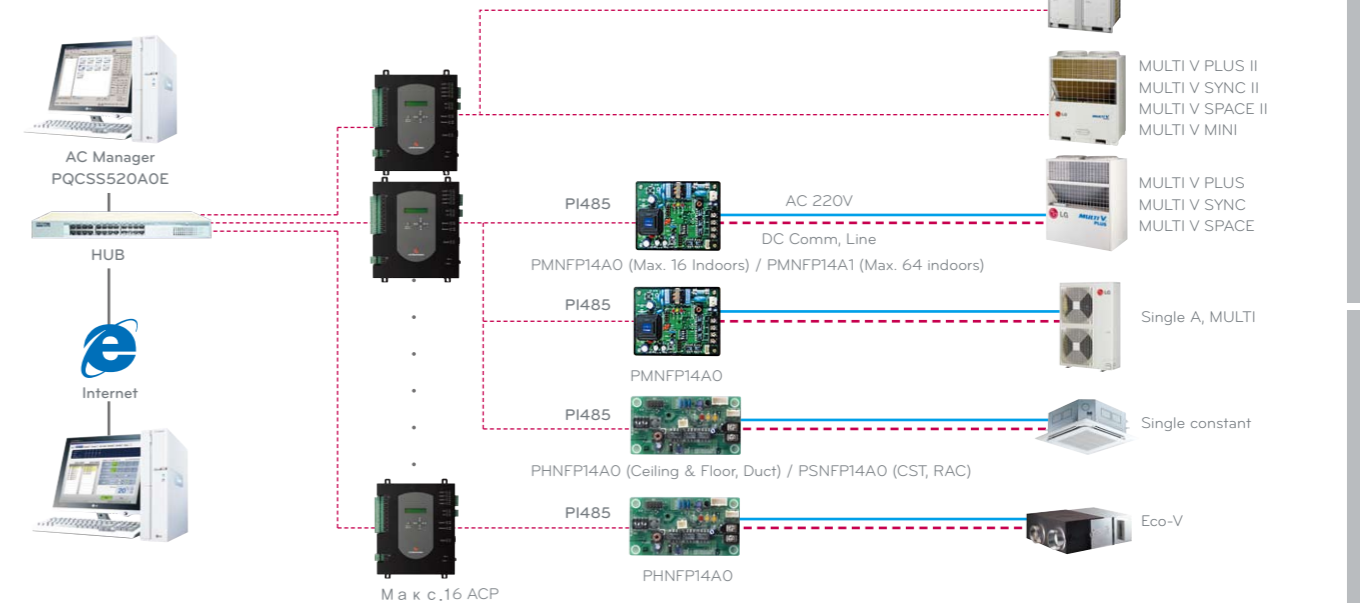


FEATURES

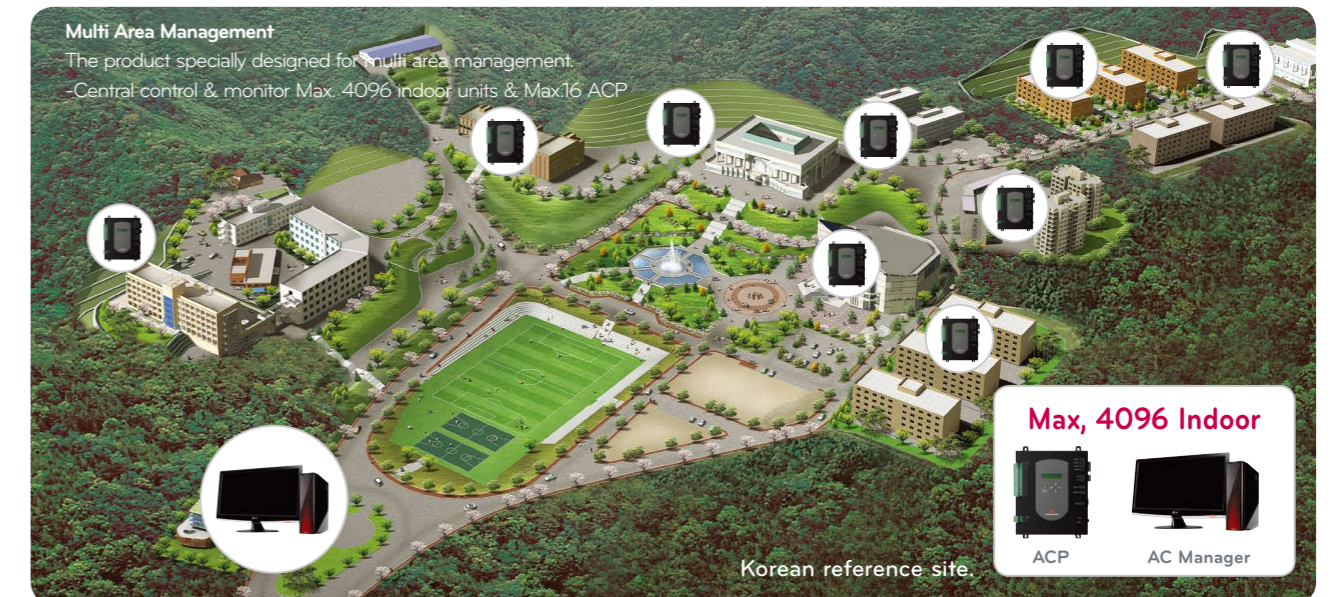
	PQCPA(B)11A0E+PQCSS520A0E
Max.no. of indoor units	4,096 indoor units(16 ACP)
Control / Monitoring	✓
Schedule management	✓
Lock function	Mode/Temp/Fan speed/Total
Temperature range restriction	✓
Temperature limit function	✓
Auto Changeover function	✓
History function	Monitoring & Error history
Peak control	✓
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	-

COMBINATION

▶ AC MANAGER (Installation with ACP)



