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2018 | MULTI V™

MULTI V™

2018

LG HVAC SOLUTION

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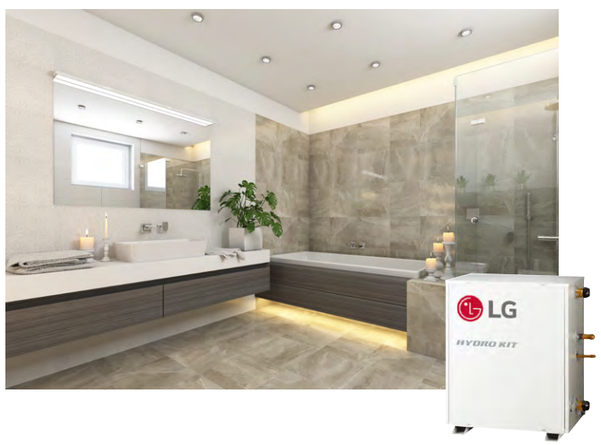


LG AIR SOLUTION

AS A TOTAL HVAC & ENERGY SOLUTION PROVIDER

* LG Air Solution production sites

The LG Electronics Air Solution Business Unit is a provider of total HVAC and energy solution. The company offers a broad portfolio of air conditioner products that are compatible with any building anywhere, including compact residences, towering skyscrapers, massive factories and giant concert halls. As a true total HVAC and energy solution provider, LG also supplies even the largest buildings and industrial facilities with central air conditioning systems such as chillers and efficient control solutions.

The history of the business unit goes back to 1968, when LG (then called GoldStar) rolled out Korea's first residential air conditioner. As the company first began making chillers for large commercial buildings in 1970, the commercial air conditioning business has grown exponentially, especially within the last 20 years. In 2008, LG sold its 100 millionth air conditioning unit, becoming the first company in the industry to reach that significant milestone. The success of LG air conditioners has allowed the company to become one of the major players in the highly competitive HVAC industry. By enhancing the industry's B2B infrastructure and finding further solutions for the HVAC sector, LG has risen to become a total HVAC solutions specialist. The company has steadily increased its sales and market share by introducing energy efficient and reliable HVAC solutions and actively pursuing new opportunities wherever they arise. This sustained, excellent performance is built on a solid foundation of global R&D and advanced manufacturing capabilities.

INFRASTRUCTURE IN EUROPE

LG Air Conditioning Academy

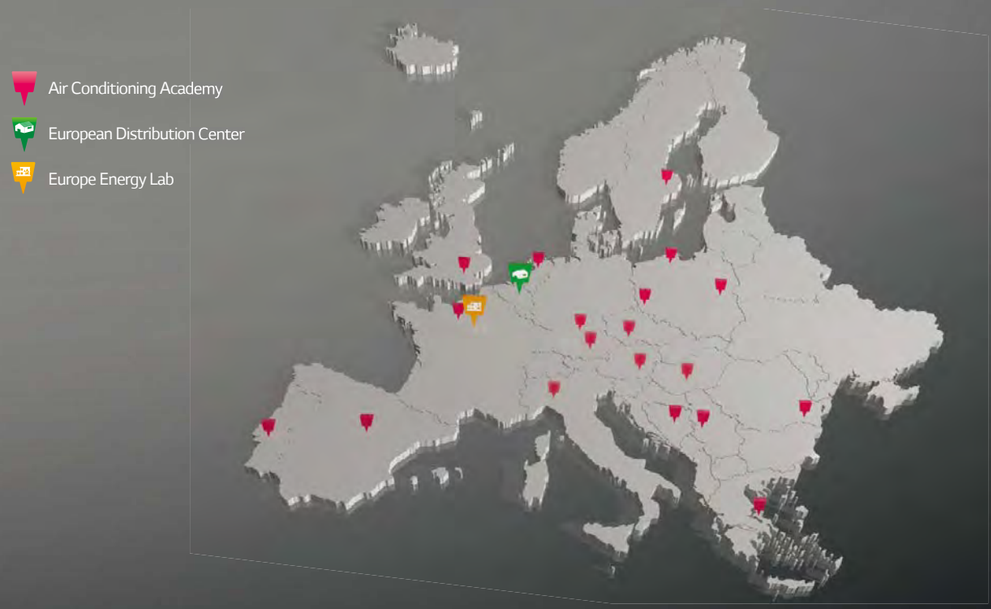
LG has set up 19 official air conditioning academies in Europe, teaching much needed skills to thousands of current industry professionals including installers, consultants, designers, sales staff and service technicians. The academy program is being used to share expertise and cultivate these HVAC experts by providing a cutting-edge technical educational experience with the newest and most advanced technology and equipment. Moreover, as LG's entire product range is installed on site, professionals can be trained in a realistic way that offers them the chance to experience the latest products first-hand.

LG Energy Lab in Europe

Committed to meet all requirements regarding energy efficiency and environmental demands, LG has been running Energy Lab. LG Energy Lab is an innovative site dedicated to commercial and residential products in heating, ventilation and the latest energy efficient air conditioning solutions. Also as a showcase, LG Energy Lab is equipped with complete monitoring and control systems. The performance of all products will be tracked and analyzed by a team of Research and Development engineers based in France and Korea, ensuring efficiency and reliability during the whole product lifecycle.

European Air Conditioning Distribution Center

LG's European Air Conditioning Distribution Center is located in Oosterhout, the Netherlands. Supplying and delivering products all over Europe, this distribution hub has contributed to smooth and rapid delivery, direct shipping for smaller orders and delivery tailored to air conditioners. The hub tries to manage inventory efficiency by taking advantage of LG EU's established inventory pool.

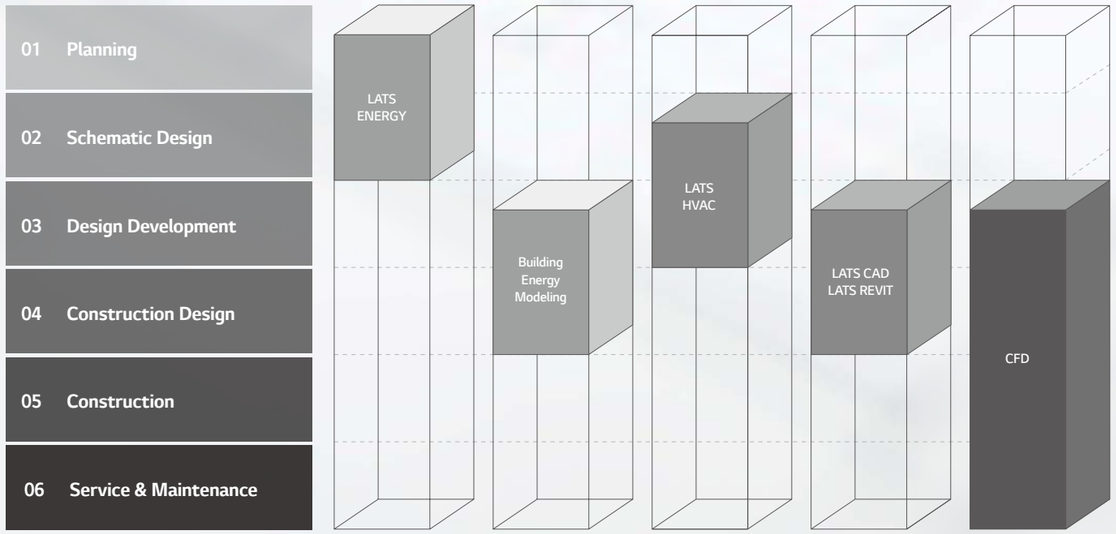


ENGINEERING CAPABILITY :HVAC TOOL & SUPPORT

From planning to service & maintenance and then to de-construction, an architectural project goes along many stages from the beginning to the end of its lifecycle. Along those stages, various engineering tools are applied to solve the diverse issues happening in each stage, with the most optimal solution possible. Due to the usage of such tools, buildings are effectively designed, built, supervised, and maintained throughout the lifecycle.
Dedicated to provide the best HVAC engineering support, LG Electronics Air-Solution Business Unit offers several engineering tools and solutions focused on HVAC, during the overall lifecycle of a building, related to the three categories: I. Draft Energy Estimation & Energy Modeling, II. Model Selection & Design, and III. Installation Environment Simulation. Among them, the LATS* Program series has been developed to offer the best and the most optimized tool for LG HVAC systems, providing our customers a faster, easier, and a more accurate way in everyday duties of Model-selection, Draft Energy Estimation & Designing, and many more.

* LATS : LG Air-conditioner Technical Solution

I	II	III
Energy Estimation & Energy Modeling	Model Selection & Design	Installation Environment Simulation

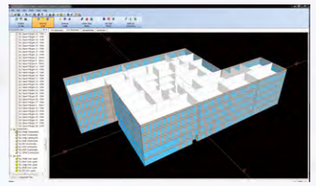


01 Draft Energy Estimation

LATS Energy
LATS Energy program is a draft energy estimation program, self-developed by LG. This program helps estimate the draft energy usage and analyzes the life cycle cost of LG VRF models during the early stage of a project.

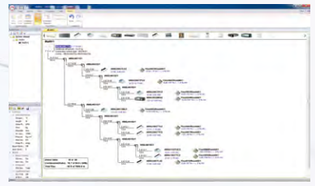
02 Building Energy Modeling

eQuest, EnergyPro, Trace700 and More
These are certified commercial programs which assess the HVAC system efficiency and building's annual energy saving for building standard or certification like LEED. LG HQ supports these programs for the project stages of Design Development and Construction Design wherein the overall designing is finished.



03 Model Selection

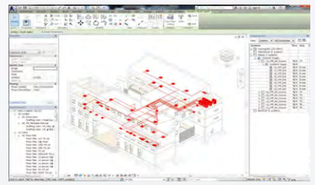
LATS HVAC
LATS HVAC is an integrated model selection program of LG HVAC products, enabling an accurate and quick selection on the best model suitable to each sites. In addition to model selection, faster estimation on refrigerant piping diameter and additional refrigerant is possible, along with auto printing of reports.



04 Design

LATS CAD
LATS CAD enables faster and a more accurate design of LG HVAC products.
Moreover, it offers not only designing, but also quotation and installation review in order to minimize problems during installation processes.

LATS Revit
LATS REVIT is developed to make 3D designing of LG HVAC products easier than the previous program. It enables engineers to check 3D images from designing stage and prevents possible issues of the installation stage.



05 Installation Environment Simulation

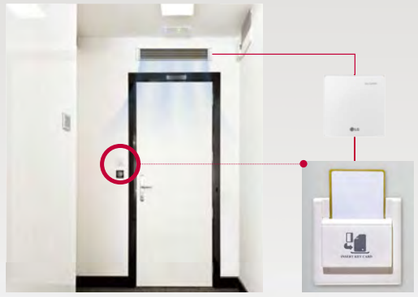
CFD Analysis
CFD Analysis is applied in areas of estimating: indoor airflow and temperature distribution while operating VRF products, outdoor airflow distribution, and noise level. By running a simulation before construction, engineers estimate possible issues and find optimal solutions of malfunction that could occur after construction.

LG CONTROL SOLUTION

MULTI V 5 offers a diverse range of effective control solutions that satisfy specific needs of each building and its user scene. These controlling systems are equipped with user friendly interface, flexible interlocking environment, energy management and smart individual controller for optimized controlling conditions and smart building management.

HOTEL

Hotel Room Solution



54kW

36kW

24kW

Integration Solution

reddot award
User Interface Design

APARTMENT

Power Distribution Solution

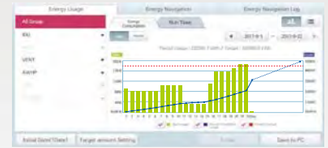
OFFICE

3rd Party BMS

Central Control Solution

Service/Maintenance

· Energy Management



· External Device

Lighting Pump Fan CO_2 Sensor Temp. Sensor

RESIDENTIAL

Smart Individual Control Solution

SMALL BUILDING

Small Central Control Solution

OUTDOOR UNIT

MULTI V 5 / MULTI V S / MULTI V MODULAR
MULTI V WATER IV (HEAT PUMP / HEAT RECOVERY) / MULTI V WATER S

OUTDOOR UNIT

LINE-UP

Unit : HP

Type	Features	Appearance	4	5	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	····	96
MULTI V 5	• Dual sensing control • Large capacity ODU (Up to 26HP) • Continuous Heating • Ocean black fin heat exchanger • Energy saving by heat recovery technology • Flexible installation with heat recovery unit and large capacity • For large space, high rise building and individual control building					●	●	●																																		
									●	●	●	●	●	●	●																												
													●	●	●	●	●	●	●	●	●	●	●	●	●	●																	
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MULTI V S	• Saves floor space • Flexible design applications - Slim, light and wide line up (4 ~ 12HP) - Combination of indoor unit (Up to 20 Units) • For Small / Medium building with up to 20 rooms		○	○																																				
			●	○●	○●																																				
						●	●	●																																		
MULTI V S Heat Recovery					●																																				
MULTI V WATER IV Heat Pump / Heat Recovery	• High efficiency system regardless external conditions • Indoor installation product • Quiet unit noise level (No fans) • For Water sourced system, High rise building and Aesthetic building					●	●		●			●																														
													●	●		●	●		●			●																					
	• Cooling and heating at the same time • Minimizing energy cost by water sourced heat recovery system • For individual control building • For Water sourced system, High rise building and Aesthetic building																				●	●		●	●		●															
																							●	●	●		●	●		●													
MULTI V WATER S	• Easy to install additional capacity • Compact size • Light weight • For Residential and Commercial building				○																																				
MULTI V M																																									

● 380V, 3Ø ○ 220V, 1Ø

OUTDOOR UNIT KEY FEATURES

MULTI V 5

MULTI V™ BRAND HISTORY

From the moment when LG introduced Korea's first residential air conditioner in 1968, the company has continuously enhanced its technological innovation and credibility. As a result of sustained improvement, LG VRF launched the first generation of MULTI V in 2006 and achieved significant development. With world's top class compressor and innovative technology competency applied on every part, cycle and controlling solutions, it has evolved to be one of the world's most efficient and reliable VRFs.

Following the first and second generations with Inverter technology and non-ozone depleting refrigerant, MULTI V III has advanced its efficiency with diverse cutting-edge technologies such as HiPORTM that directly returns oil to compressor and Vapor Injection that allows double compression by adding mid-pressure refrigerant. As acknowledged by the Eurovent Certification, the innovative technologies of 4th generation secured MULTI V brand the product leadership based on efficient system like Smart Load Control that controls operational load according to external temperature and other technologies that are optimized to manage refrigerant and heat exchange for all cooling, heating and part load operations. Moreover, MULTI V developed wide range of VRF line-up that could satisfy various types and size of building; MULTI V S is the VRF with side discharge, designed for small to mid-sized building and MULTI V WATER is the water-cooled VRF solution with variable water flow controlling technology.

In 2017, the time has arrived for the ultimate VRF system, MULTI V 5. This generation has fully improved its technological potential with ever powerful and reliable yet economical LG's Ultimate Inverter Compressor, Ocean Black Fin with the most effective corrosion resistance performance and biomimetics technology-applied, enlarged fans. At the same time, the Dual Sensing Control offers users the most pleasant environment while minimizing the unnecessary energy loss with system that senses both the temperature and humidity to efficiently manage cooling, heating and part load operations.

With MULTI V 5 that has been solely designed for the ultimate efficiency, performance, flexibility, comfort and control, we are highly confident to bring the ultimate pleasant air experience.

OUTDOOR UNIT KEY FEATURES

MULTI V 5

DUAL SENSING CONTROL

The cooling load is based on the amount of both sensible heat load and latent heat load. Most importantly, the cooling load is keen to, and thus, greatly affected by external humidity, rather than the outdoor temperature. For this reason, MULTI V 5's Dual Sensing Control applied function senses both temperature and humidity and applies sensed data for load control in order to obtain in-depth understanding of sensible heat load and latent heat load. This helps preventing excessive cooling load supply and offers the most pleasant and comfortable cooling environment the users want combined with reduction in energy consumption.

Smart Load Control (SLC)

This comprehensive understanding of environmental conditions allows optimized energy efficiency and maximized indoor comfort level.

ESEER
Up to 21%
(vs. standard mode at 26HP)

Comfort Cooling

This maintains operation at mild cooling mode around set temperature without stopping in between operations for maximized user comfort.

Improved Indoor Comfort

OUTDOOR UNIT KEY FEATURES

MULTI V 5

ULTIMATE INVERTER COMPRESSOR

As the core technology of the air conditioning system, the Ultimate Inverter Compressor of MULTI V 5 boasts its ultimate efficiency and durability, designed based on the unique technology and innovation of LG HVAC.