ACP & AC MANAGER APPLICATION



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



•PQNFB16A1

Easy interface between BMS and LG Air-conditioner

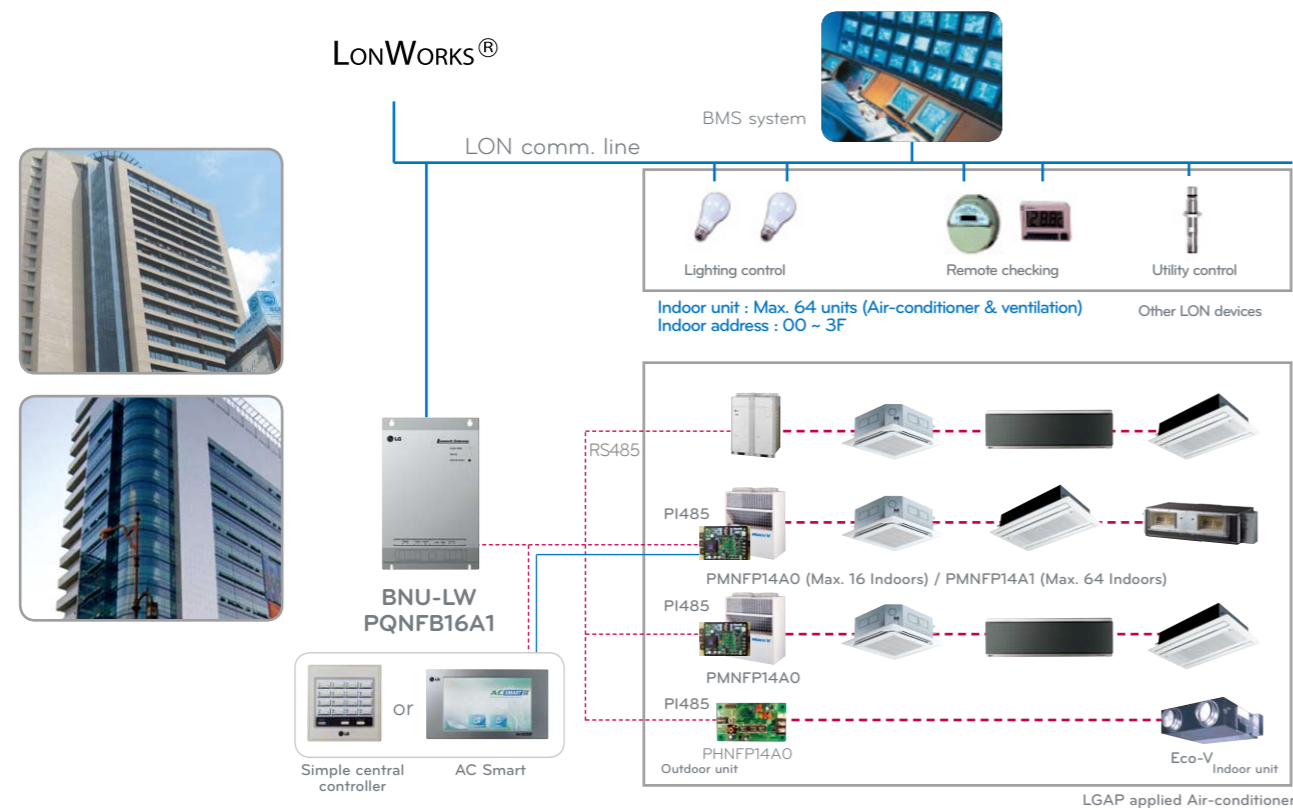
- Independence of BMS under the standard BMS
 - Operation system based on LONWORKS® Network Service)

For LGAP applied models FEATURES

- Connection to LONWORKS® using LONTALK protocol and LG Air-conditioner protocol
- Process ability
 - 64 units(including indoors and ventilators)
 - 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)

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



BNU-BN Gateway (Building Network Unit- BACnet)



•PQNFB17B0

Easy interface between BMS and LG Air-conditioner

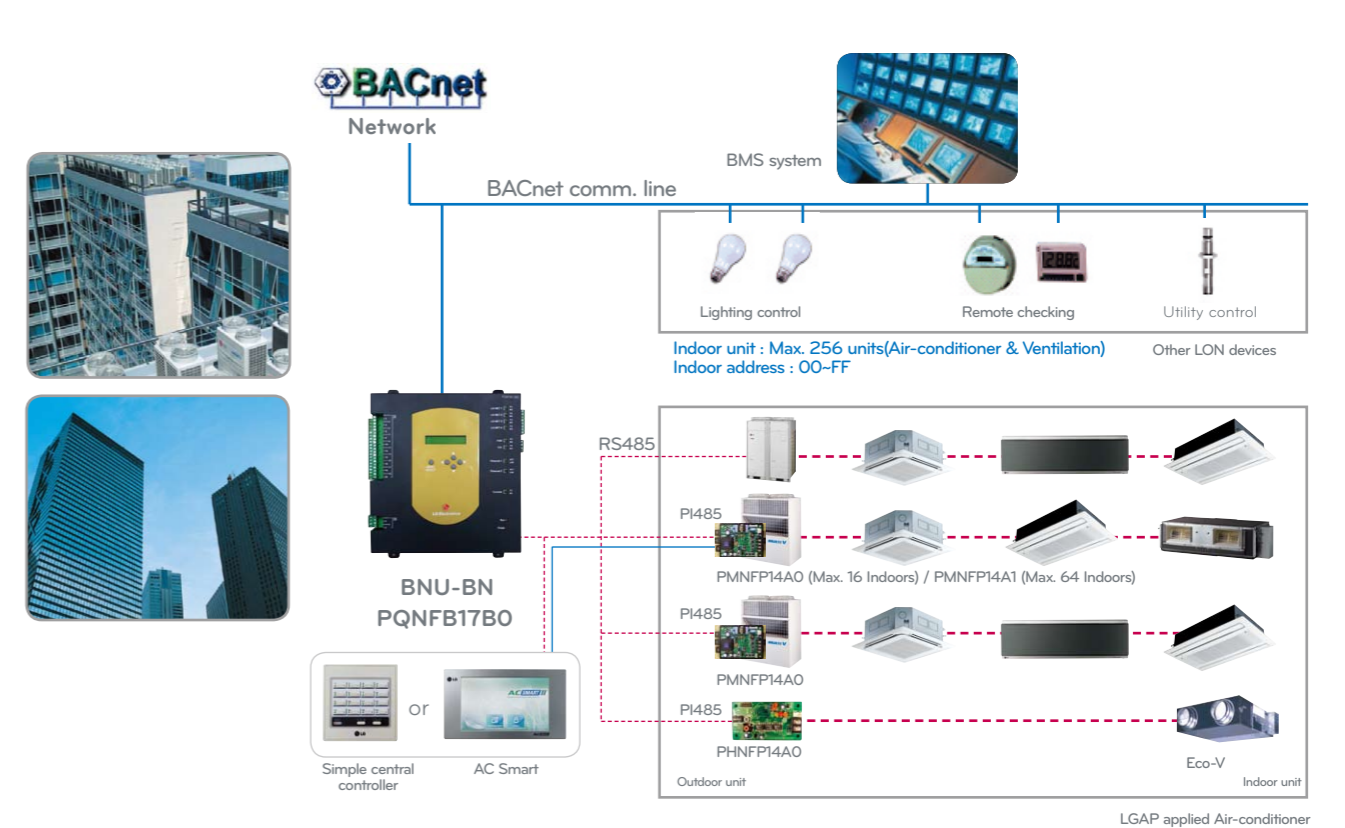
- Independence of BMS under the standard BMS.
 - Operation system based on BACnet Service.

For LGAP applied models FEATURES

- Through embedded web control function in BACnet one can access the airconditioner and external through internet.
- It can control 256 indoor units. (A/C or Ventilator)
- External devices such as fire alarm, motion detector can be connected to gateway and their function can be interlinked with airconditioner operation.

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



AHU Comm. kit

•PUCKAO



To connect air handling unit for mid & large space and supply fresh air.
Connectable capacity is from 18 kbtu/h ~60kbtu/h.

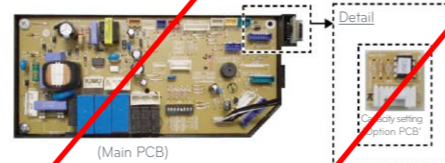
15.Deleted. Because this model is not for Multi V

SPECIFICATION

Model Name	Weight(kg)			Dimension(mm)			POWER
	NET	Gross		W	H	D	
Comm.Kit PUCKAO	2.5	4		280	135	280	220~240V, 50/60Hz, 1Ph

SELECTION OF EVAPORATOR

• When selecting evaporator, Change 'Option PCB' in Control kit according to below table (Basic 'Option PCB is for 24k Btu/h)

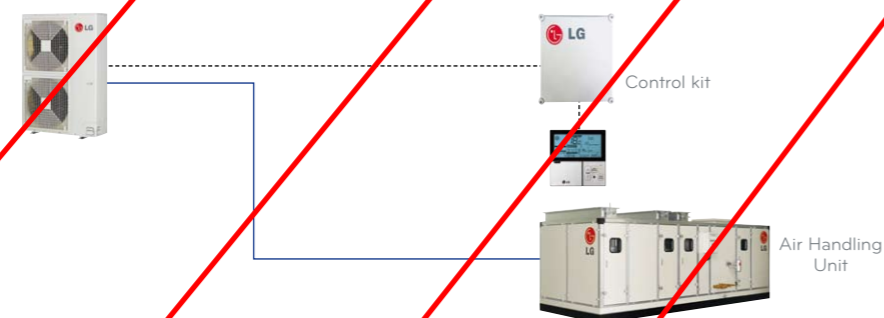


option PCB P/No	Capacity (Btu/h)	Allowed heat exchanger Volume (dm³)	Allowed heat exchanger capacity (kW)	Air flow rate (CMM)	outdoor Unit Model Name
EBR65102902	18K	0.76~0.94	5~6	18~21	AUUh186D / AUUW186D
EBR65102903	24K	0.88~1.08	6~7	20~23	AUUh246D / AUUW246D
EBR65102904	30K	0.88~1.08	7~9	22~26	AUUh306D / AUUH306D / AUUW306D2
EBR65102905	36K	0.88~1.08	9~11	25~32	AUUh366D / AUUH368D / AUUW366D / AUUW368D
EBR65102906	42K	0.88~1.08	11~13	31~35	AUUh426D / AUUW428D
EBR65102907	48K	1.23~1.51	13~16	33~45	AUUh486D / AUUW486D / AUUW488D
EBR65102908	60K	1.93~2.35	20~24	42~55	AUUh608D / AUUW606D / AUUW608D

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

WIRING DIAGRAM

— Refrigerant piping
- - - Communication wire



AHU Comm. kit & EEV kit

•PRCKAO
•PRLK048AO



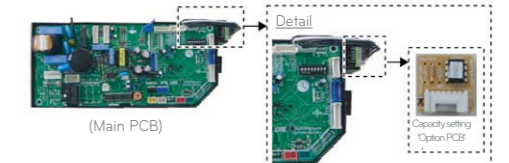
To connect air handling unit for mid & large space and supply fresh air.
Connectable capacity is from 18 kbtu/h ~60kbtu/h.

SPECIFICATION

Model Name	Weight(kg)		Dimension(mm)			POWER
	NET	Gross	W	H	D	
Comm.Kit PRCKAO	2.2	3.6	280	135	280	220~240V, 50/60Hz, 1Ph
EEV Kit PRLK048AO	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)

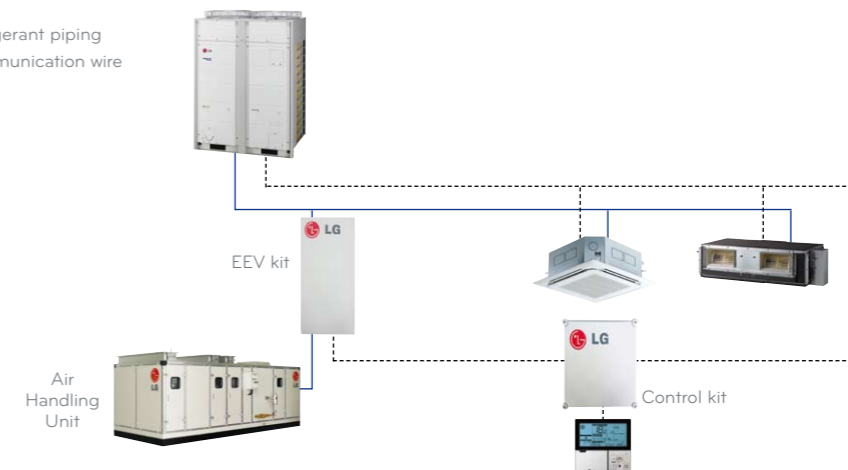


option PCB P/No	Capacity (Btu/h)	Allowed heat exchanger Volume (dm³)	Allowed heat exchanger capacity (kW)	Air flow rate (CMM)
EBR52358907	28k	0.88~1.08	7~9	22 ~ 26
EBR52358908	36k	0.88~1.08	9~11	25~32
EBR52358909	42k	0.88~1.08	11~13	31~35
EBR52358910	48k	1.23~1.51	13~16	33~45
EBR52358911	76k	1.93~2.35	20~24	50~64
EBR52358912	96k	1.93~2.35	25~31	64~72

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

WIRING DIAGRAM

— Refrigerant piping
- - - Communication wire



AHU Control kit



- PRCKD20E
- PRCKD40E

AHU have functions like cooling, heating, humidification, Air cleaning & ventilation ; providing Multi-solution to the consumer.

SPECIFICATION

Model Name	Weight(kg)		Dimension(mm)			POWER	POWER
	NET	NET	W	H	D		
Control Kit PRCKD20E PRCKD40E	43.5	48	600	750	285	220~240V, 50/ 60Hz, 1Ph	<ul style="list-style-type: none"> • AHU Controller • ODU Comm. PCB • Sensor Power Supply 1~4 Set ODU Combine 5~8 Set ODU Combine

AHU Expansion kit



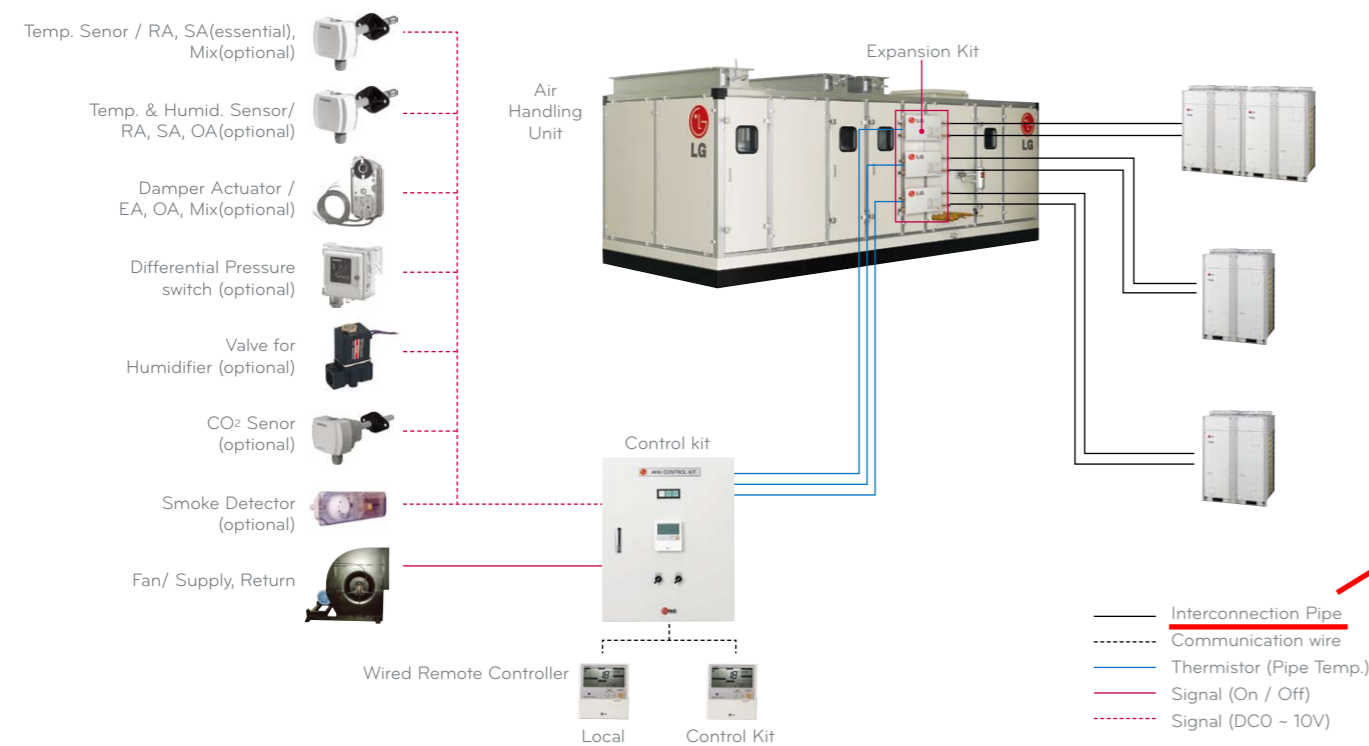
- PATX13A0E
- PATX20A0E
- PATX25A0E
- PATX35A0E
- PATX50A0E

AHU have functions like cooling, heating, humidification, Air cleaning & ventilation ; providing Multi-solution to the consumer.