All Inverter
Provide high efficiency with low vibration and low noise

Six By-pass Valves
Prevent compressor damage due to excessively compressed refrigerant more efficiently than 4 by-pass valves

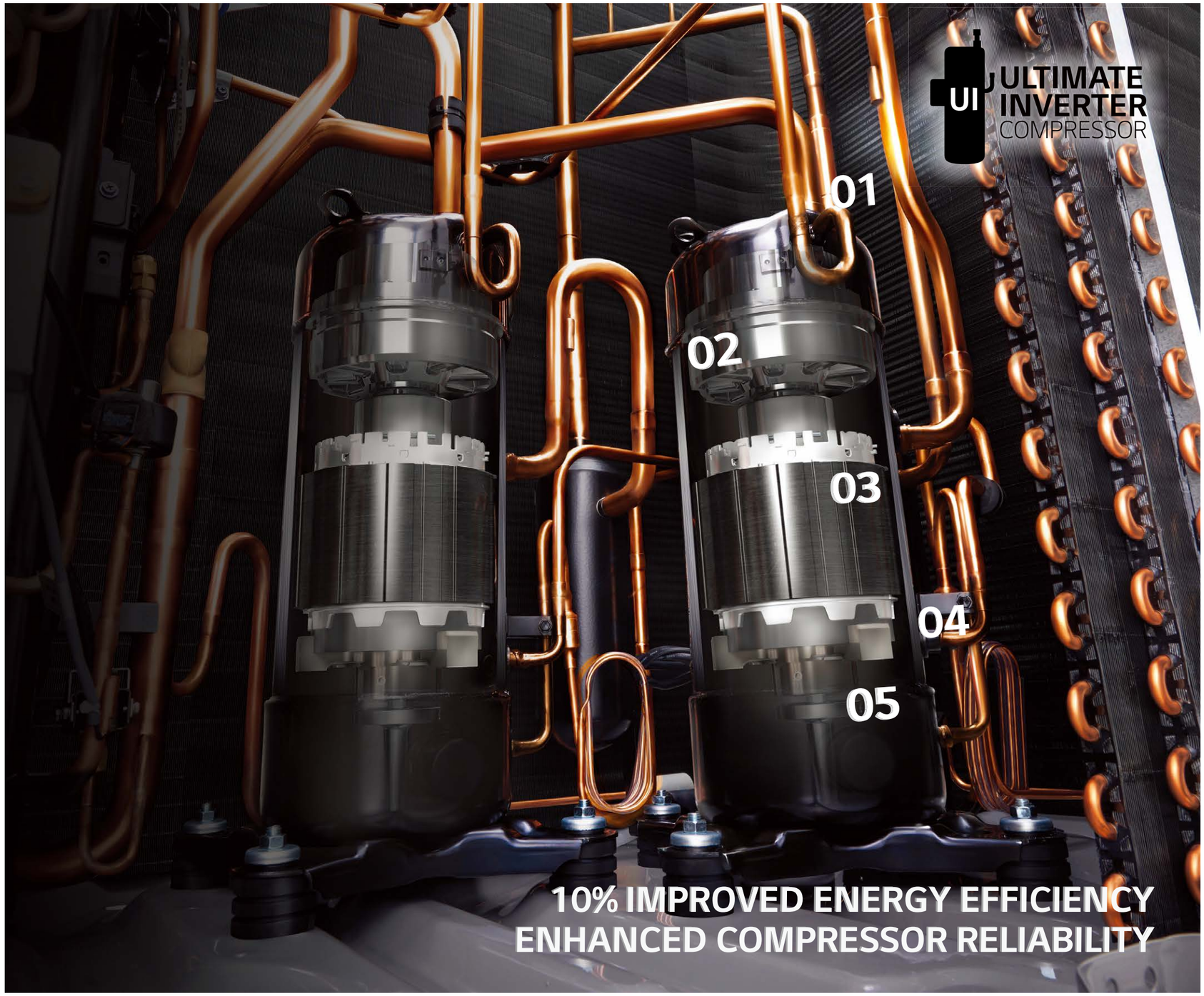
01. Vapor Injection
Maximize heating capacity via two-stage compression

02. Enhanced Bearing with PEEK Material
Newly invented system motivated by PEEK (Polyetheretherketone) bearing used for aero engine to increase operation range and durability

03. Wide Operation Range from 10 to 165Hz
Improved part load efficiency at all operation ranges

04. HiPOR™ (High Pressure Oil Return)
Resolve compressor efficiency loss caused by oil return

05. Smart Oil Management
Oil level detection in real time



OUTDOOR UNIT KEY FEATURES

MULTI V 5

LARGE CAPACITY ODU WITH BIOMIMETICS TECHNOLOGY FAN

Large Capacity Outdoor Unit

Enhanced core parts like biomimetics technology-based fans, 4-sided heat exchanger as opposed to 3-sided heat exchanger of previous model and compressor with increased efficiency and capacity allow large capacity for outdoor units. A single unit of MULTI V 5 can provide up to 26HP.

Humpback Whale Design

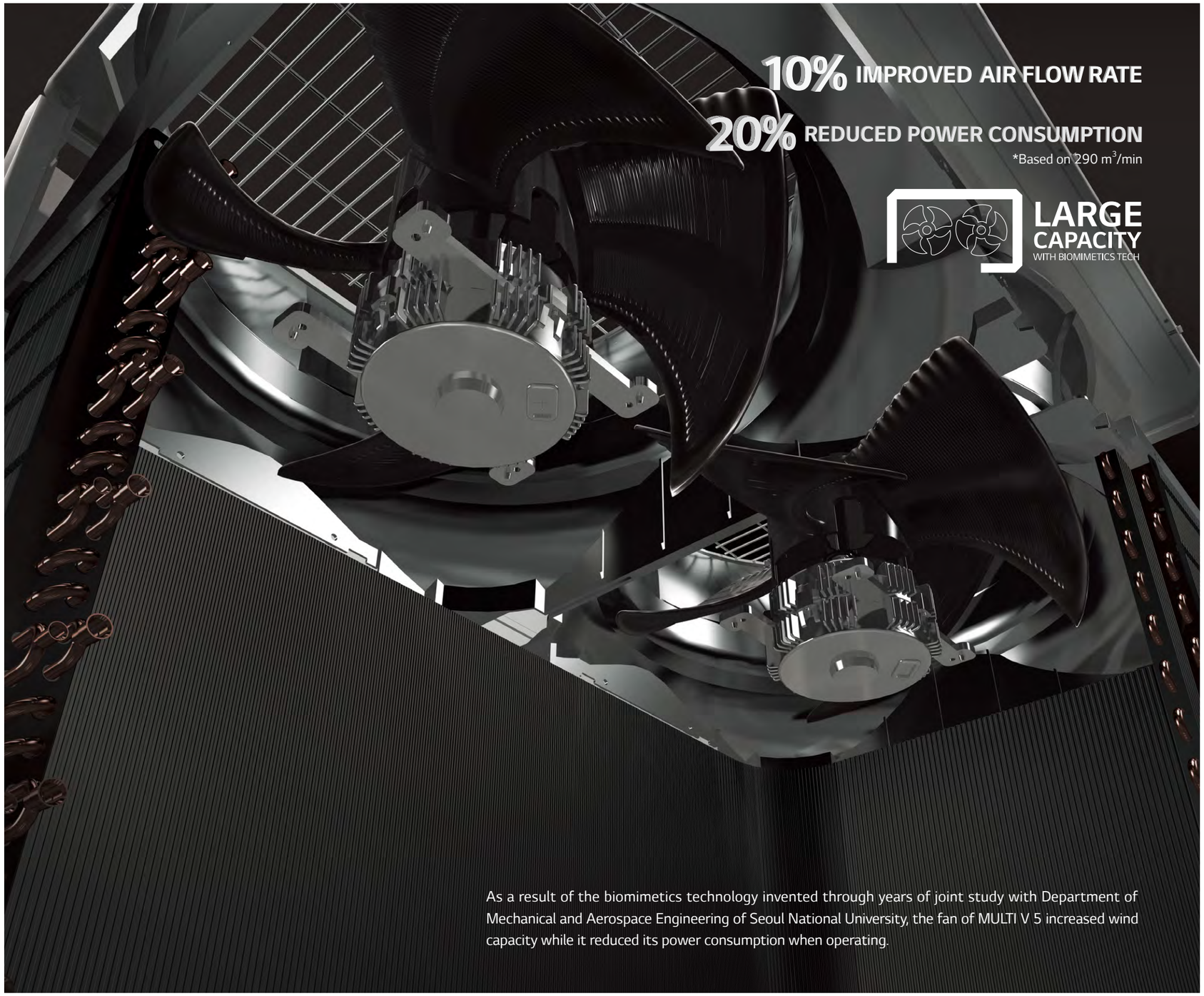
Inspired by the bumps on the humpback whale's flipper, the tubercles on the back side increased wind power by reducing flacking.

Clam Shell Pattern

Like the clam shell textures, the range difference created by moire pattern reduced noise level.

Increased Air Flow Rate

With extended shroud, discharged air current is stabilized and power consumption is reduced.



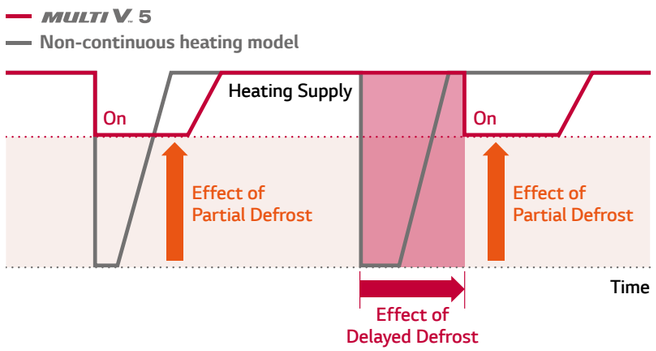
As a result of the biomimetics technology invented through years of joint study with Department of Mechanical and Aerospace Engineering of Seoul National University, the fan of MULTI V 5 increased wind capacity while it reduced its power consumption when operating.

OUTDOOR UNIT KEY FEATURES

MULTI V 5

CONTINUOUS HEATING

Improved technologies such as Dual Sensing Control, Partial Defrost and Smart Oil Management enhance Continuous Heating for increased heating capacity and indoor comfort. The delayed and partial defrost technologies minimize unnecessary operational consumption to provide consistent heating.



Heating Operation Time Per Day
Up to 11%

Power Input
Down to 7%

* LG internal test result
* Test condition : Outdoor 2/1℃, Indoor 20/15℃, Humidity 83%

Dual Sensing Control

Partial Defrost

Smart Oil Management

OCEAN BLACK FIN
HEAT EXCHANGER

Improved technologies such as Dual Sensing Control, Partial Defrost and Smart Oil Management enhance Continuous Heating for increased heating capacity and indoor comfort. The delayed and partial defrost technologies minimize unnecessary operational consumption to provide consistent heating.

CERTIFICATE OF VALIDATION

Certificate Number / Report Reference	4786735320-1 / 4786735320-15-1
Issue Date:	2015-03-25
Expiration Date:	2018-03-24
Issued to:	LG Electronics Inc 76 Seongsan-dong, Changwon-Si, Gyeongnam, 641-713, Korea
Claim Validated:	Aluminum Fin & Copper Tube Heat Exchanger employed on the Outdoor Unit of Air-Conditioners. Simulating the corrosive load for 27 years of exposure in a more severe traffic environment with salt contamination(Test Method B).
Tests:	Test method B of ISO21207 : Salt contaminated condition + severe industrial or traffic environment
Standards / Regulations:	ISO 21207, 6.2 & Annex A LG(65)-E-8148

This certificate and the claim validation expire on the expiration date listed above. UL validated the claim based upon criteria defined by the client. Client's use of the validated claim on or in connection with the product is and shall remain Client's representation that the claim is true and accurate. UL neither selected the samples nor determined whether the samples were representative of production units. The test results apply only to the actual samples tested. UL is not responsible for the scope of the tests performed or for the accuracy of test data generated by third parties. Please see test report for full details including test standards.

This certificate in no way conveys or implies Listing, Classification or Recognition or other certification by UL and does not authorize the use of UL Listing, Classification or Recognition Marks on or in connection with the product. The validated claim relates solely to product performance and in no way conveys or implies evaluation of the safety of the product identified above.

Churlbae Kim
Engineering Leader
Commercial & Industrial

UL Korea Ltd.
26th Fl. Gangnam Finance Center, 737
Yeoksam-dong, Gangnam-gu, Seoul, Korea

Ocean Black Fin

* Test Method B Simulation Validated
(Test condition: Salt contaminated condition +severe industrial/traffic environment (NO_2/SO_2))
* Based on 1,500 UL test hours

MULTI V 5

CONSULTANTS & HVAC DESIGNERS

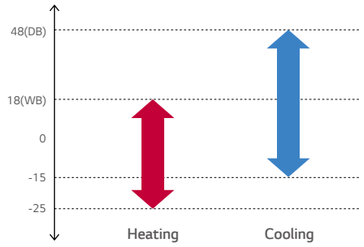
From accurate 3D-based building modeling to strong system capability regardless of the building size and climate conditions, MULTI V 5 offers the most efficient and flexible installation environment for consultants and HVAC designers. Indeed, MULTI V 5 is the most reasonable HVAC system that has achieved the best efficiency through LG's enhanced inner parts, operational cycle and controlling technology.

01 Improved designing effectiveness and accuracy via LATS Revit, the BIM application

LG provides 3D-based BIM simulation tool, LATS Revit, in order to offer product selection, positioning and piping from installation, interference check to correction phases based on systematic consideration of the load. This enables the easiest, yet the most accurate system modeling support.

02 Applicable to various climate conditions and purposes based on wide operational range for both heating and cooling operations

Even in the extreme climate situations, MULTI V 5 can perform stable heating and cooling operations. Due to LG's improved inner parts and cycle technology, it can perform heating operation at extremely cold temperature as low as -25C. For cooling performance, MULTI V 5 can operate from -15°C to 48°C. With wide operational range, it can perfectly perform heating operation in cold environment, making the product adequate for uses in specialized venues like server rooms.



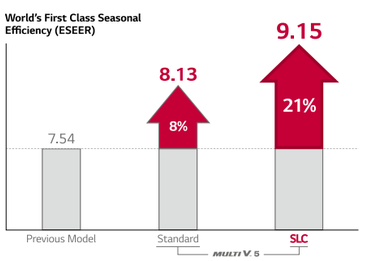
03 Flexible construction design available due to long piping technology

Through the world's best class piping technology MULTI V 5 provides the perfect solution for various types of building with diverse size and purposes. The longest piping length offered by MULTI V 5 is 225m and height difference between outdoor unit and indoor unit stretches up to 110m.

Total Piping Length	1,000m
Actual longest piping length	225m
Longest piping length after 1st branch (conditional application)	40m (90m)
Height between ODU ~ IDU	110m
Height between IDU ~ IDU	40m
Height between ODU ~ ODU	5m

04 The most economical solution with the world's top class energy efficiency

Improved reliability based on LG's Ultimate Inverter Compressor and other core parts, as well as the most developed controlling technology due to optimal cycle operation and Dual Sensing Control that recognizes both the temperature and humidity achieved the world's best class seasonal efficiency (ESEER) of 9.15. As a result, this enables the most economical system capability for MULTI V 5 in comparison to any other existing HVAC systems.



* Comparison based on 10HP in cooling mode

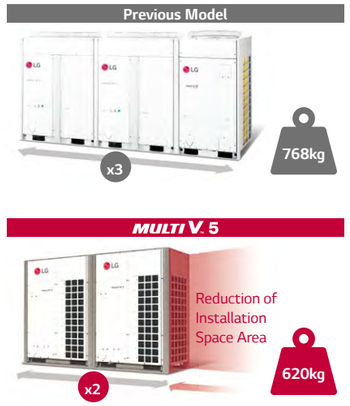
MULTI V 5

INSTALLERS

Due to increased capacity provided by single outdoor units, installation became simpler with reduced number of outdoor unit combination. Moreover, solutions connected to and operated by smart devices significantly shortened physical hours required for test run, diagnose and monitoring of multiple services while making these controlling more accurate.

01 Increased installation convenience due to large capacity units reducing number of outdoor units required for combination

By providing up to 26HP for single unit line up, MULTI V 5 decreases the total number of required outdoor units in order to ultimately simplify installation process, when compared to previous models. For example, previous system required a combination of a 20HP outdoor unit, a 18HP outdoor unit and a 10HP outdoor unit to run a total of 48HP. For MULTI V 5, however, only 2 outdoor units with each providing 24HP can cover the same amount. This significantly reduces installation hours, especially those that used to take long time such as using crane to properly place outdoor units on the rooftop.



02 Simple and easy installation and service with Mobile LGMV

With LGMV, the smarter SVC application, hours and resources spent for installation are significantly reduced and more accurate installation and service can be offered.

Auto test run

Mobile application allows automatic address setting and test run report releasing.

Refrigerant diagnose solution

By regularly checking the amount of refrigerant, it automatically reloads if current amount is not enough.

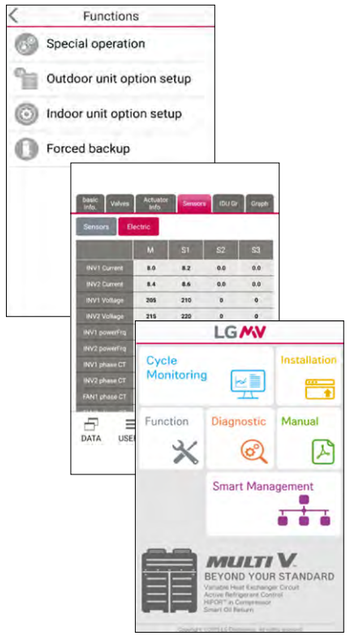
Easier setting for installers

Unlike before when set up had to be done via DIP Switch of Outdoor unit, installers can simply manage setting via mobile app for MULTI V 5. Indeed, settings for SLC steps, Dual Sensing Control and outdoor unit fan's maximum RPM control can be easily managed via LGMV.

Smart management

By checking test run history, black box review and other previous records, site information can be managed efficiently.

*LGMV application is available for Android and iOS (iphone/ipad)



MULTI V 5

BUILDING OWNERS

With increased reliability of core parts such as compressor and heat exchanger, as well as high operational efficiency, building owners can significantly reduce operational costs in comparison to other systems. At the same time, large capacity outdoor units minimize installation space which eventually allow better use of the floor space. Moreover, MULTI V 5 prevents overuse of the operational costs by planning and consuming the projected monthly energy usage.

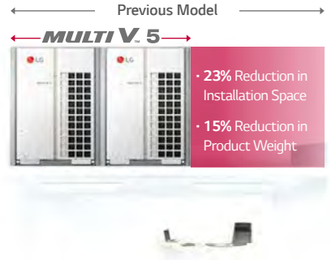
01 Corrosion resistance via Ocean Black Fin

Protection certified by UL (Underwriters Laboratories), LG's exclusive Ocean Black Fin is applied on the heat exchanger of MULTI V 5 in order to perform even in corrosive environments. The protection from various corrosive external environments such as seaside with high salt contamination and industrial cities with severe air pollution caused by fumes from factories keeps MULTI V 5 operating without breakdown.

Ocean Black Fin

02 Minimized installation footprint via large capacity outdoor units for flexible usage of the saved floor space

MULTI V 5 provides up to 26HP for single unit line up. Considering that a total of 260HP is being installed, the total installation space is saved up to 23% while the overall product weight decreases up to 15% in comparison to previous model. This eventually resulted in the maximized use of the saved floor space. Moreover, reduced product weight of MULTI V 5 makes installation easier with less limitation on product weight installed on the building's rooftop.

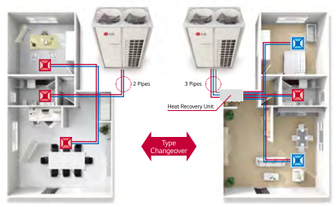


03 Operational costs management by presetting energy consumption

Energy management function allows MULTI V 5 to preset monthly energy usage and consume what has been previously planned. By analyzing and comparing previous consumption and planned energy usage for the month, overuse of the HVAC system operational costs can be prevented.

04 Easy building remodeling with Integral system that offers both the Heat Pump & Heat Recovery

MULTI V 5 offers HVAC solution with integrated system that offers both the Heat Pump and the Heat Recovery Systems.
Even if the site has been previously installed with Heat Pump System, user can easily replace it with Heat Recovery System or Hot Water Solution when necessary, through simple piping construction which eventually allows more rooms for future remodeling plans.



Heat Pump System | Heat Recovery System

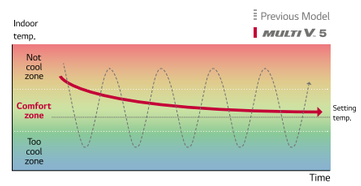
MULTI V 5

END USERS

LG's inverter technology and capability to actively respond to the building's both internal and external environment allow users to quickly arrive at the desired ambient and systematically maintain such condition. Moreover, users can control the indoor environment remotely via smartphone from wherever and whenever. Lastly, new Standard III Remote Controller with simple user interface and premium design provides users the optimal controlling experience.

01 More comfortable cooling environment via Dual Sensing

With the performance of LG's Ultimate Inverter Compressor MULTI V 5 can quickly approach at user's desired temperature. At the same time, the dual sensing technology controls and maintains indoor temperature pleasantly based on its recognition of both the temperature and humidity in order to offer the optimal user comfort.



02 Continuous heating operation

Due to improved technologies of MULTI V 5 such as delayed defrost via Dual Sensing Control, partial defrost and smart oil management, users can enjoy pleasant and comfortable indoor environment with no stopping of heating operations in between.

CONTINUOUS HEATING

03 Optimal controlling environment with new Standard III Remote Controller

MULTI V 5's new wired remote controller offers simple and easy controlling experience via simplified user interface and 4.3-inch large colored LCD screen. Moreover, it provides diverse information such as indoor temperature, humidity, cleanliness and real-time check on energy consumption.

MULTI V 5 Certified to Meet New EUROVENT Efficiency Regulations

The MULTI V range has always been at the forefront of energy efficiency. LG takes customers' concerns about energy savings very seriously. The company also strives to protect the environment by continuously improving MULTI V technology, thereby reducing its carbon footprint.

In European Union countries, the energy efficiency of variable refrigerant flow (VRF) products has become a policy of its own. While European policymakers encourage technology improvements of VRF products, they also recently set minimum efficiency boundaries. This is to ensure that less energy-efficient VRF products are no longer sold, while environmentally friendly VRF units are promoted. As a result, beginning in 2018, VRF products will have to meet minimum energy efficiency standards, also taking into account the seasonal operation of the product in both heating and cooling modes.

Preserving the environment is LG's top priority, and MULTI V 5 will meet the stricter efficiency standards from day one. As a company, LG is pleased that mandatory regulations on energy efficiency will allow easier comparisons between manufacturers offering similar products. Efficiency assessments will be done on an equal footing, thus allowing customers to make informed choices measured according to European regulations and standards. However, LG's transparent communication regarding the energy performance of MULTI V 5 units does not stop there. MULTI V 5 will also have its performance certified through independent third party organizations, such as Eurovent certification for VRF.

MULTI V 5 performances will be assessed and certified so LG customers will be able to make the most of national incentive policies that require certified data when implementing VRF technology. Eurovent certification for MULTI V 5 will allow customers to accelerate their business and to reduce their workload to minimal levels. Eurovent certification for MULTI V 5 will be even more important as the EU rules for the energy efficiency of VRF products do not require energy labeling to be displayed with the units. However, designers and construction companies consulting the Eurovent database will find information about the energy performance of MULTI V 5 at a glance.

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

5 MAIN FEATURES

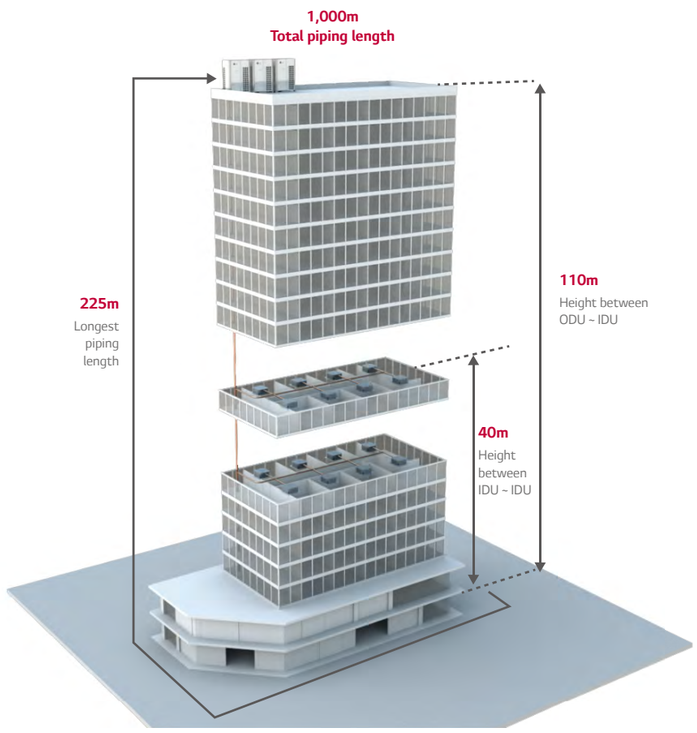
- ULTIMATE EFFICIENCY
- ULTIMATE PERFORMANCE
- ULTIMATE COMFORT
- ULTIMATE FLEXIBILITY
- ULTIMATE CONTROL
- HEAT RECOVERY

OUTDOOR UNIT KEY FEATURES

MULTI V 5

Due to improved supercooling circuit and refrigerant controlling technologies, MULTI V 5 allows users to install world's best class piping lengths, which results in more flexible installation design.

Piping length



Piping capabilities

Total Piping Length	1,000m
Actual longest piping length (Equivalent)	200m (225m)
Longest piping length after 1st branch (conditional application)	40m (90m)
Height between ODU ~ IDU	110m
Height between IDU ~ IDU	40m
Height between ODU ~ ODU	5m

ULTIMATE EFFICIENCY

LG's Ultimate Inverter Compressor

The newly designed bearing of the Ultimate Inverter Compressor allows low-frequency operation at 10 Hz from the previously lowest speed at 15 Hz, increasing the ultimate efficiency and reliability of MULTI V 5.

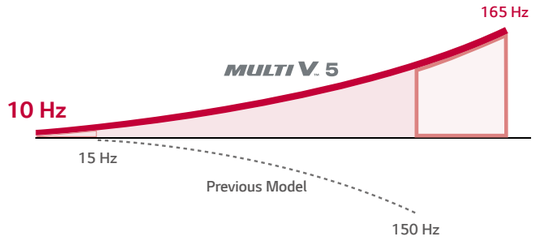
ULTIMATE INVERTER COMPRESSOR

Vapor Injection

- Maximize heating capacity via two-stage compression
- Provide powerful heating in low temperature conditions
- Improve energy efficiency and heating performance

Extended Compressor Speed from 10 Hz

- Increase part load efficiency at all operation ranges
- Rapid operation response
- Capable of reaching required temperature quickly



Enhanced Bearing with PEEK Material for Increased Durability and Reliability

- Applied newly invented scroll system driven by PEEK (Polyetheretherketone) bearing used for aero engine
- Can operate longer without oil supply
- Increase durability and reliability

Concentration Motor

- 10% increase of magnetic flux density

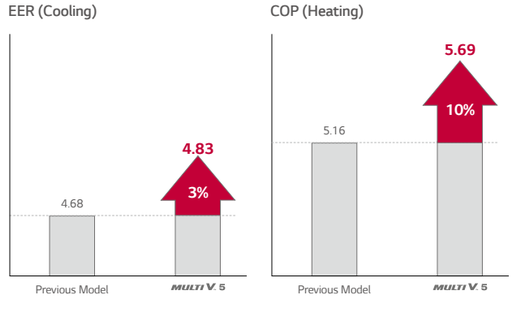
HiPOR™

- Minimizing energy loss with direct oil return

Smart Oil Management

- Measuring the presence of oil through the oil sensor

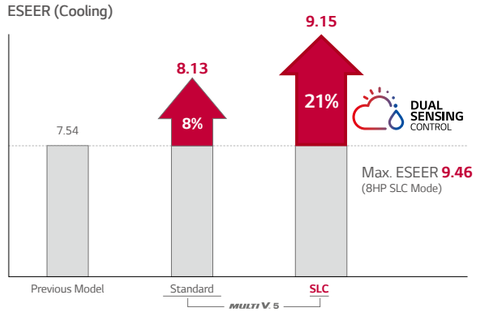
World's First Class, Rated Efficiency (Eurovent Test Condition)



* Comparison based on 10HP in cooling mode

* Comparison based on 10HP in heating mode

World's First Class Seasonal Efficiency (ESEER)



* Comparison based on 10HP in cooling mode

MULTI V 5

ULTIMATE EFFICIENCY

Smart Load Control (SLC)

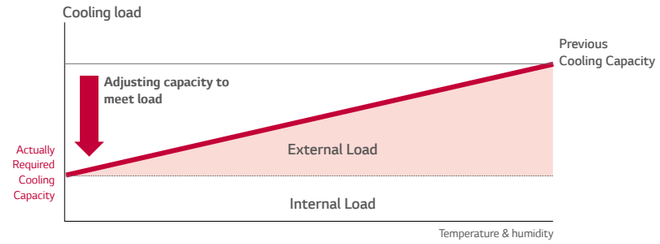
Smart Load Control function enables comprehensive understanding of environmental conditions in order to optimize energy efficiency and maximize indoor comfort level. This technology allows active control of discharge refrigerant temperature which eventually increases the ESEER up to 21% for maximum 26 HP and 15% for average outdoor units in comparison to the previous models.

Increased Energy Efficiency (SLC ESEER)

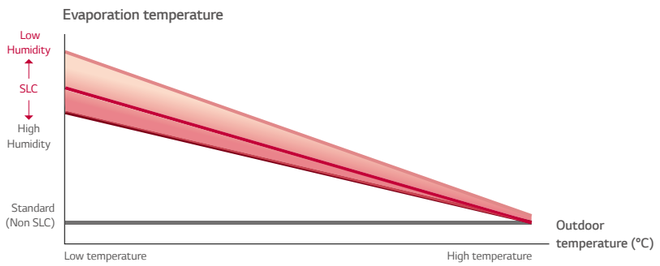
Up to 21%
Up to 15% (High humidity) ~ **31%** (Low humidity)

DUAL SENSING CONTROL

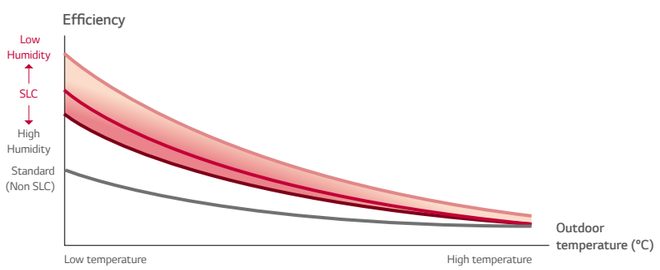
For low temperature, lower load and capacity are required



Lower load and capacity need higher evaporation temperature



Higher evaporation temperature results in higher efficiency

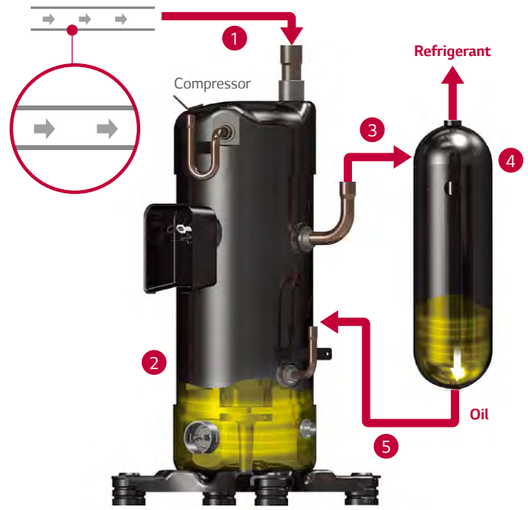


* Low humidity: Below 50% / Standard: 50~70% / High humidity: 70~100%
* Setting is available in indoor (Standard III Remote Controller)

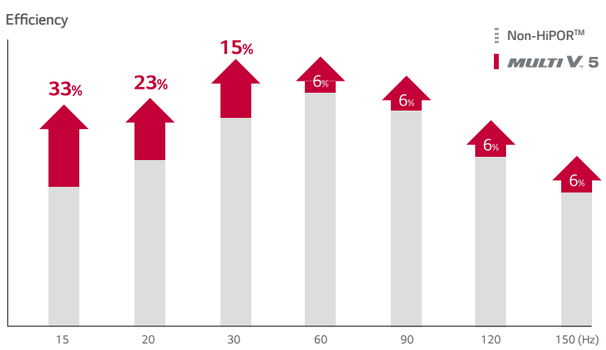
HiPOR™ (High Pressure Oil Return)

HiPOR™ technology enables oil to return directly into the compressor, instead of returning through the refrigerant suction pipe in order to minimize energy losses while maximizing the efficiency of compressor. The previous model compressor that caused loss of low pressure refrigerant return to the refrigerant pipe. However MULTI V 5 maximizes reliability and efficiency of the compressor by reducing high pressure refrigerant loss.