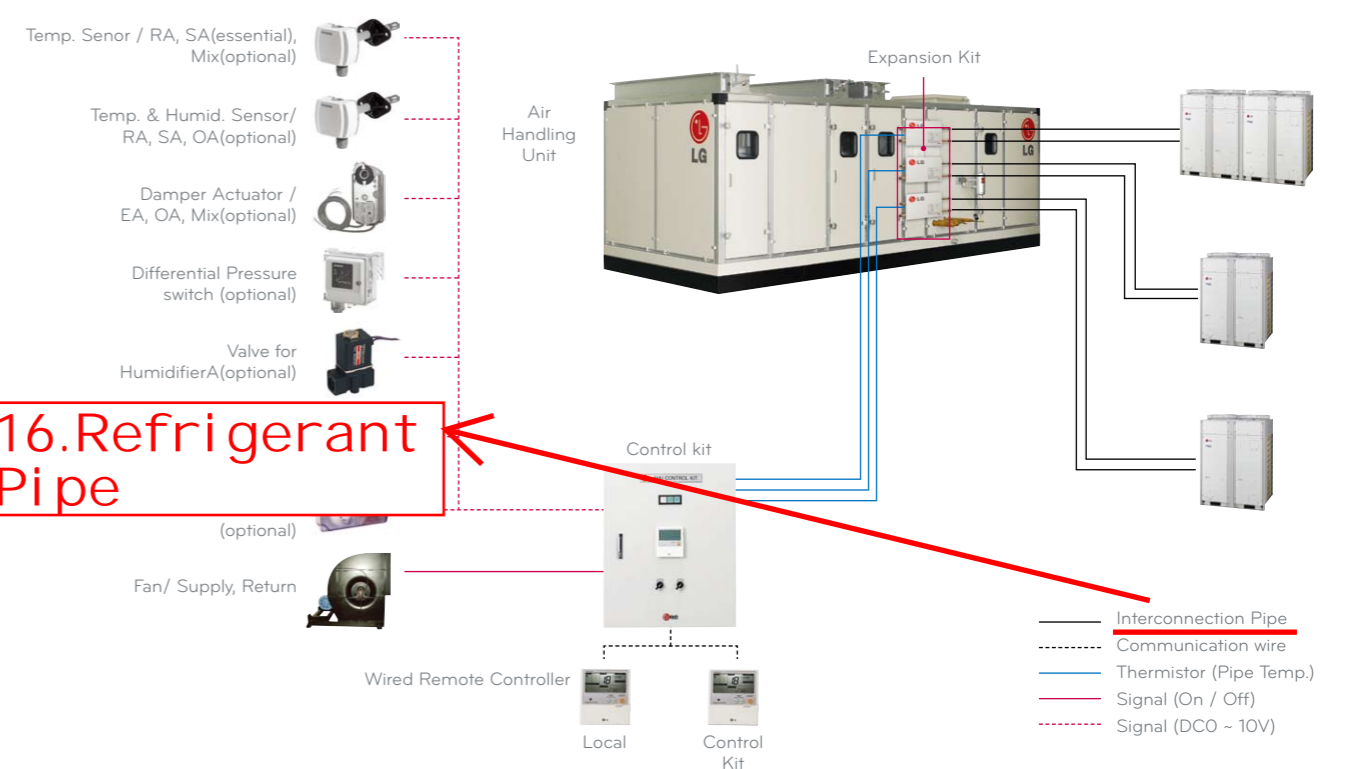
SPECIFICATION

Model Name	Weight(kg)		Dimension(mm)			POWER
	NET	Gross	W	H	D	
Expansion Kit PATX13A0E PATX20A0E PATX25A0E PATX35A0E PATX50A0E	5.6 5.8 6.0 6.2 8.5	6.9 7.1 7.3 7.5 10.0	238 291	169 192	491 561	<ul style="list-style-type: none"> • ODU Capacity : 8~16HP • ODU Capacity : 18~26HP • ODU Capacity : 28~36HP • ODU Capacity : 38~46HP • ODU Capacity : 48HP~56HP

1.4 SYSTEM LAYOUT



1.4 SYSTEM LAYOUT



PDI

•PQNUD1S00



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.

POWER INDICATOR 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

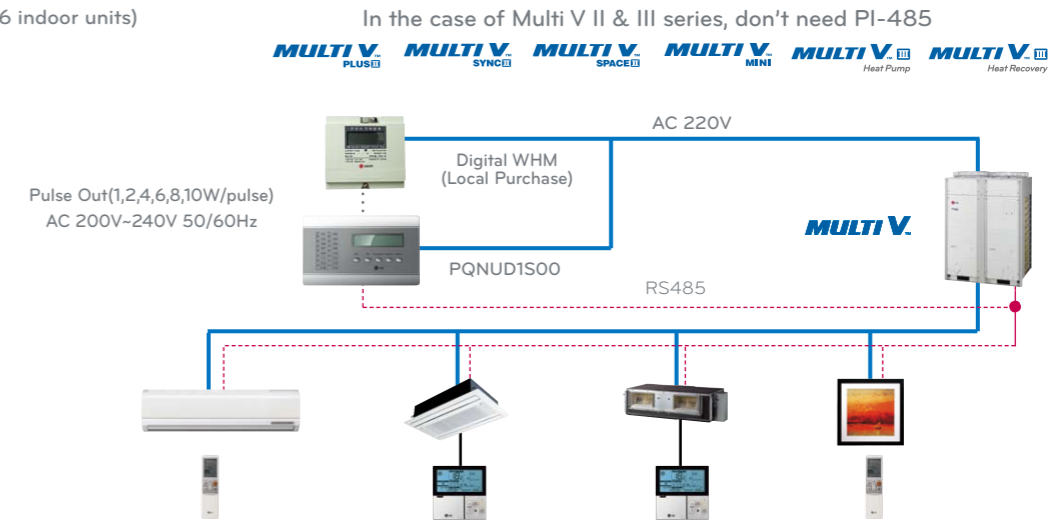
$$\text{Power used per room} = \frac{\text{Total power consumed for an external unit}}{\text{total weight}} \times \text{weight by room}$$