Process comparison



Efficiency comparison



* Rating condition (Tc=54.4 °C, Te=7.2 °C)

OUTDOOR UNIT KEY FEATURES

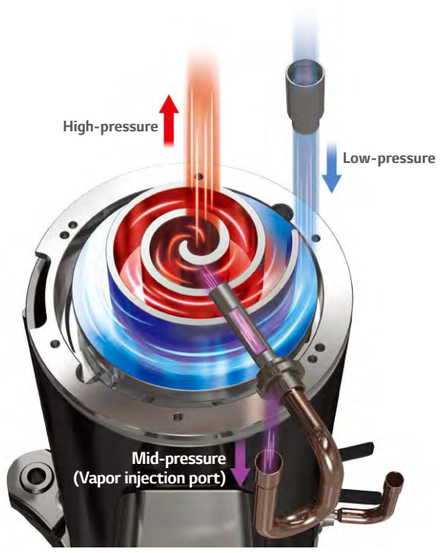
MULTI V 5

ULTIMATE EFFICIENCY

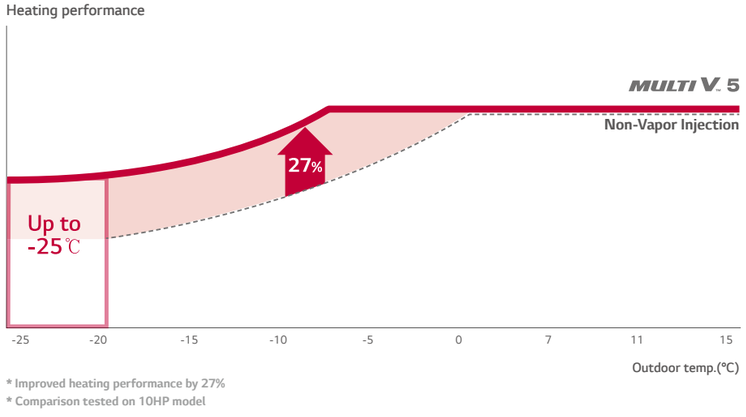
Vapor Injection

Vapor Injection uses a two-stage compression effect, which is designed to provide efficient heating in very cold environments. Combined with HiPOR™, this system boosts heating performance and enhances heating temperature range.

Technology mechanism



Performance comparison

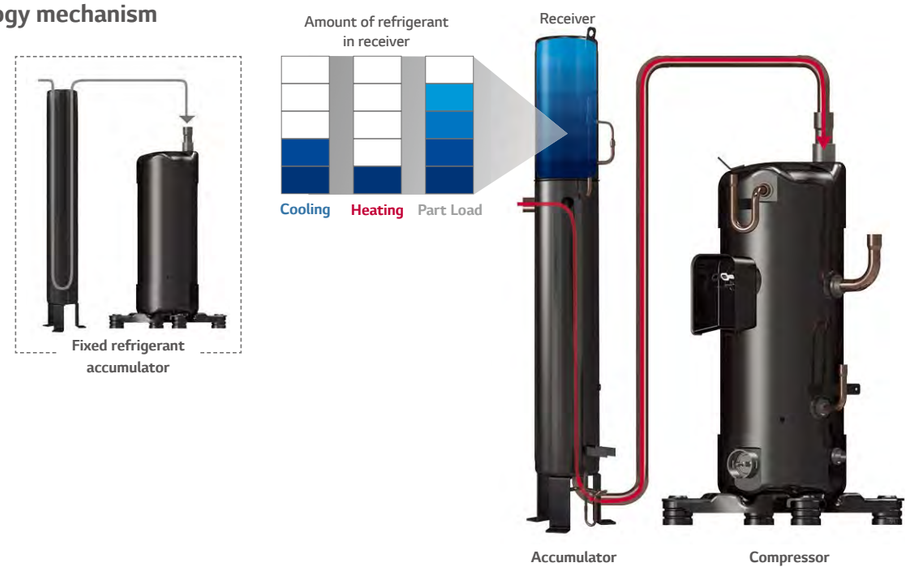


* Improved heating performance by 27%
* Comparison tested on 10HP model

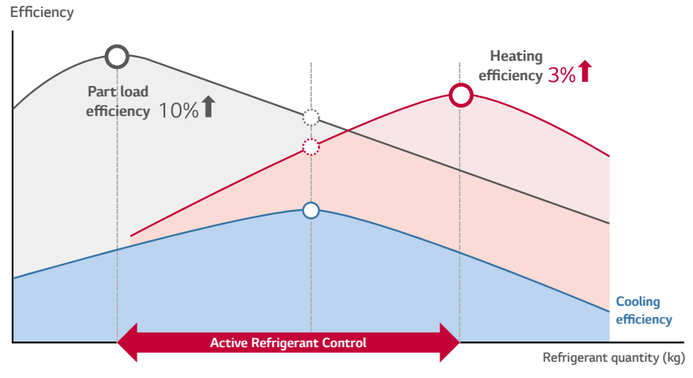
Active Refrigerant Control

Active Refrigerant Control monitors and adjusts the quantity of circulating refrigerant during each cycle to maximize efficiency in real time when it runs cooling and heating operation, as well as the part load operation. This five step control leads to an improvement in energy efficiency, unlike when fixed amount of refrigerant is provided to the compressor regardless of operation mode, which limits optimal efficiency for each operation.

Technology mechanism



Efficiency performance



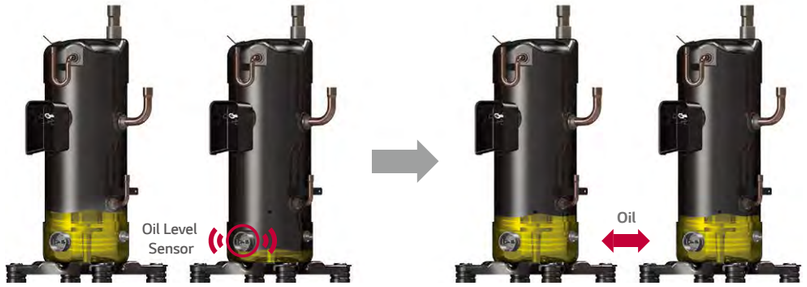
MULTI V 5

ULTIMATE EFFICIENCY

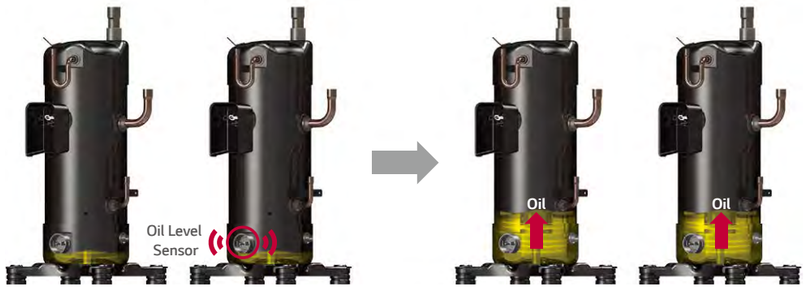
Smart Oil Management

Compressor reliability and Efficiency are improved with an oil sensor that allows oil balancing and oil return. The value of the capacitance between the electrodes can measure the presence of oil in real-time. This real-time measurement of oil in the compressor reduces energy loss, providing consistent heating for the indoor environment. With Smart Oil Return, heating operation time per day has increased up to 12% in comparison to previous model.

Auto Oil Balancing

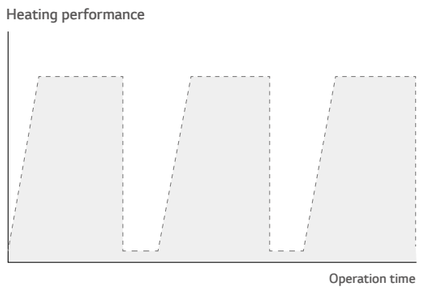


Smart Oil Return

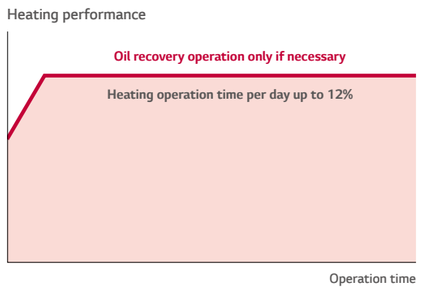


Operation time comparison

• Non-oil sensor model



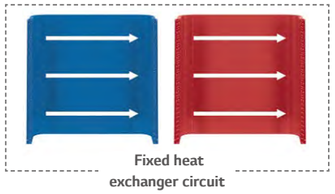
• MULTI V 5

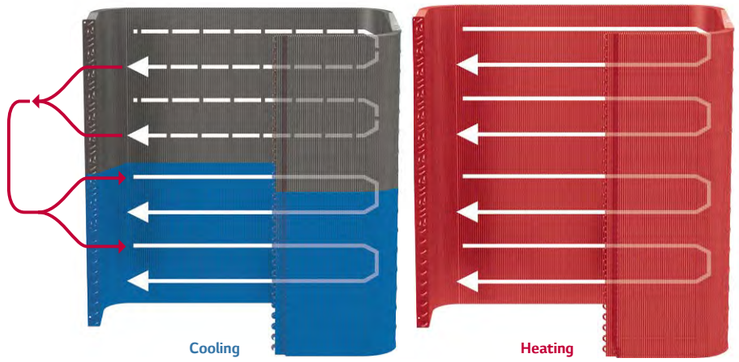


Variable Heat Exchanger Circuit

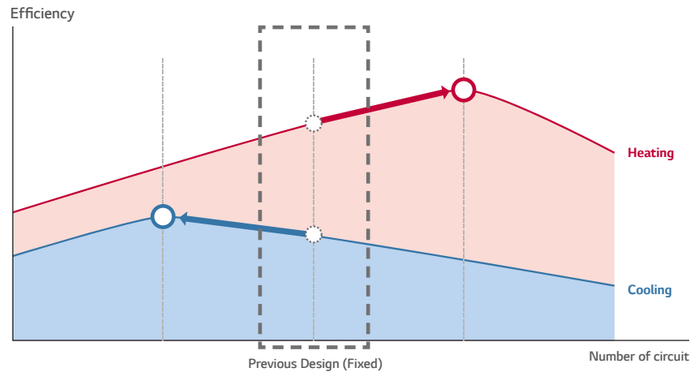
Variable Heat Exchanger Circuit intelligently selects the optimal path for both heating and cooling operations. With this smart path selection technology, an average of 6% increase in the efficiency of both operations has been achieved. The paths number and circuit velocity are adjusted to match temperatures and operation modes in order to maximize efficiency instead of compromising efficiency for each operation when the number and direction of paths are fixed independently of temperature operation mode.

Technology mechanism





Efficiency performance



ULTIMATE PERFORMANCE

Heat Exchanger with Ocean Black Fin for Corrosion Resistance

LG's exclusive Ocean Black Fin is applied on the heat exchanger of MULTI V 5 in order to perform even in corrosive environments. The strong protection from various corrosive external environments such as seaside with high salt contamination and industrial cities with severe air pollution caused by fumes from factories keeps MULTI V 5 operating without breakdown. This improvement in durability prolongs the product's lifespan and lowers both the operational and maintenance costs.

Previous Model

Ocean Black Fin

Corrosion Resistance Proven by Certified Tests

LG Corrosion Resistance solution passed ISO accelerated corrosion test conducted by an independent test organization and the result has been certified by prestigious global certification organization, UL (Underwriters Laboratories).

Certified protection

Condition of salt spray test

Temperature	35°C
Mist of 5% sodium chloride solution	

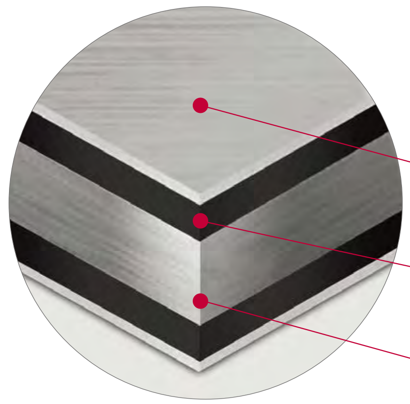
Condition of gas exposure test

R.H.	NO_2	SO_2
95%	10×10^{-5}	5×10^{-6}

* Test Method B Simulation Validated (Test condition: Salt contaminated condition + severe industrial/traffic environment(NO_2/SO_2))
* Based on 1,500 UL test hours

Enhanced Coating Layers

The black coating with enhanced epoxy resin is applied for strong protection from various corrosive external conditions such as salt contamination and air pollution including fumes from factories. Moreover, the hydrophilic film keeps water from accumulating on the heat exchanger's fin, minimizing moisture buildup and eventually making it even more corrosion resistant.



Hydrophilic film (Water flow)
The Hydrophilic coating minimizes moisture buildup on the fin.

Epoxy resin (Corrosion resistant)
The Black coating provides strong protection from corrosion.

Aluminum fin

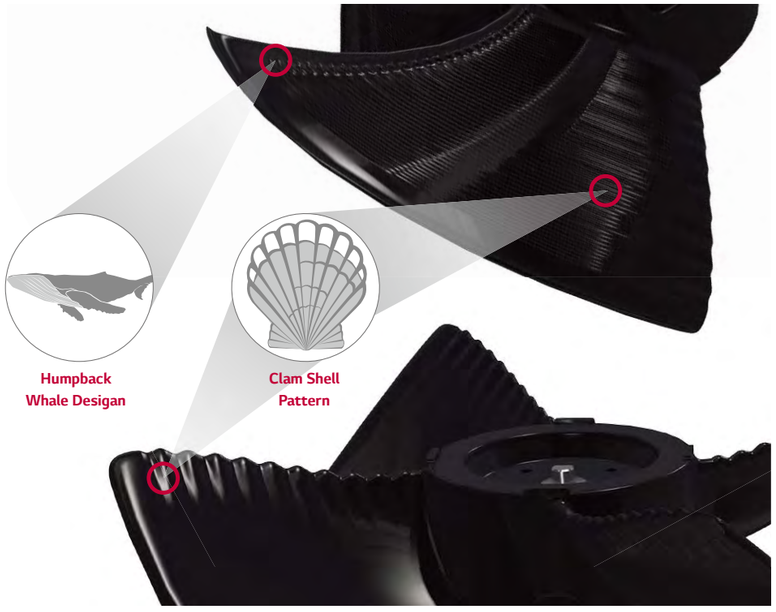
OUTDOOR UNIT KEY FEATURES

MULTI V 5

ULTIMATE PERFORMANCE

Larger Capacity ODU with Biomimetics Technology Fan

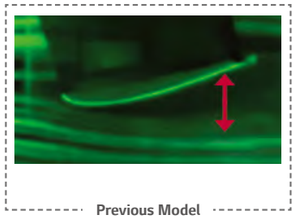
The moire pattern from external texture of clam shells has been applied on fans to create the range difference which results in reduction of noise level. At the same time, unlike the fans installed in previous products that generate separation of flow due to absence of tubercles, the bumpy back design inspired by the bumps on the humpback whale's flipper is applied as the tubercles on the back side of the fans, increasing wind power by reducing flacking.



Flow difference comparison caused by tubercles

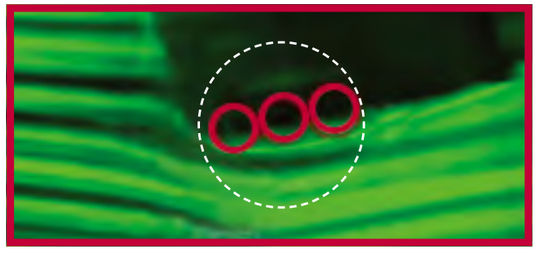
• Previous model

Without tubercles



• MULTI V 5

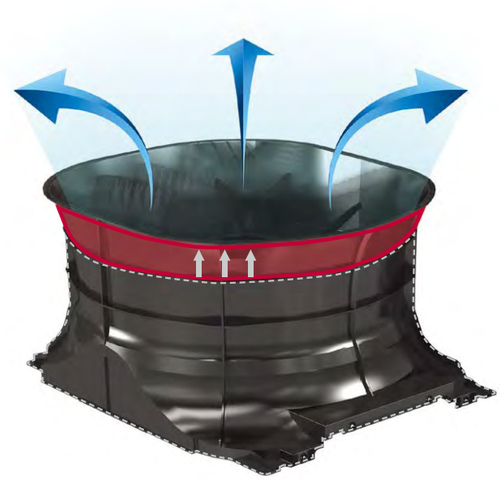
With tubercles



* Biomimetic refers to human-made processes, substances, devices, or systems that imitate nature.

Increased Air Flow Rate with Bigger Shroud

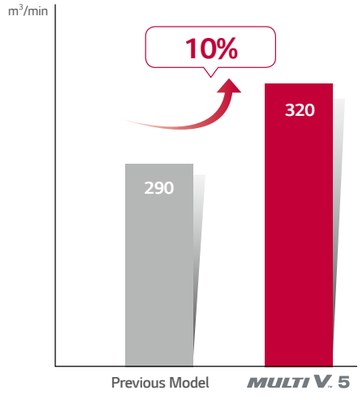
In addition to the biomimetics technology-based fans, extended shroud of MULTI V 5 allows more high static pressure and helps fans to blow higher air volume for efficient operation. With wider air guide, discharged air current is stabilized and noise level is reduced.