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

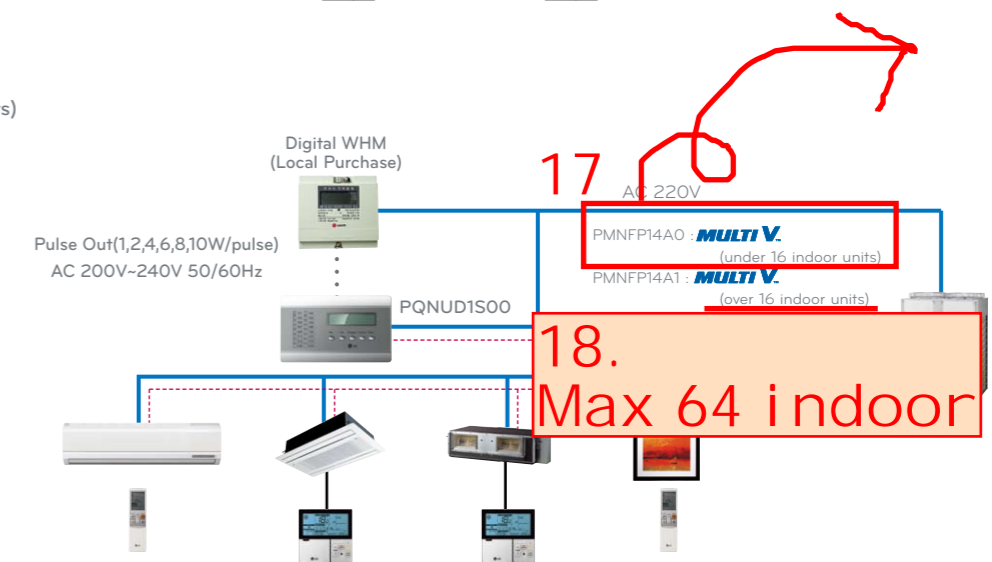
COMBINATION

[Installation without Central controller]

▶ **MULTI V.**
 (under 16 indoor units)

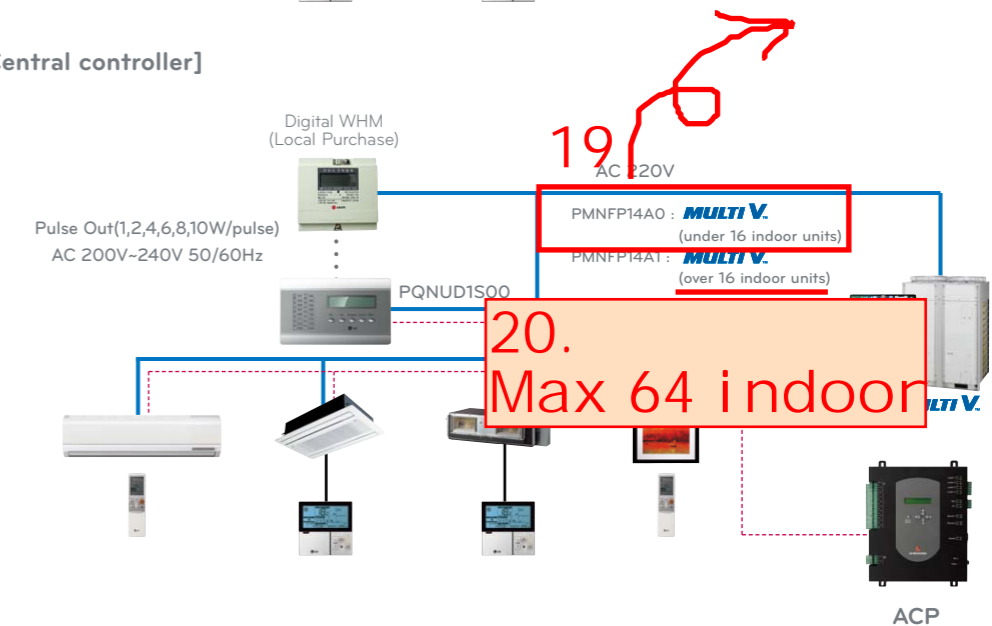


▶ **MULTI V.**
 (Over 16 Indoor units)



[Installation with Central controller]

▶ **MULTI V.**



Dry Contact

- PQDSA(1)
- PQDSB(1)
- PQDSBC



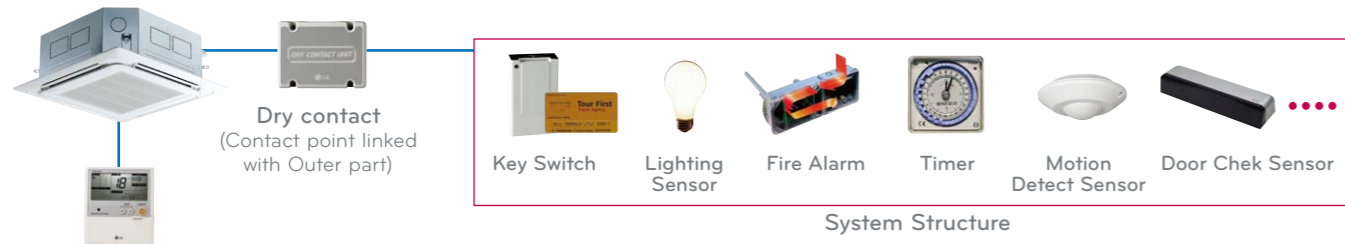
It is connected between indoor units and external device, so it can be used for various purpose

FEATURES

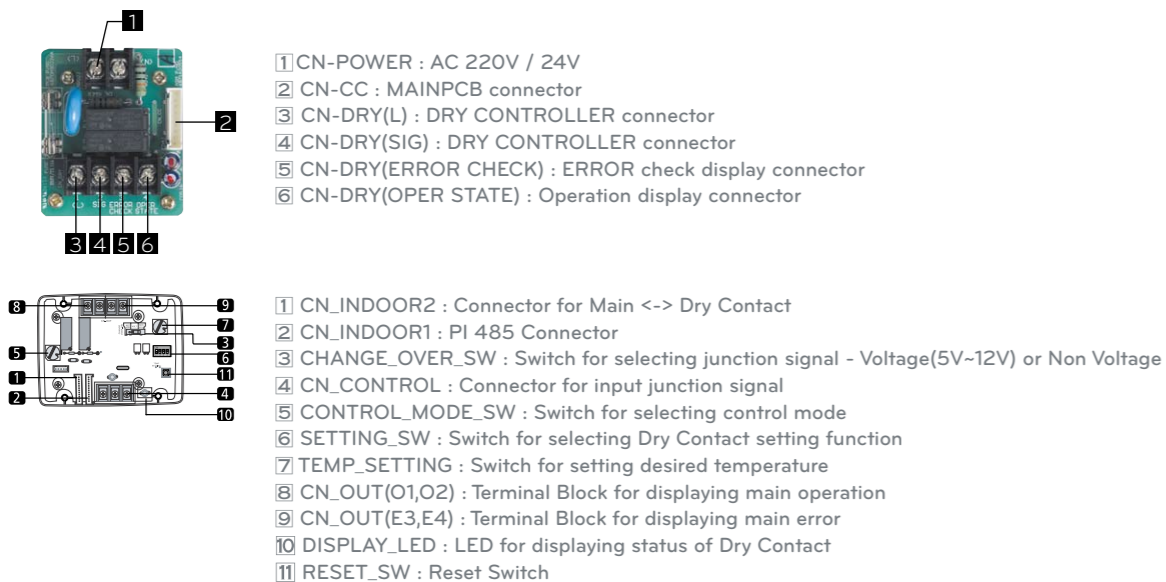
	PQDSA/ PQDSB	PQDSA1/ PQDSB1	PQDSBC
Contact point	1 Control point	1 Control point	2 Control points
Power input	AC 220V from outside power source	AC 24V from outside power source	DC 5V&12V from indoor unit PCB
Voltage / Non voltage input	-	-	✓
On_Off control	✓	✓	✓
Lock / Unlock	-	-	✓
Fan speed setting	-	-	✓
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



Dry Contact

- PQDSBNGCM1



It is connected between indoor units and external device, so it can be used for various purpose

FEATURES

1) Model name : PQDSBNGCM1

2) Specification

Dimensions : 105 X 78 X 35 mm

Applied Model : Multi V Plus II & Multi V III

Function : Contact(Input) : 8 Contact

Voltage/ Non_Voltage selectable

Contact(Output) : 2 Contact(Operating, Error)

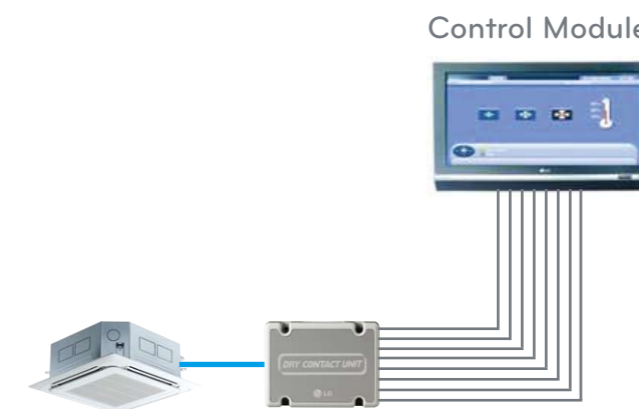
Rotary Switch1 : Operating Set_Temp Selection

Rotary Switch2 : Operating Logic Selection

3) Description

The product is specially designed for interface with other controller using dry contact communication.

STRUCTURE



•PQDSBCGCD0

Dry Contact



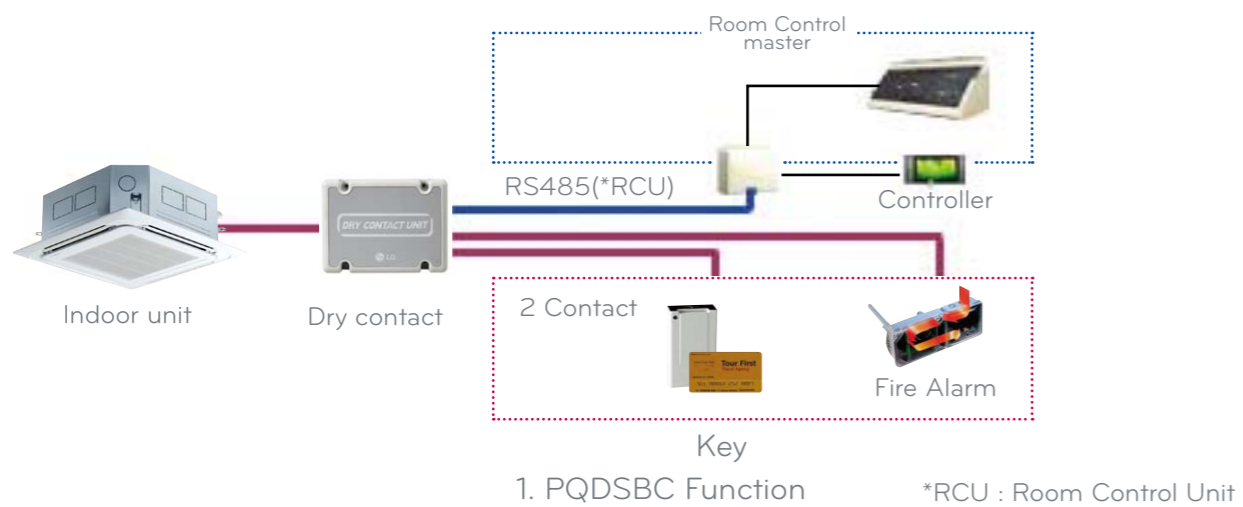
It is connected between indoor units and external device, so it can be used for various purpose

FEATURES

- 1) Model name : PQDSBCGCD0
- 2) Specification
 - Dimensions : 105 X 78 X 35 mm
 - Applied Model : Multi V Plus II & Multi V III
 - Function :
 - Contact(Input) : 2 Contact(Other operation selectable)
 - Contact(Output) : 2 Contact(Operating Error)
 - PI485 Communication Mode Input : LGAP 485 Communication
- 3) Description
 - The product is specially designed for interface with other controller using dry contact communication or 485 communication

STRUCTURE

2.485 Communication Function



•PQDSBCDVM0

ODU Dry Contact



Dry contact for demand control

FEATURES

- 1) Model name : PQDSBCDVM0
- 2) Specification
 - Applied Model : Multi V III Series
 - 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 specially designed for demand control.
 - Applied to Multi V III only

STRUCTURE MULTI V III Heat Pump



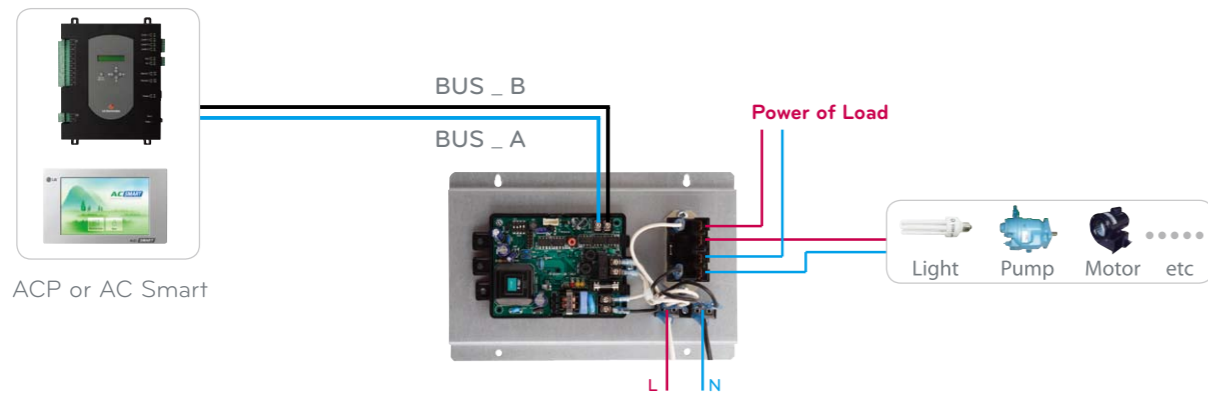
DO Kit

•PQNFP00TO



Do Kit is connected between ACP (AC Smart) and external devices.
 So An start and stop external devices such as light, pump, motor, etc.

WIRING DIAGRAM



Cool/Heat Selector

•PRDSBM



This switch enables selection of heating, cooling or fan mode. So it can prevent that cooling & heating mixing error occurs during the change of season.

FEATURES

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

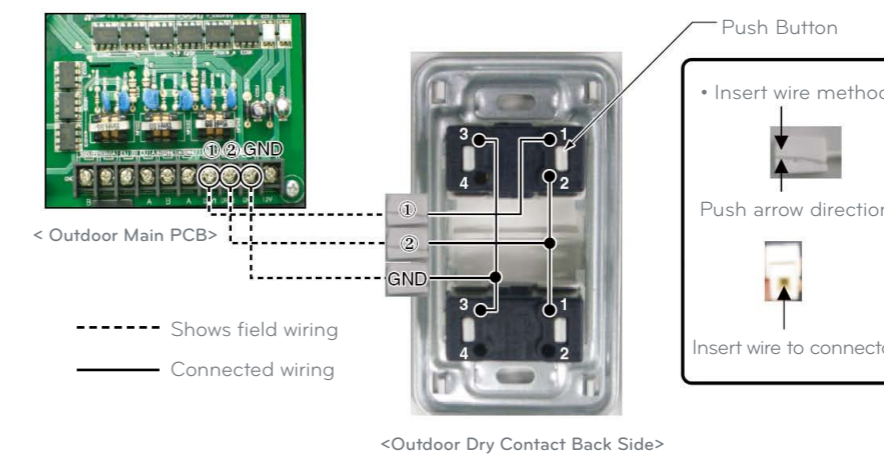


MODELS APPLIED



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.



※Communication line length can be maximum 300m, use communication line as thick as 1.25mm².