Enhanced Performance with Newly Developed Fan

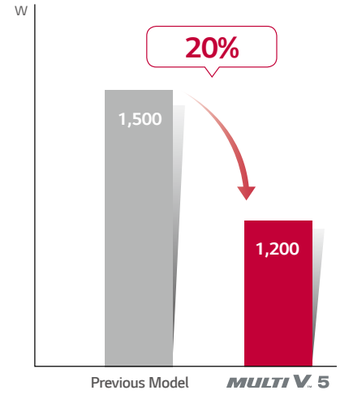
Based on the biomimetics technology, the fans of MULTI V 5 increased air flow rate by 10% in comparison to previous model and reduced its power consumption up to 20%. This eventually results in maximized performance with large capacity.

Air flow rate



* Comparison based on 20HP model

Power consumption



* Comparison based on air volume of 290m³/min

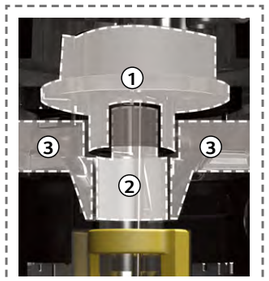
MULTI V 5

ULTIMATE PERFORMANCE

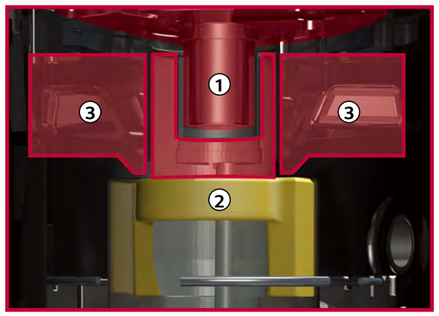
Enhanced Bearing with PEEK Material

Motivated by the lubricative material of PEEK(Polyetheretherketone) bearing used for aero engines, the newly invented scroll system with refined shape increases durability and reliability of compressor. It also helps MULTI V 5 to operate longer without oil supply in comparison to the previous models.

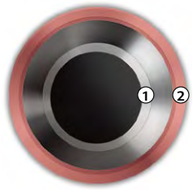
Technology mechanism comparison



Previous Model



① Material : FR160
①+② Structure : Inner Bearing
③ Supporter

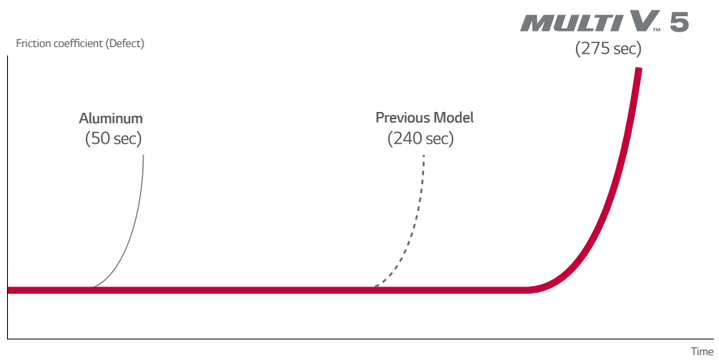


① Material : PEEK (Polyetheretherketone)
①+② Structure : New Outer Bearing
③ Supporter : High speed operation with reduction of bearing load and vibration

Operating time without oil supply
Up to 15%

Noise Level (Max. Sound Pressure)
Down to 3dB

Oilless operation hours comparison

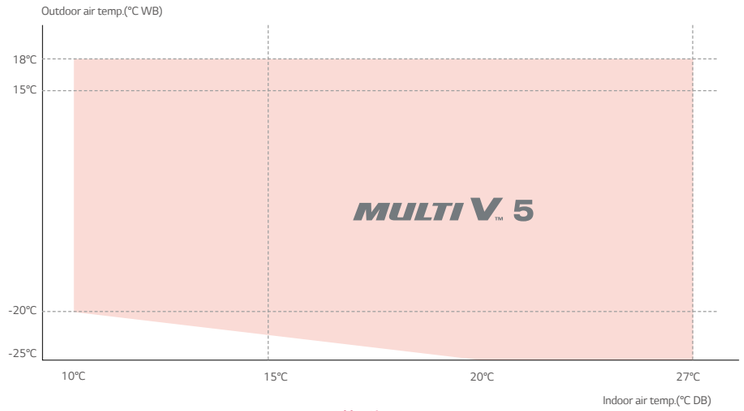


* LG Internal test result
* Test condition : Bearing oil blocking test (Oil blocking at 60 Hz)

Reliable Performance in Extreme Environment

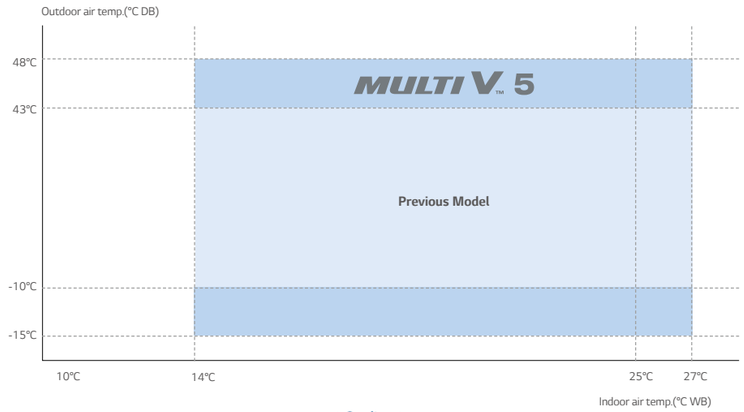
With enhanced inverter compressor and control technology coming from improved supercooling technology installation, vapor injection and Ocean Black Fin, MULTI V 5 extended range of cooling and heating operations. For heating, it can operate at as low as -25°C to perform properly even at very cold environment. Moreover, MULTI V 5's cycle technology with enhanced durability enables optimal cooling performance at high temperature that increases up to 48°C. It is improved perfectly to fully function at extreme conditions such as performing cooling operation at -15°C, making the product adequate for uses in specialized venues like technical rooms.

Wider operational range for each performance



‹ Heating ›

* Under the condition of -25°C for outdoor temperature and 20°C for indoor temperature



‹ Cooling ›

MULTI V 5

ULTIMATE COMFORT

Continuous Heating

With Dual Sensing Control, partial defrost and smart oil management via oil sensor, continuous heating technology has been improved.

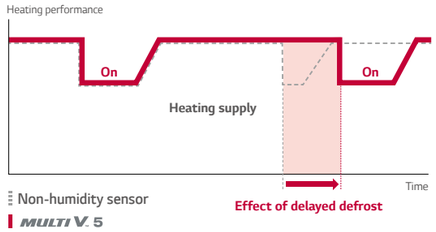
11% Increase in Heating Operation Time Per Day
7% Reduction in Power Input

CONTINUOUS HEATING

Delayed Defrost via Humidity Sensor of Dual Sensing Control

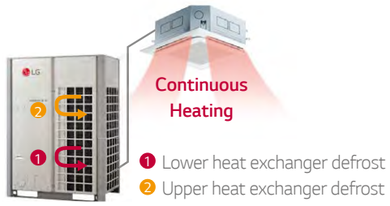
By controlling the evaporation temperature considering the humidity, heating operation time is improved.

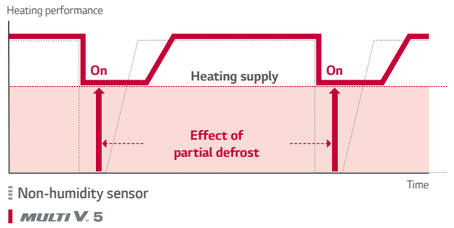
DUAL SENSING CONTROL



Partial Defrost

Unlike the previous model that stopped heating operation for one-time defrost, MULTI V 5 partially defrosts the heat exchanger by dividing it to lower and upper parts in order to provide consistent heating for the indoor environment and improve heating capacity.

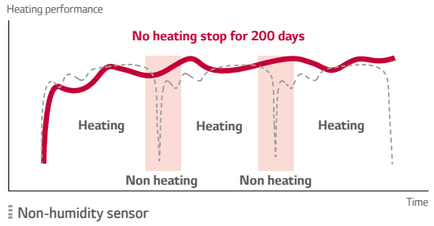




Smart Oil Management

Oil sensor of the Ultimate Inverter (UI) Compressor enables smart oil management to provide enhanced heating operation without periodic oil recovery operation.

Eliminated Unnecessary Oil Return via Oil Sensor



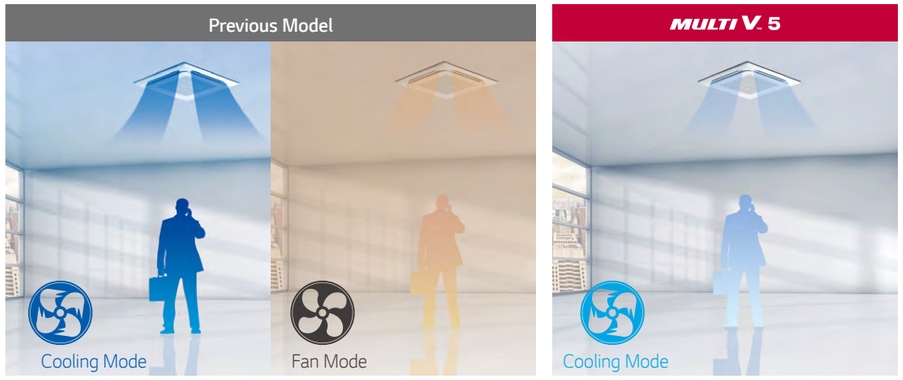
* LG internal test result

Comfort Cooling

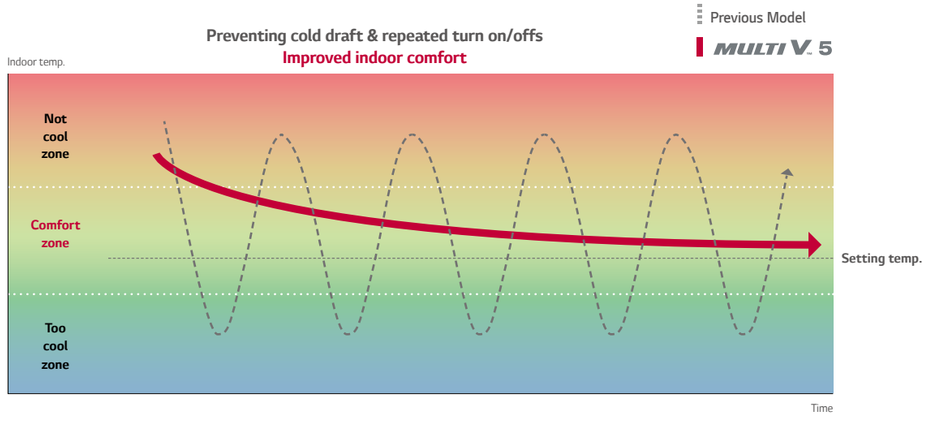
Without stopping in between operations, this function allows MULTI V 5 to maintain operation at mild cooling mode around the set temperature by sensing both temperature and humidity with Dual Sensing Control. By preventing both cold draft and repeated turn on/offs previously required to match the set temperature, users can experience more comfortable indoor environment.

DUAL SENSING CONTROL

Cooling operation comparison



* Indoor unit set up available with Standard III Remote Controller



OUTDOOR UNIT KEY FEATURES

MULTI V 5

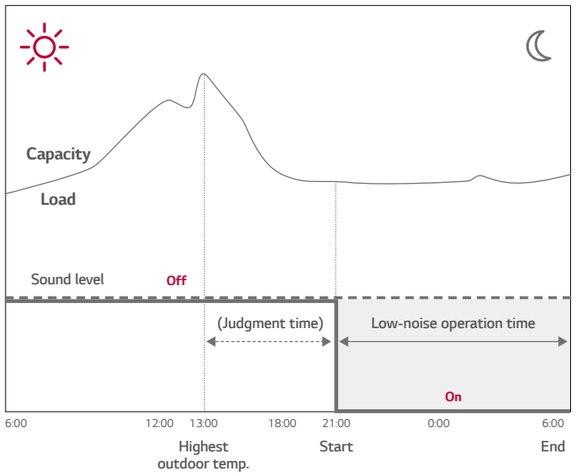
ULTIMATE COMFORT

Low-Noise Operation

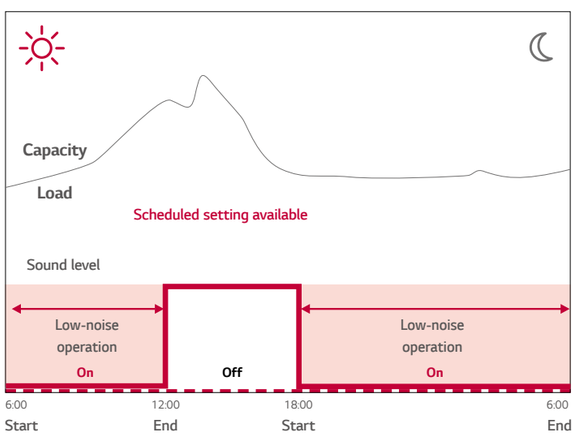
Unlike the previous model which enables Low-Noise Operation only during night after judgment time, the Low-Noise Operation of MULTI V 5 can function regardless of the time at the noise sensitive areas.

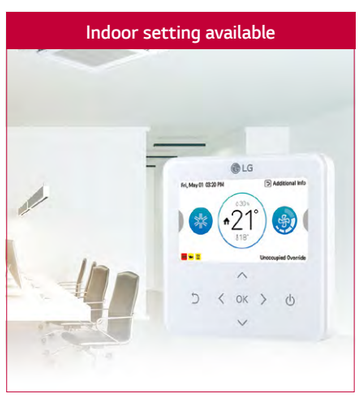
Operation hours comparison

Previous Model



MULTI V 5





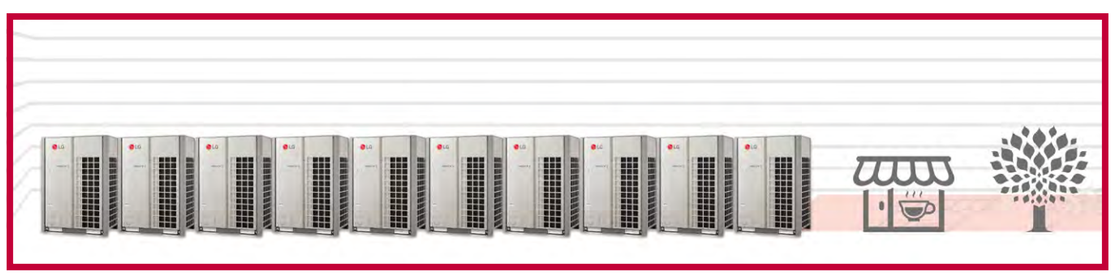
* Indoor unit set up available with Standard III Remote Controller

ULTIMATE FLEXIBILITY

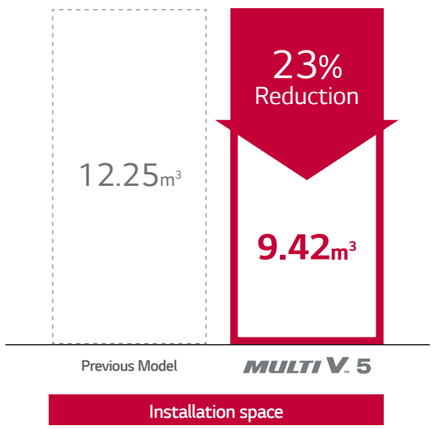
Flexible Installation Space with Large Capacity Outdoor Units

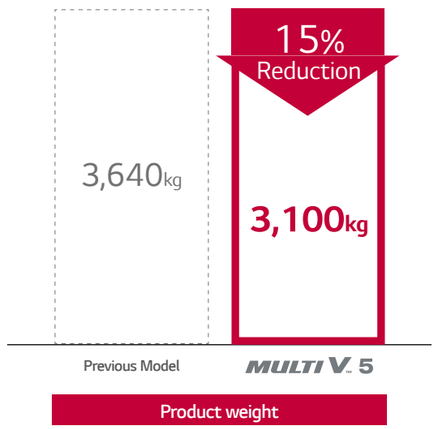
Large capacity outdoor units of MULTI V 5 minimizes installation space that spares valuable floor space and significantly decreases total installed weights. This allows users the flexible design potential and better use of the saved space.