Suction Grille / Canvas

- PBSGB30
- PBSGB40
- PBSC30
- PBSC40



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 APPLIED TO

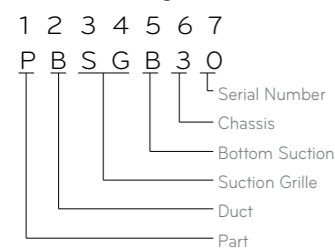
- Ceiling concealed duct _ Built-in type (refer PDB for applicable model)

ACCESSORY MODEL NAME

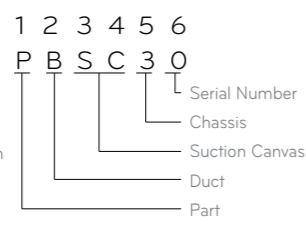
Type	Model Name	Capacity (Btu/h)					
		7K	9K	12K	15K	18K	24K
Grille	pbsgb30	✓	✓	✓	✓		
	pbsgb40					✓	✓
Canvas	pbsc30	✓	✓	✓	✓		
	pbsc40					✓	✓

DETAILS OF MODEL NAME

• For suction grille



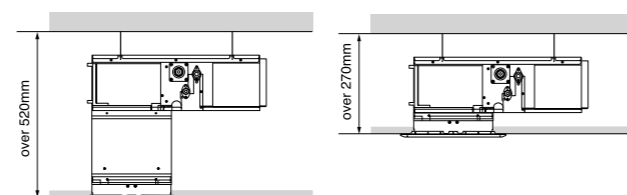
• For suction canvas



DIMENSION

	(Unit : mm)		
	A	B	C
PBSGB30	910	359	56
PBSGB40	1188	359	56
PBSC30	821	274	42-250
PBSC40	1100	274	42-250

APPLICATION



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)

Ventilation Kit (Fresh Kit) for New Cassette

- PTVK410
- PTVK420
- PTVK430



PTVK410



PTVK420

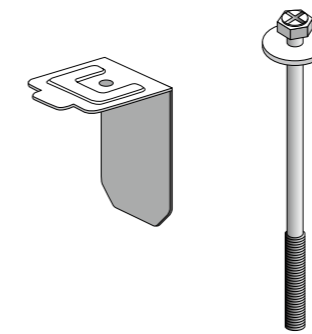


PTVK430

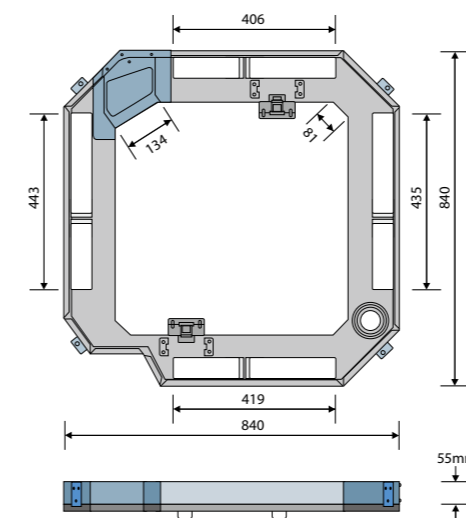
Ventilation kits (Fresh Kit) for New Cassette, New Multi V cassette and new Cassette for coming season.

ACCESSORY

- Installation Bracket
- Bolt
- Screw
- Installation manual



DIMENSION



MODELS APPLIED TO

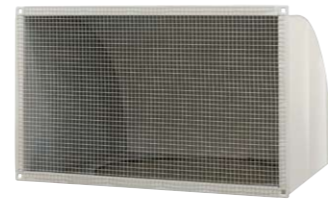
- Ceiling Cassette - 4Way (TPTN,TM)

Air Guide

- PQAGA
- PRAGX*SO



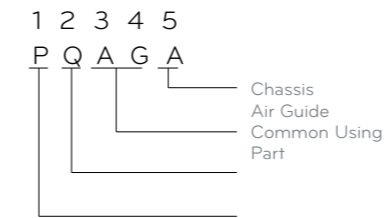
Multi V Plus II



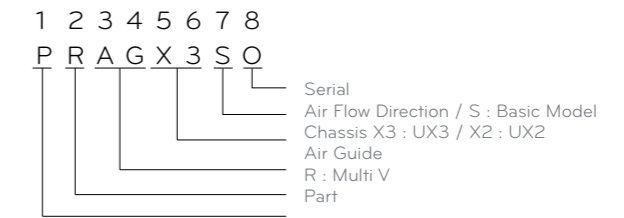
Multi V III

DETAILS OF MODEL NAME

Multi V Plus II



Multi V III



Easy air discharge at odd places.

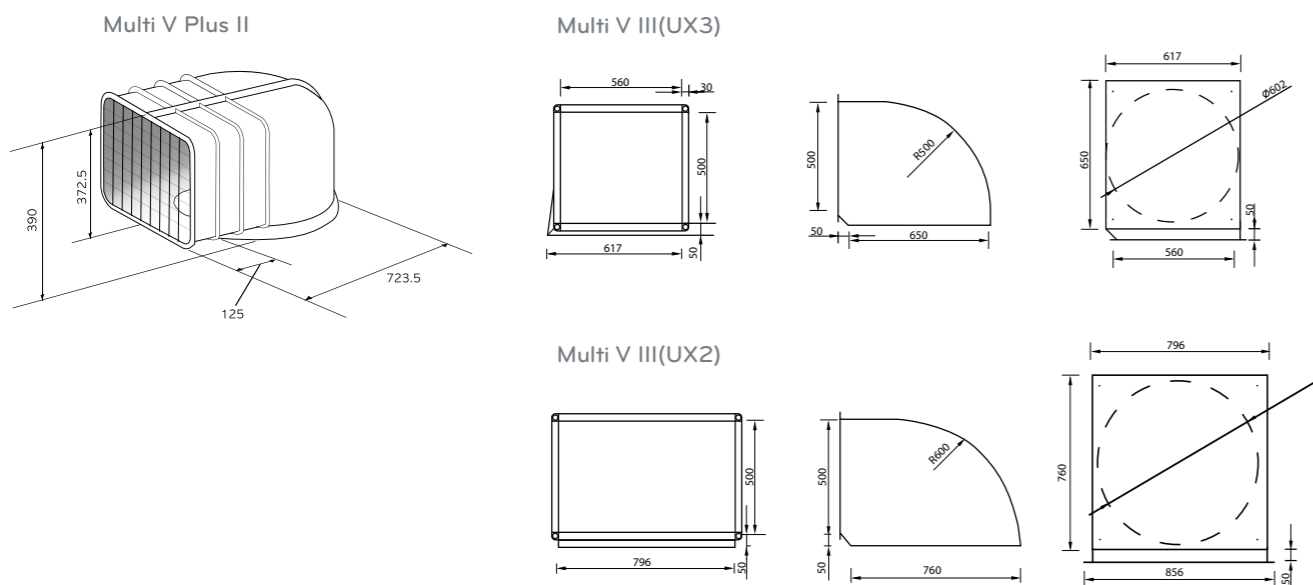
FEATURES

- 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 II type, Single A (UY, UW Chassis), Multi V III(UX2, UX3)

DIMENSION



APPLICATION



Multi V III(UX2)



Multi V III(UX3)

Heat Recovery Unit

- PRHR021
- PRHR031
- PRHR041



FEATURES

- Max. 32 indoor units can be connected by module design. (Max 8 indoor units per a branch. In case of PRHR041)
- Due to the automatic search algorithm for piping detection, easy installation
- Subcooling cycle in HR unit makes the system efficiency maximum.

21

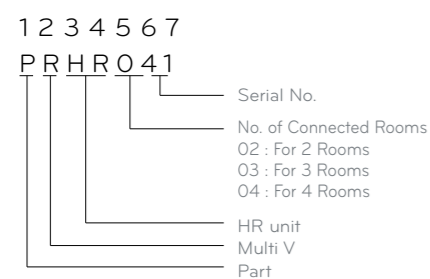
MODELS APPLIED TO



ACCESSORY MODEL NAME AND SPECIFICATION

Model Name		PRHR021	PRHR031	PRHR041		
Number of branches	EA	2	3	4		
Max. connectable capacity of indoor units(Per branch/unit)	kW	14.1/28.2	14.1/44.8	14.1/56.4		
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	20	22	24		
Dimensions(WxHxD))	mm	801x218x617	801x218x617	801x218x617		
Piping connections	Indoor Unit	Liquid	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)
		Gas	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Outdoor Unit	Liquid	mm(inch)	9.52(3/8)	15.88(5/8)	15.88(5/8)
		Low pressure	mm(inch)	22.2(7/8)	28.58(11/8)	28.58(11/8)
	High Pressure	mm(inch)	19.05(3/4)	22.2(7/8)	22.2(7/8)	
Power Supply	ø /V/Hz	1 / 220-240 / 50	1 / 220-240 / 50	1 / 220-240 / 50		

DETAILS OF MODEL NAME



DIMENSION

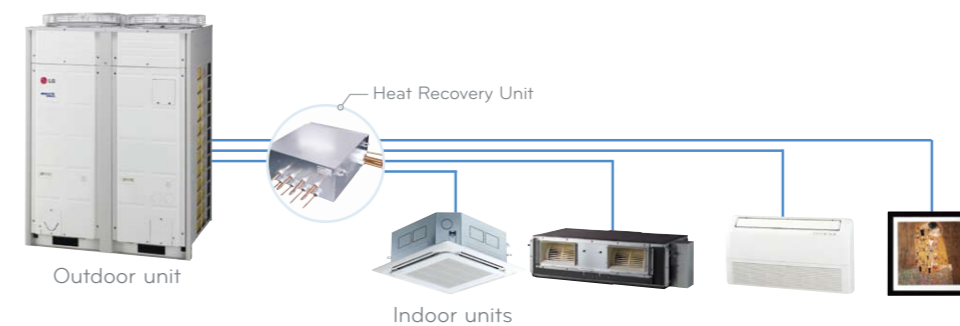
- HR unit (1EA)
- Hanging bolts M10 or M8 (4EA)
- Nut M8 or M10 (8EA)
- Flat washers M10 (8EA)
- Reducers

REDUCERS FOR INDOOR UNIT AND HR UNIT

Models	Liquid pipe	High pressure	Low pressure
Indoor unit reducer	OD9.52 O6.35		OD15.88 O12.7
HR unit reducer	OD9.52 O6.35	OD19.05 O15.88 O12.7	OD22.2 O19.05 O15.88
		OD12.7 O6.52	OD15.88 O12.7
PRHR031/ PRHR041	OD15.88 O12.7	OD28.58 O22.22 O19.25	OD22.2 O19.05 O15.88
		OD12.7 O9.52	OD19.05 O15.88
			OD15.88 O12.7

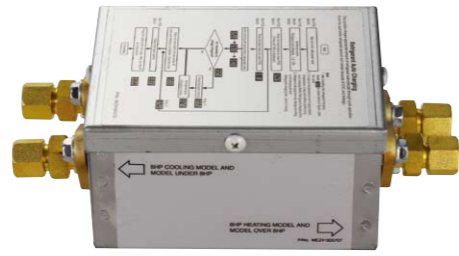
(Unit : mm)

INSTALLATION



Refrigerant charging Kit

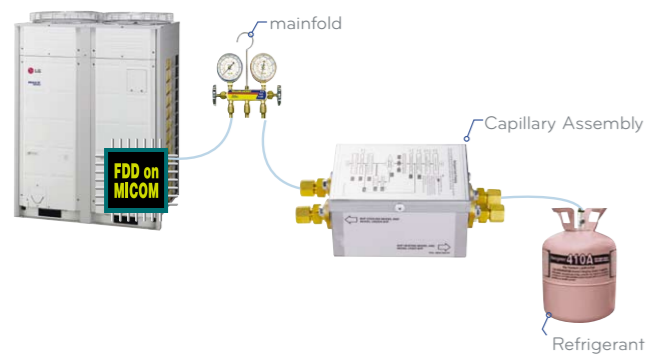
•PRAC1



PROCEDURE

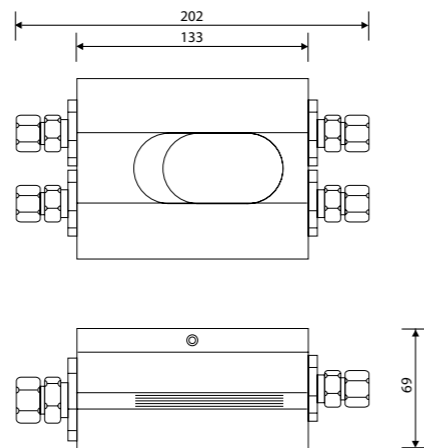
- Arrange manifold, capillary assembly, refrigerant vessel and scale
- Connect manifold to the gas pipe service valve of outdoor unit as shown in the figure.
- Connect manifold and Capillary tube. Use designated capillary assembly only.
If designated capillary assembly isn't used, the system may get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

APPLICATION



* FDD : Fault Detect & Diagnosis

DIMENSION



ERROR CONTENTS ABOUT AUTO REFRIGERANT CHARGING FUNCTION

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

Cassette Cover

- PTDCD
- PTDCD1
- PTDCM
- PTDCQ



Maintains the ceiling elegance.

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
PTDCD	PT-CDO, PT-CD1, PT-HD0, PT-HD1
PTDCD1	PT-CDA1, PT-CDC1, PT-HDA1, PT-HDC1
PTDCM	PT-UMC
PTDCQ	PT-UQC

HEADER FOR CONNECTION OF INDOOR UNITS



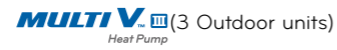
Model	Gas Pipe	Liquid Pipe	Model	Gas Pipe	Liquid Pipe
4 branch ARBL054			7 branch ARBL107		
7 branch ARBL057			10 branch ARBL1010		
4 branch ARBL104			10 branch ARBL2010		

Y BRANCH PIPE FOR CONNECTION OF INDOOR UNITS



Model	Gas Pipe	Liquid Pipe	Model	Gas Pipe	Liquid Pipe
ARBLN01621			ARBLN07121		
ARBLN03321			ARBLN14521		
			ARBLN23220		

Y BRANCH PIPE FOR CONNECTION OF OUTDOOR UNITS



Model	Connection of Gas Pipe	Connection of Liquid Pipe	Model	Connection of Gas Pipe	Connection of Liquid Pipe
ARCNN21			ARCNN31		



Model	Connection of Gas Pipe	Connection of Liquid Pipe
ARCNN41		



Model	Low Pressure Gas Pipe	Liquid Pipe	High Pressure Gas Pipe	Model	Low Pressure Gas Pipe	Liquid Pipe	High Pressure Gas Pipe
ARCNB21				ARCNB31			



Model	Low Pressure Gas Pipe	Liquid Pipe	High Pressure Gas Pipe
ARCNB41			



Model	Low Pressure Gas Pipe	Liquid Pipe	High Pressure Gas Pipe
ARBLB01621			
ARBLB03321			
ARBLB07121			
ARBLB14521			
ARBLB23220			