Comparison on installation space



Installation space area and product weight comparison





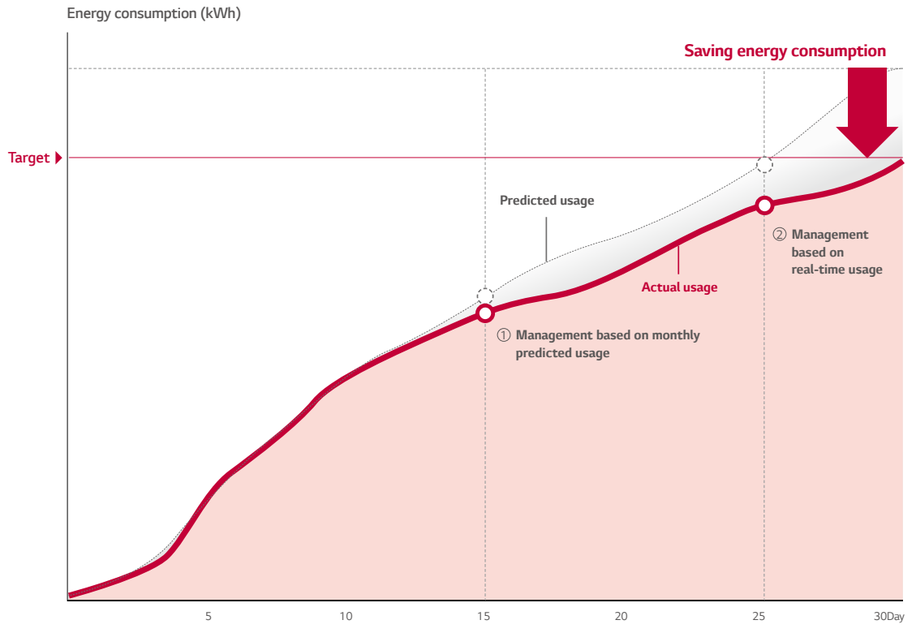
* Comparison basis: 2 Rows of outdoor units 260HP (26HP X 10sets) installation case

MULTI V 5

ULTIMATE CONTROL

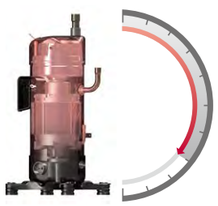
Energy Management

Energy Management allows MULTI V 5 to analyze previous data in order to forecast energy usage beforehand and prevent from exceeding the monthly energy consumption plan by systematically controlling the cooling volume. With energy consulting program that provides automatic operation options for 7 levels of energy management such as compressor capacity management and indoor unit operation level control, users can monitor energy usage anytime and efficiently manage their energy bills.



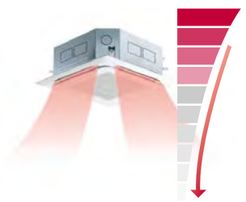
Management setting example
① When predicted usage is 120% ② When the real-time usage is 90%
* Energy Management allows maximum 7 steps (Input format is percent for predicted and real-time usage)
* Central control kit such as ACP IV or AC Smart IV and PDI are required for energy management function

Control methods



Compressor capacity management

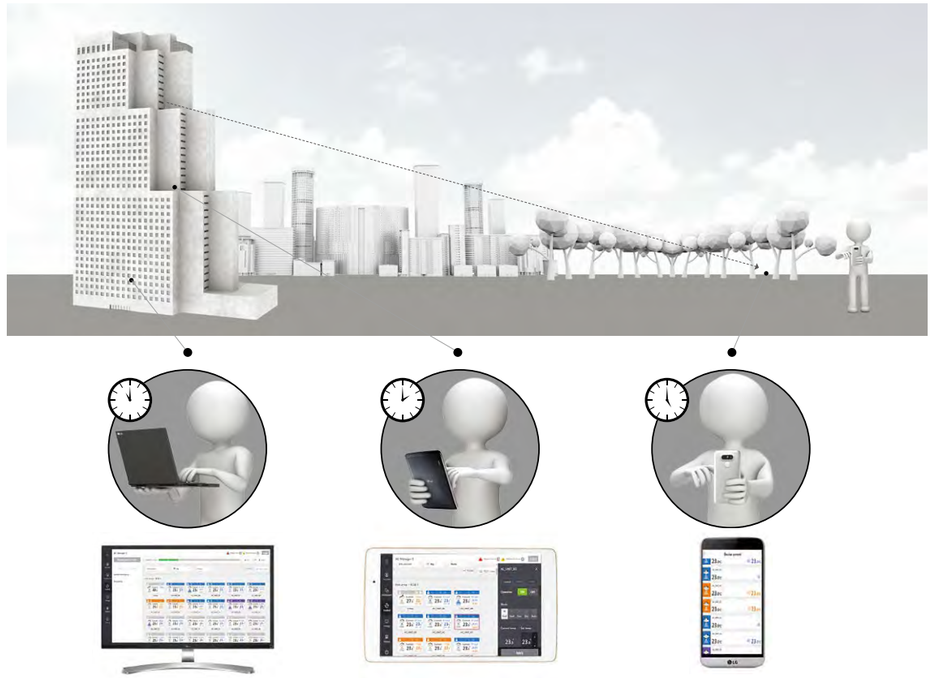
Operation rate control of indoor unit



Indoor unit operation management

AC Smart 5 with Advanced Control Interface

As an advanced central controller, AC Smart 5 offers flexible interface for each user by assessing the device screen and automatically customizing the layout to provide the most optimized interface. Moreover, without additional device, AC Smart 5 provides BACnet/IP and Modbus TCP/IP interface to be integrated by BMS(Building Management System), as well as its own various management function



[PC]
11:00 am
Monitoring room

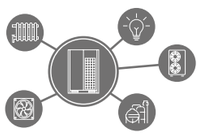
[Tablet]
2:00 pm
Checking each room

[Mobile]
5:00 pm
Monitoring at any time, anywhere

Various functions of AC Smart 5

Advanced energy monitoring

Operational trend



Interlocking

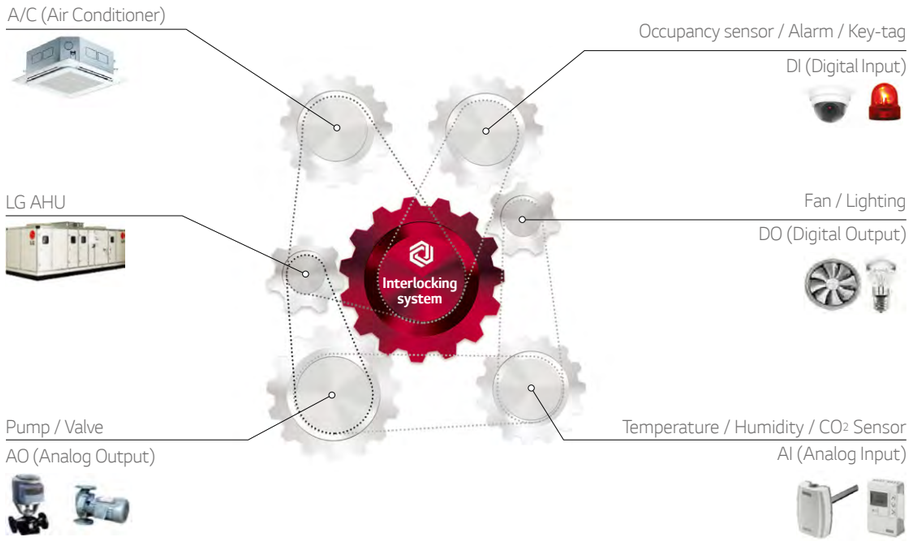
BMS Integration

MULTI V 5

ULTIMATE CONTROL

Expandability & Programmability

The expandable control system can be interlocked with sensors and facilities of building, as well as air conditioners. It makes building management smart by setting up logic optimized for the site.

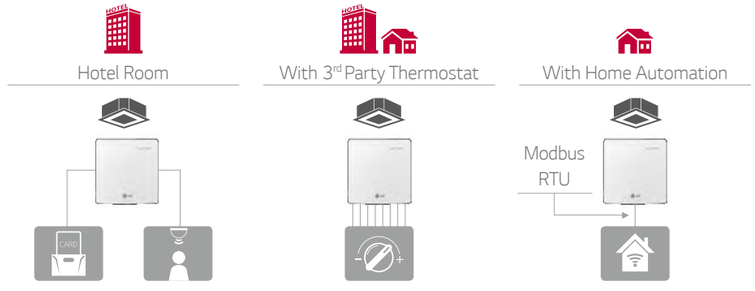


System Flexibility

It can be linked with 3rd party BMS via Gateway and provide flexible control system for each site via Dry Contact.

Interlock with 3rd party BMS

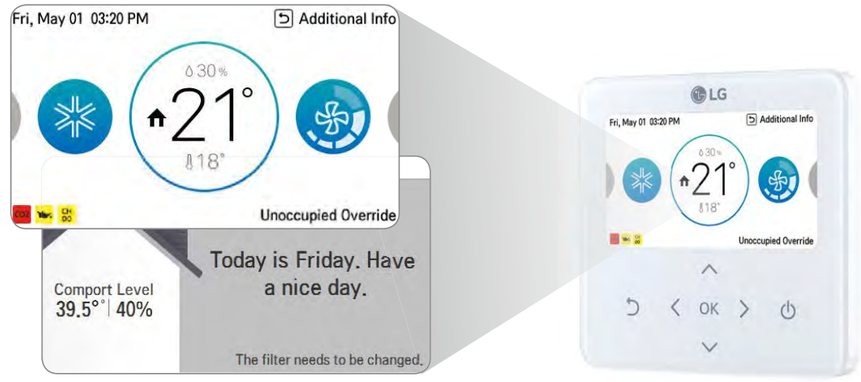
Dry Contact optimized for variable scenario



Smart Individual Controller (with Standard III Remote Controller)

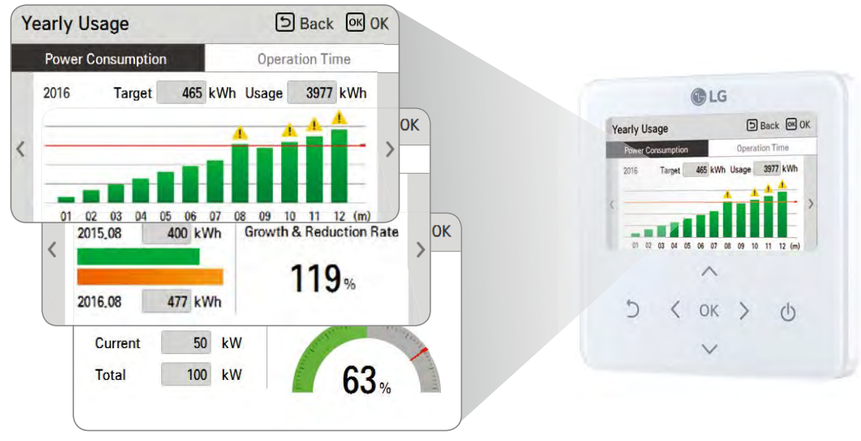
New Standard III Remote Controller of MULTI V 5 offers 4.3-inch large LCD screen with neat and premium design. This luxurious design well-matches interior design through large colored LCD screen with curved display and simple button layout which makes it easier to control. With diverse information offered such as temperature, humidity and cleanliness information, users can check on currently consumed power in real-time and electricity consumption data(weekly/monthly/annually) to predict and plan power consumption usage. Moreover, simple and geometrically neat design of user interface makes data comprehension visually easy. With circular visual theme, information are labelled in different-sized circles based on their priorities.

Intuitive & Emotional Interface



Luxurious Design

Energy Management



* Central control kit such as ACP IV or AC Smart IV and PDI are required for energy management function

OUTDOOR UNIT KEY FEATURES

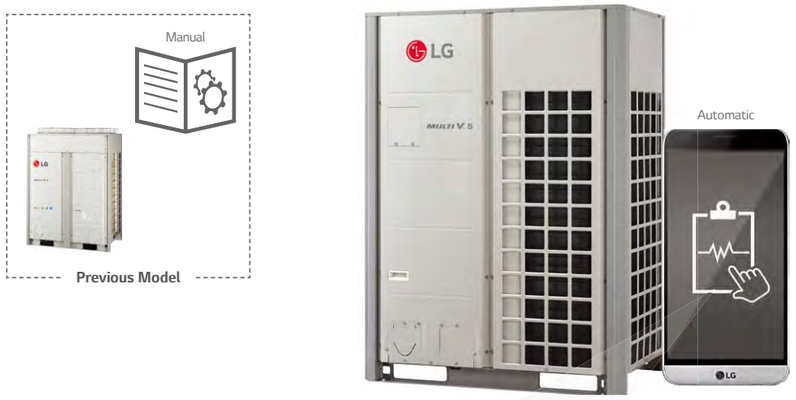
MULTI V 5

ULTIMATE CONTROL

Simple Test Run via LGMV

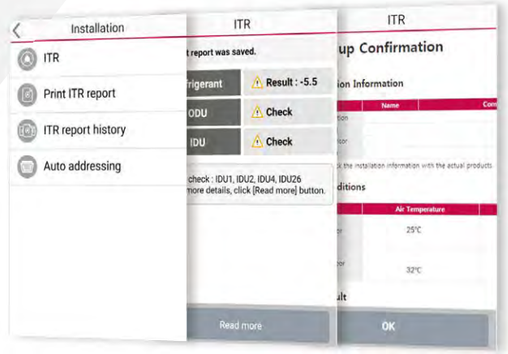
In order to bring out performance to the 100% level, proper product test run is necessary. For previous product, professional engineer who is well-aware of more than 40 different functional settings and 200+ error codes had to check main parts in order to make sure that the test run had succeeded. With Mobile LGMV of MULTI V 5, however, fast and accurate auto test run can be executed and the professional installer running the test can receive test results via email, which shortens installation hours and increases overall efficiency in installation processes.

Test run comparison



LGMV smartphone application setting pages

Wi–Fi MV Module



37% Reduction in Installation Hours

* This feature is provided only to qualified professional installers
**LGMV Application is available for Android and iOS (iphone/ipad)

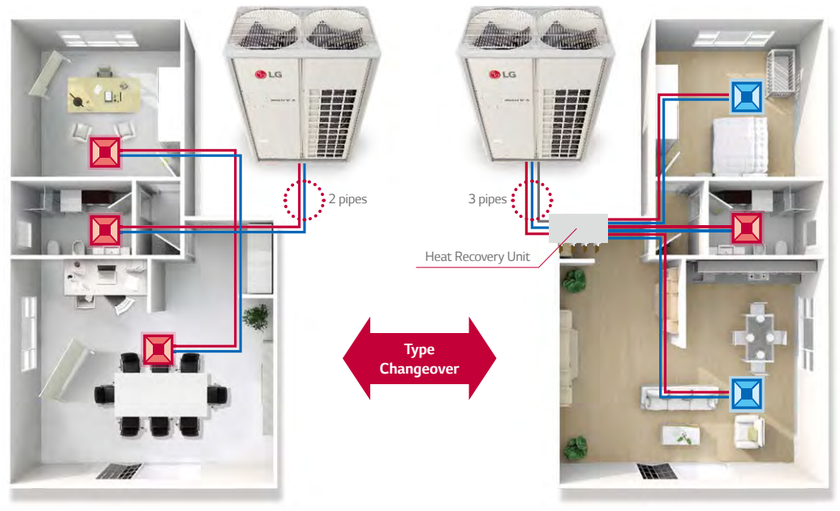
HEAT RECOVERY

Applicable for Various Building Types with Heat Pump & Heat Recovery Systems

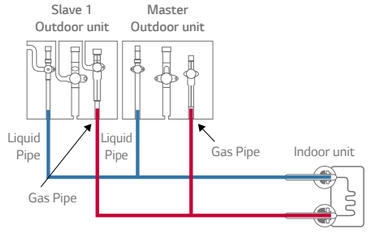
LG MULTI V 5 satisfies users' various needs with just one platform. Heat Pump System works for the sites where either cooling or heating operation is needed, while Heat Recovery System fits perfectly to the sites wherein both the cooling and heating operations are simultaneously needed or locations installed with Hot Water Solution to provide hot water and heating via radiator. By providing suitable solutions that cater to any building types and their requirements, MULTI V 5 offers the best HVAC system.

Simple Piping System Changes

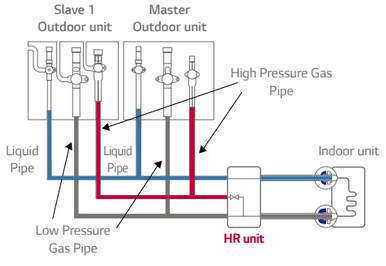
MULTI V 5 allows the building previously installed with Heat Pump System to switch to the Heat Recovery System for changing purpose of the building or remodeling reasons via simple piping construction.



Heat Pump System



Heat Recovery System



OUTDOOR UNIT KEY FEATURES

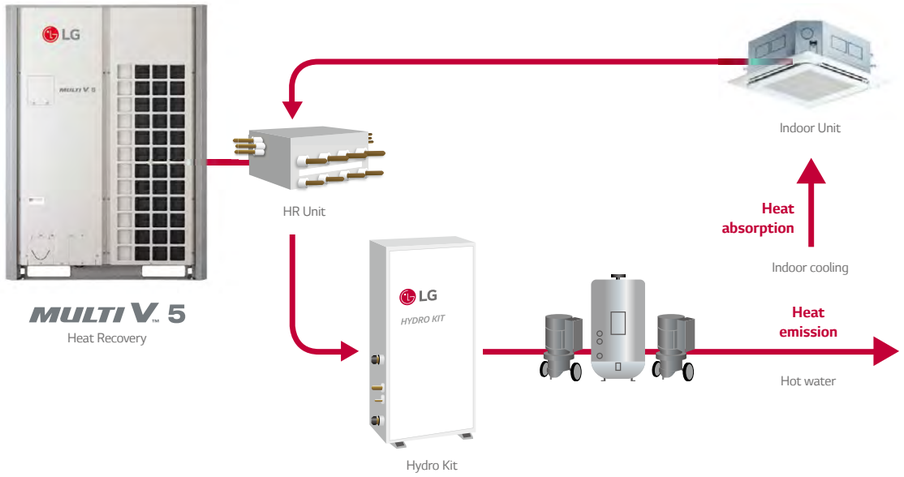
MULTI V 5

HEAT RECOVERY

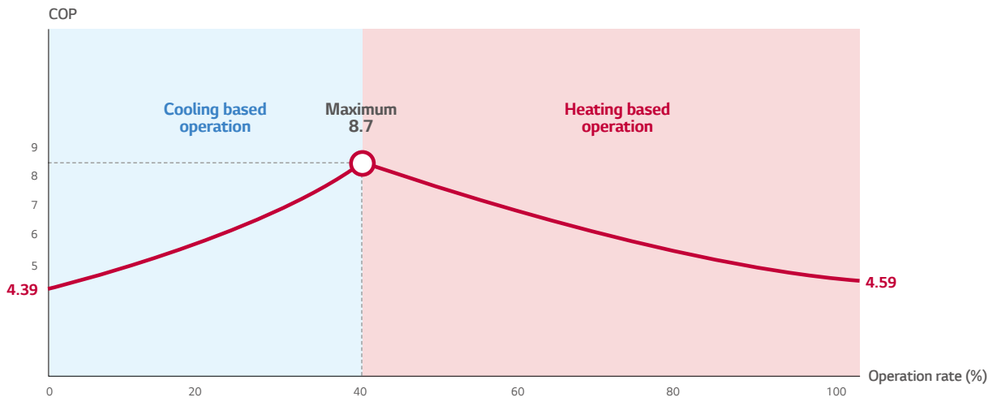
Energy Saving with Simultaneous Operation

MULTI V 5 Heat Recovery system with HR Unit can perform both cooling and heating operations simultaneously. For continuous operation, it minimizes in order to switch mode while it increases efficiency with simultaneous operation. Moreover, it allows the COP to reach up to 8.5 under circumstances of 40% cooling and 60% heating operations, which results in the decreased energy consumption up to 30%.

Technology mechanism



COP with simultaneous operation

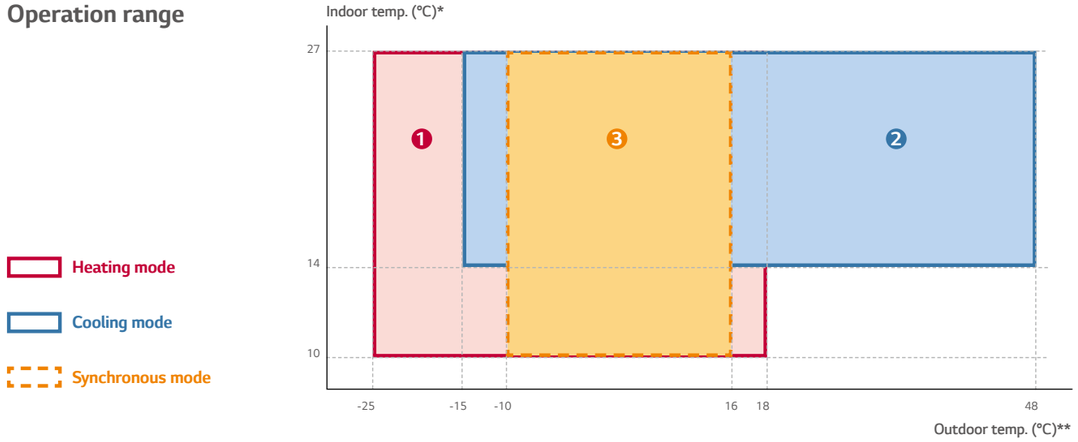


* Outdoor temperature : 7°C DB / 6°C WB
* Indoor temperature : 20°CDB / 15°C WB
* ARUM200LTE5

Wide Operation Range

Both the low and high temperature operation ranges are expanded through condenser with various control. For heating mode, the outdoor temperature can go from as low as -25°C to 24°C, and from -15°C to as high as 48°C for cooling mode. As for the synchronous mode, it can run from -10°C to 16°C.

Operation range



Outdoor Temperature

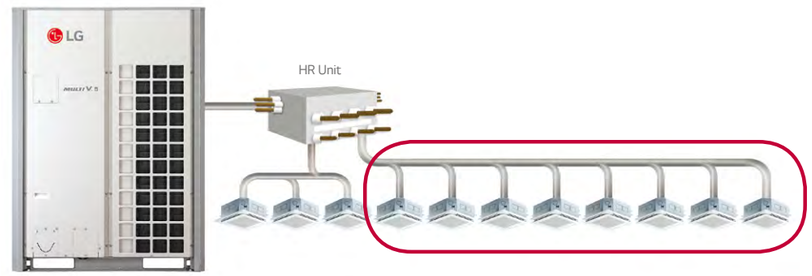
1 Heating mode : - 25°C WB ~ 18°C WB 2 Cooling mode : - 15°C DB ~ 48°C 3 Synchronous mode : -10°C WB ~ 16°C WB

* Heating (°C DB), Cooling (°C WB), Synchronous (°C DB) ** Heating (°C WB), Cooling (°C DB), Synchronous (°C WB)

Flexible Connection of Heat Recovery Unit

LG MULTI V 5 Heat Recovery Unit allows flexible connection both in series and in a row. With the zone control function, up to 8 indoor units can be connected to a branch while the maximum of 32 indoor units can be connected to a HR unit, saving the installation cost by flexible connection.

Zoning control



OUTDOOR UNIT SPECIFICATION

MULTI V 5

LG participates in the ECP programme for EUROVENT VRF program.
Check ongoing validity of certification
: www.eurovent-certification.com

ARUM080LTE5/ ARUM100LTE5 / ARUM120LTE5 / ARUM140LTE5 / ARUM160LTE5

HP			8	10	12	14	16
Model Name	Combination Unit		ARUM080LTE5	ARUM100LTE5	ARUM120LTE5	ARUM140LTE5	ARUM160LTE5
	Independent Unit		ARUM080LTE5	ARUM100LTE5	ARUM120LTE5	ARUM140LTE5	ARUM160LTE5
Capacity	Cooling (Rated)	kW	22.4	28.0	33.6	39.2	44.8
	Heating (Rated)	kW	22.4	28.0	33.6	39.2	44.8
	Heating (Max)	kW	25.2	31.5	37.8	44.1	50.4
Input	Cooling (Rated)	kW	4.49	5.80	7.58	8.68	10.89
	Heating (Rated)	kW	3.97	4.92	6.85	8.13	10.28
	Heating (Max)	kW	4.78	5.92	8.26	9.72	12.39
EER			4.99	4.83	4.43	4.52	4.11
ESEER			8.41	8.13	7.47	7.33	6.59
ESEER (SLC)			9.46	9.15	8.60	8.26	7.79
COP	COP (Rated)		5.64	5.69	4.91	4.82	4.36
	COP (Max)		5.27	5.32	4.58	4.54	4.07
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output × Number	W × No.	4,200 × 1	5,300 × 1	5,300 × 1	5,300 × 1	5,300 × 1
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	m^3/min	240 × 1	240 × 1	240 × 1	320 × 1	320 × 1
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm (inch)	9.52(3/8)	9.52(3/8)	12.7(1/2)	12.7(1/2)	12.7(1/2)
Low Pressure Gas Pipe		mm (inch)	19.05(3/4)	22.2(7/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)
High Pressure Gas Pipe		mm (inch)	15.88(5/8)	19.05(3/4)	19.05(3/4)	22.2(7/8)	22.2(7/8)
Dimensions (W × H × D)		mm	(930 × 1,690 × 760) × 1	(930 × 1,690 × 760) × 1	(930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760)×1	(1,240 × 1,690 × 760)×1
Net Weight		kg	198 × 1	215 × 1	215 × 1	237 × 1	237 × 1
Sound Pressure Level	Cooling	dB(A)	58.0	58.0	59.0	60.0	60.5
	Heating	dB(A)	59.0	59.0	60.0	61.0	61.5
Sound Power Level	Cooling	dB(A)	77.0	78.0	79.0	82.0	83.0
	Heating	dB(A)	78.0	79.0	80.0	84.0	85.0
Communication Cable		No.×mm^2 (VCTF-SB)	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	7.5	9.5	9.5	13.5	13.5
		lbs	16.5	20.9	20.9	29.8	29.8
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO_2eq		15.7	19.8	19.8	28.2	28.2
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	3,900	3,900	3,900	3,900	3,900
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			13(20)	16(25)	20(30)	23(35)	26(40)

* This product contains Fluorinated Greenhouse Gases. (R410A)

LG participates in the ECP programme for EUROVENT VRF program.
Check ongoing validity of certification
: www.eurovent-certification.com

ARUM180LTE5 / ARUM200LTE5 / ARUM220LTE5 / ARUM221LTE5 / ARUM240LTE5

HP			18	20	22	22¹	24
Model Name	Combination Unit		ARUM180LTE5	ARUM200LTE5	ARUM220LTE5	ARUM221LTE5	ARUM240LTE5
	Independent Unit		ARUM180LTE5	ARUM200LTE5	ARUM220LTE5	ARUM120LTE5 ARUM100LTE5	ARUM240LTE5
Capacity	Cooling (Rated)	kW	50.4	56.0	61.6	61.6	67.2
	Heating (Rated)	kW	50.4	56.0	61.6	61.6	67.2
	Heating (Max)	kW	56.7	63.0	69.3	69.3	74.3
		Btu/h	193,500	215,000	236,500	236,500	253,400
Input	Cooling (Rated)	kW	10.91	12.77	15.70	13.4	17.40
	Heating (Rated)	kW	10.12	12.20	14.15	11.8	15.89
	Heating (Max)	kW	11.94	14.69	16.76	14.2	18.80
EER			4.62	4.39	3.92	4.60	3.86
ESEER			7.40	7.03	6.68	7.76	6.57
ESEER (SLC)			8.11	7.70	7.87	8.84	8.05
COP	COP (Rated)		4.98	4.59	4.35	5.23	4.23
	COP (Max)		4.75	4.29	4.13	4.89	3.95
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output × Number	W × No.	5,300 × 1 + 4,200 × 1	5,300 × 1 + 4,200 × 1	5,300 × 1 + 4,200 × 1	5,300 × 2	5,300 × 2
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	m^3/min	320 × 1	320 × 1	320 × 1	(240 × 1) + (240 × 1)	320 × 1
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm (inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)	15.88(5/8)
Low Pressure Gas Pipe		mm (inch)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	34.9(1-3/8)
High Pressure Gas Pipe		mm (inch)	22.2(7/8)	22.2(7/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)
Dimensions (W × H × D)		mm	(1,240 × 1,690 × 760) ×1	(1,240 × 1,690 × 760) ×1	(1,240 × 1,690 × 760) ×1	(930 × 1,690 × 760) × 1 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) ×1
Net Weight		kg	300 × 1	300 × 1	300 × 1	(215 × 1) + (215 × 1)	310 × 1
Sound Pressure Level	Cooling	dB(A)	61.0	62.0	64.5	61.5	65.0
	Heating	dB(A)	62.0	64.5	65.5	62.5	67.0
Sound Power Level	Cooling	dB(A)	85.0	86.0	86.0	81.5	88.0
	Heating	dB(A)	86.0	87.0	88.0	82.5	90.0
Communication Cable		No.×mm^2 (VCTF-SB)	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	16.0	16.0	16.0	19.0	17.0
		lbs	35.3	35.3	35.3	41.9	37.5
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO_2eq		33.4	33.4	33.4	39.7	35.5
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	5,200	5,200	5,200	7,800	5,200
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			29(45)	32(50)	35(44)	35(44)	39(48)

* This product contains Fluorinated Greenhouse Gases. (R410A)

OUTDOOR UNIT SPECIFICATION

MULTI V 5

LG participates in the ECP programme for EUROVENT VRF program.
Check ongoing validity of certification
: www.eurovent-certification.com

ARUM260LTE5

ARUM241LTE5 / ARUM261LTE5 / ARUM280LTE5 / ARUM300LTE5

HP			24'	26	26'	28	30
Model Name	Combination Unit		ARUM241LTE5	ARUM260LTE5	ARUM261LTE5	ARUM280LTE5	ARUM300LTE5
	Independent Unit		ARUM120LTE5 ARUM120LTE5	ARUM260LTE5	ARUM140LTE5 ARUM120LTE5	ARUM160LTE5 ARUM120LTE5	ARUM180LTE5 ARUM120LTE5
Capacity	Cooling (Rated)	kW	67.2	72.8	72.8	78.4	84.0
	Heating (Rated)	kW	67.2	67.2	72.8	78.4	84.0
	Heating (Max)	kW	75.6	74.3	81.9	88.2	94.5
		Btu/h	257,900	253,400	279,400	300,900	322,400
Input	Cooling (Rated)	kW	15.2	20.20	16.3	18.5	18.5
	Heating (Rated)	kW	13.7	15.99	15.0	17.1	17.0
	Heating (Max)	kW	16.5	19.15	18.0	20.7	20.2
EER			4.43	3.60	4.48	4.24	4.54
ESEER			7.47	6.34	7.39	6.94	7.43
ESEER (SLC)			8.60	7.62	8.41	8.12	8.29
COP	COP (Rated)		4.91	4.20	4.86	4.58	4.95
	COP (Max)		4.58	3.88	4.56	4.27	4.68
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output × Number	W × No.	5,300 × 2	5,300 × 2	5,300 × 2	5,300 × 2	(5,300 × 2) + (4,200 × 1)
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	m^3/min	(240 × 1) + (240 × 1)	320 × 1	(320 × 1) + (240 × 1)	(320 × 1) + (240 × 1)	(320 × 1) + (240 × 1)
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm (inch)	15.88(5/8)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Low Pressure Gas Pipe		mm (inch)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)
High Pressure Gas Pipe		mm (inch)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)
Dimensions (W × H × D)		mm	(930 × 1,690 × 760) × 1 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) ×1	(1,240 × 1,690 × 760) × 1 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1 + (930 × 1,690 × 760) × 1
Net Weight		kg	(215 × 1) + (215 × 1)	310 × 1	(237 × 1) + (215 × 1)	(237 × 1) + (215 × 1)	(300 × 1) + (215 × 1)
Sound Pressure Level	Cooling	dB(A)	62.0	65.0	62.5	62.8	63.1
	Heating	dB(A)	63.0	67.0	63.5	63.8	64.1
Sound Power Level	Cooling	dB(A)	82.0	88.0	83.8	84.5	86.0
	Heating	dB(A)	83.0	90.0	85.5	86.2	87.0
Communication Cable		No.×mm^2 (VCTF-SB)	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	19.0	17.0	23.0	23.0	25.5
		lbs	41.9	37.5	50.7	50.7	56.2
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO_2eq		39.7	35.5	48.0	48.0	53.2
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	7,800	5,200	7,800	7,800	9,100
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			39(48)	42(52)	42(52)	45(56)	49(60)

* This product contains Fluorinated Greenhouse Gases. (R410A)

ARUM320LTE5 / ARUM340LTE5 / ARUM360LTE5 / ARUM380LTE5 / ARUM400LTE5

HP			32	34	36	38	40
Model Name	Combination Unit		ARUM320LTE5	ARUM340LTE5	ARUM360LTE5	ARUM380LTE5	ARUM400LTE5
	Independent Unit		ARUM200LTE5 ARUM120LTE5	ARUM220LTE5 ARUM120LTE5	ARUM240LTE5 ARUM120LTE5	ARUM240LTE5 ARUM140LTE5	ARUM240LTE5 ARUM160LTE5
Capacity	Cooling (Rated)	kW	89.6	95.2	100.8	106.4	112.0
	Heating (Rated)	kW	89.6	95.2	100.8	106.4	112.0
	Heating (Max)	kW	100.8	107.1	112.1	118.4	124.7
		Btu/h	343,900	365,400	382,300	403,800	425,300
Input	Cooling (Rated)	kW	20.4	23.3	25.0	26.1	28.3
	Heating (Rated)	kW	19.1	21.0	22.7	24.0	26.2
	Heating (Max)	kW	22.9	25.0	27.1	28.5	31.2
EER			4.40	4.09	4.04	4.08	3.96
ESEER			7.19	6.94	6.85	6.83	6.58
ESEER (SLC)			8.01	8.11	8.22	8.11	7.94
COP	COP (Rated)		4.70	4.53	4.43	4.43	4.28
	COP (Max)		4.39	4.28	4.14	4.15	4.00
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output × Number	W × No.	(5,300 × 2) + (4,200 × 1)	(5,300 × 2) + (4,200 × 1)	5,300 × 3	5,300 × 3	5,300 × 3
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	m^3/min	(320 × 1) + (240 × 1)	(320 × 1) + (240 × 1)	(320 × 1) + (240 × 1)	320 × 2	320 × 2
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm (inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Low Pressure Gas Pipe		mm (inch)	34.9(1-3/8)	34.9(1-3/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
High Pressure Gas Pipe		mm (inch)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	34.9(1-3/8)	34.9(1-3/8)
Dimensions (W × H × D)		mm	(1,240 × 1,690 × 760) × 1 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1 + (930 × 1,690 × 760) × 1	(1,240 ×1,690 × 760) × 2	(1,240 ×1,690 × 760) × 2
Net Weight		kg	(300 × 1) + (215 × 1)	(300 × 1) + (215 × 1)	(310 × 1) + (215 × 1)	(310 × 1) + (237 × 1)	(310 × 1) + (237 × 1)
Sound Pressure Level	Cooling	dB(A)	63.8	65.6	66.0	66.2	66.3
	Heating	dB(A)	65.8	66.6	67.8	68.0	68.1
Sound Power Level	Cooling	dB(A)	86.8	86.8	88.5	89.0	89.2
	Heating	dB(A)	87.8	88.6	90.4	91.0	91.2
Communication Cable		No.×mm^2 (VCTF-SB)	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	25.5	25.5	26.5	30.5	30.5
		lbs	56.2	56.2	58.4	67.2	67.2
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO_2eq		53.2	53.2	55.3	63.7	63.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	9,100	9,100	9,100	9,100	9,100
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			52(64)	55(64)	58(64)	61(64)	64

* This product contains Fluorinated Greenhouse Gases. (R410A)

OUTDOOR UNIT SPECIFICATION

MULTI V 5

ARUM420LTE5 / ARUM440LTE5 / ARUM460LTE5 / ARUM480LTE5 / ARUM500LTE5

HP			42	44	46	48	50
Model Name	Combination Unit		ARUM420LTE5	ARUM440LTE5	ARUM460LTE5	ARUM480LTE5	ARUM500LTE5
	Independent Unit		ARUM240LTE5 ARUM180LTE5	ARUM240LTE5 ARUM200LTE5	ARUM240LTE5 ARUM220LTE5	ARUM240LTE5 ARUM240LTE5	ARUM240LTE5 ARUM140LTE5 ARUM120LTE5
Capacity	Cooling (Rated)	kW	117.6	123.2	128.8	134.4	140.0
	Heating (Rated)	kW	117.6	123.2	128.8	134.4	140.0
	Heating (Max)	kW	131.0	137.3	143.6	148.5	156.2
		Btu/h	446,800	468,300	489,800	506,700	532,800
Input	Cooling (Rated)	kW	28.3	30.2	33.1	34.8	33.7
	Heating (Rated)	kW	26.0	28.1	30.0	31.8	30.9
	Heating (Max)	kW	30.7	33.5	35.6	37.6	36.8
EER			4.15	4.08	3.89	3.86	4.16
ESEER			6.90	6.77	6.62	6.57	6.97
ESEER (SLC)			8.05	7.86	7.96	8.05	8.23
COP	COP (Rated)		4.52	4.39	4.29	4.23	4.54
	COP (Max)		4.26	4.10	4.04	3.95	4.25
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output × Number	W × No.	(5,300 × 3) + (4,200 × 1)	(5,300 × 3) + (4,200 × 1)	(5,300 × 3) + (4,200 × 1)	5,300 × 4	5,300 × 4
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	m^3/min	320 × 2	320 × 2	320 × 2	320 × 2	(320 × 2) + (240 × 1)
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm (inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Low Pressure Gas Pipe		mm (inch)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
High Pressure Gas Pipe		mm (inch)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)
Dimensions (W × H × D)		mm	(1,240 ×1,690 × 760) × 2	(1,240 ×1,690 × 760) × 2	(1,240 ×1,690 × 760) × 2	(1,240 ×1,690 × 760) × 2	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1
Net Weight		kg	(310 × 1) + (300 × 1)	(310 × 1) + (300 × 1)	(310 × 1) + (300 × 1)	310 × 2	(310 × 1) + (237 × 1) + (215 × 1)
Sound Pressure Level	Cooling	dB(A)	66.5	66.8	67.8	68.0	67.0
	Heating	dB(A)	68.2	68.9	69.3	70.0	68.6
Sound Power Level	Cooling	dB(A)	89.8	90.1	90.1	91.0	89.4
	Heating	dB(A)	91.5	91.8	92.1	93.0	91.3
Communication Cable		No.×mm^2 (VCTF-SB)	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	33.0	33.0	33.0	34.0	40.0
		lbs	72.8	72.8	72.8	75.0	88.2
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO_2eq		68.9	68.9	68.9	71.0	83.5
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	10,400	10,400	10,400	10,400	13,000
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			64	64	64	64	64

* This product contains Fluorinated Greenhouse Gases. (R410A)

ARUM520LTE5 / ARUM540LTE5 / ARUM560LTE5 / ARUM580LTE5 / ARUM600LTE5

HP			52	54	56	58	60
Model Name	Combination Unit		ARUM520LTE5	ARUM540LTE5	ARUM560LTE5	ARUM580LTE5	ARUM600LTE5
	Independent Unit		ARUM240LTE5 ARUM160LTE5 ARUM120LTE5	ARUM240LTE5 ARUM180LTE5 ARUM120LTE5	ARUM240LTE5 ARUM200LTE5 ARUM120LTE5	ARUM240LTE5 ARUM220LTE5 ARUM120LTE5	ARUM240LTE5 ARUM240LTE5 ARUM120LTE5
Capacity	Cooling (Rated)	kW	145.6	151.2	156.8	162.4	168.0
	Heating (Rated)	kW	145.6	151.2	156.8	162.4	168.0
	Heating (Max)	kW	162.5	168.8	175.1	181.4	186.3
		Btu/h	554,300	575,800	597,300	618,800	635,700
Input	Cooling (Rated)	kW	35.9	35.9	37.8	40.7	42.4
	Heating (Rated)	kW	33.0	32.9	34.9	36.9	38.6
	Heating (Max)	kW	39.4	39.0	41.7	43.8	45.9
EER			4.06	4.21	4.15	3.99	3.96
ESEER			6.76	7.02	6.91	6.78	6.73
ESEER (SLC)			8.08	8.17	8.01	8.08	8.15
COP	COP (Rated)		4.41	4.60	4.49	4.40	4.35
	COP (Max)		4.12	4.33	4.19	4.14	4.06
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output × Number	W × No.	5,300 × 4	(5,300 × 4) + (4,200 × 1)	(5,300 × 4) + (4,200 × 1)	(5,300 × 4) + (4,200 × 1)	5,300 × 5
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	m^3/min	(320 × 2) + (240 × 1)	(320 × 2) + (240 × 1)	(320 × 2) + (240 × 1)	(320 × 2) + (240 × 1)	(320 × 2) + (240 × 1)
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm (inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Low Pressure Gas Pipe		mm (inch)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
High Pressure Gas Pipe		mm (inch)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)
Dimensions (W × H × D)		mm	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1
Net Weight		kg	(310 × 1) + (237 × 1) + (215 × 1)	(310 × 1) + (300 × 1) + (215 × 1)	(310 × 1) + (300 × 1) + (215 × 1)	(310 × 1) + (300 × 1) + (215 × 1)	(310 × 2) + (215 × 1)
Sound Pressure Level	Cooling	dB(A)	67.1	67.2	67.4	68.3	68.5
	Heating	dB(A)	68.7	68.8	69.5	69.8	70.4
Sound Power Level	Cooling	dB(A)	89.6	90.1	90.4	90.4	91.3
	Heating	dB(A)	91.5	91.8	92.0	92.4	93.2
Communication Cable		No.×mm^2 (VCTF-SB)	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	40.0	42.5	42.5	42.5	43.5
		lbs	88.2	93.7	93.7	93.7	95.9
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO_2eq		83.5	88.7	88.7	88.7	90.8
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	13,000	14,300	14,300	14,300	14,300
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			64	64	64	64	64

* This product contains Fluorinated Greenhouse Gases. (R410A)

OUTDOOR UNIT SPECIFICATION

MULTI V 5

ARUM620LTE5 / ARUM640LTE5 / ARUM660LTE5 / ARUM680LTE5 / ARUM700LTE5 / ARUM720LTE5

HP			62	64	66	68	70	72
Model Name	Combination Unit		ARUM620LTE5	ARUM640LTE5	ARUM660LTE5	ARUM680LTE5	ARUM700LTE5	ARUM720LTE5
	Independent Unit		ARUM240LTE5 ARUM240LTE5 ARUM140LTE5	ARUM240LTE5 ARUM240LTE5 ARUM160LTE5	ARUM240LTE5 ARUM240LTE5 ARUM180LTE5	ARUM240LTE5 ARUM240LTE5 ARUM200LTE5	ARUM240LTE5 ARUM240LTE5 ARUM220LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5
Capacity	Cooling (Rated)	kW	173.6	179.2	184.8	190.4	196.0	201.6
	Heating (Rated)	kW	173.6	179.2	184.8	190.4	196.0	201.6
	Heating (Max)	kW	192.6	198.9	205.2	211.5	217.8	222.8
		Btu/h	657,200	678,700	700,200	721,700	743,200	760,100
Input	Cooling (Rated)	kW	43.5	45.7	45.7	47.6	50.5	52.2
	Heating (Rated)	kW	39.9	42.1	41.9	44.0	45.9	47.7
	Heating (Max)	kW	47.3	50.0	49.5	52.3	54.4	56.4
EER			3.99	3.92	4.04	4.00	3.88	3.86
ESEER			6.73	6.58	6.78	6.70	6.60	6.57
ESEER (SLC)			8.09	7.98	8.05	7.92	7.99	8.05
COP	COP (Rated)		4.35	4.26	4.41	4.33	4.27	4.23
	COP (Max)		4.07	3.98	4.14	4.05	4.01	3.95
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output × Number	W × No.	5,300 × 5	5,300 × 5	(5,300 × 5) + (4,200 × 1)	(5,300 × 5) + (4,200 × 1)	(5,300 × 5) + (4,200 × 1)	5,300 × 6
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	m^3/min	320 × 3	320 × 3	320 × 3	320 × 3	320 × 3	320 × 3
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm (inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
Low Pressure Gas Pipe		mm (inch)	44.5(1-3/4)	44.5(1-3/4)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)
High Pressure Gas Pipe		mm (inch)	41.3(1-5/8)	41.3(1-5/8)	44.5(1-3/4)	44.5(1-3/4)	44.5(1-3/4)	44.5(1-3/4)
Dimensions (W × H × D)		mm	(1,240 ×1,690 × 760) × 3	(1,240 ×1,690 × 760) × 3	(1,240 ×1,690 × 760) × 3	(1,240 ×1,690 × 760) × 3	(1,240 ×1,690 × 760) × 3	(1,240 ×1,690 × 760) × 3
Net Weight		kg	(310 × 2) + (237 × 1)	(310 × 2) + (237 × 1)	(310 × 2) + (300 × 1)	(310 × 2) + (300 × 1)	(310 × 2) + (300 × 1)	310 × 3
Sound Pressure Level	Cooling	dB(A)	68.6	68.7	68.8	69.0	69.6	69.8
	Heating	dB(A)	70.5	70.6	70.6	71.1	71.3	71.8
Sound Power Level	Cooling	dB(A)	91.5	91.6	92.0	92.2	92.2	92.8
	Heating	dB(A)	93.5	93.6	93.8	94.0	94.2	94.8
Communication Cable		No.×mm^2 (VCTF-SB)	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	47.5	47.5	50.0	50.0	50.0	51.0
		lbs	104.7	104.7	110.2	110.2	110.2	112.4
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO_2eq		99.2	99.2	104.4	104.4	104.4	106.5
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	14,300	14,300	15,600	15,600	15,600	15,600
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			64	64	64	64	64	64

* This product contains Fluorinated Greenhouse Gases. (R410A)

ARUM740LTE5 / ARUM760LTE5 / ARUM780LTE5 / ARUM800LTE5 / ARUM820LTE5 / ARUM840LTE5

HP			74	76	78	80	82	84
Model Name	Combination Unit		ARUM740LTE5	ARUM760LTE5	ARUM780LTE5	ARUM800LTE5	ARUM820LTE5	ARUM840LTE5
	Independent Unit		ARUM240LTE5 ARUM240LTE5 ARUM140LTE5 ARUM120LTE5	ARUM240LTE5 ARUM240LTE5 ARUM160LTE5 ARUM120LTE5	ARUM240LTE5 ARUM240LTE5 ARUM180LTE5 ARUM120LTE5	ARUM240LTE5 ARUM240LTE5 ARUM200LTE5 ARUM120LTE5	ARUM240LTE5 ARUM240LTE5 ARUM220LTE5 ARUM120LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM120LTE5
Capacity	Cooling (Rated)	kW	207.2	212.8	218.4	224.0	229.6	235.2
	Heating (Rated)	kW	207.2	212.8	218.4	224.0	229.6	235.2
	Heating (Max)	kW	230.4	236.7	243.0	249.3	255.6	260.6
		Btu/h	786,200	807,700	829,200	850,700	872,100	889,100
Input	Cooling (Rated)	kW	51.1	53.3	53.3	55.2	58.1	59.8
	Heating (Rated)	kW	46.8	48.9	48.8	50.8	52.8	54.5
	Heating (Max)	kW	55.6	58.2	57.8	60.5	62.6	64.7
EER			4.06	3.99	4.10	4.06	3.95	3.93
ESEER			6.84	6.70	6.88	6.80	6.72	6.69
ESEER (SLC)			8.17	8.07	8.13	8.02	8.07	8.12
COP	COP (Rated)		4.43	4.35	4.48	4.41	4.35	4.31
	COP (Max)		4.15	4.06	4.20	4.12	4.08	4.03
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output × Number	W × No.	5,300 × 6	5,300 × 6	(5,300 × 6) + (4,200 × 1)	(5,300 × 6) + (4,200 × 1)	(5,300 × 6) + (4,200 × 1)	5,300 × 7
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	m^3/min	(320 × 3) + (240 × 1)	(320 × 3) + (240 × 1)	(320 × 3) + (240 × 1)	(320 × 3) + (240 × 1)	(320 × 3) + (240 × 1)	(320 × 3) + (240 × 1)
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm (inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
Low Pressure Gas Pipe		mm (inch)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)
High Pressure Gas Pipe		mm (inch)	44.5(1-3/4)	44.5(1-3/4)	44.5(1-3/4)	44.5(1-3/4)	44.5(1-3/4)	44.5(1-3/4)
Dimensions (W × H × D)		mm	(1,240 × 1,690 ×760) × 3 + (930 × 1,690 ×760) × 1	(1,240 × 1,690 ×760) × 3 + (930 × 1,690 ×760) × 1	(1,240 × 1,690 ×760) × 3 + (930 × 1,690 ×760) × 1	(1,240 × 1,690 ×760) × 3 + (930 × 1,690 ×760) × 1	(1,240 × 1,690 ×760) × 3 + (930 × 1,690 ×760) × 1	(1,240 × 1,690 ×760) × 3 + (930 × 1,690 ×760) × 1
Net Weight		kg	(310 × 2) + (237 × 1) + (215 × 1)	(310 × 2) + (237 × 1) + (215 × 1)	(310 × 2) + (300 × 1) + (215 × 1)	(310 × 2) + (300 × 1) + (215 × 1)	(310 × 2) + (300 × 1) + (215 × 1)	(310 × 3) + (215 × 1)
Sound Pressure Level	Cooling	dB(A)	69.1	69.2	69.2	69.4	70.0	70.1
	Heating	dB(A)	70.9	70.9	71.0	71.4	71.6	72.1
Sound Power Level	Cooling	dB(A)	91.8	91.9	92.2	92.4	92.4	92.9
	Heating	dB(A)	93.7	93.8	94.0	94.2	94.4	94.9
Communication Cable		No.×mm^2 (VCTF-SB)	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	57.0	57.0	59.5	59.5	59.5	60.5
		lbs	125.7	125.7	131.2	131.2	131.2	133.4
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO_2eq		119.0	119.0	124.2	124.2	124.2	126.3
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	18,200	18,200	19,500	19,500	19,500	19,500
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			64	64	64	64	64	64

* This product contains Fluorinated Greenhouse Gases. (R410A)

OUTDOOR UNIT SPECIFICATION

MULTI V 5

ARUM860LTE5 / ARUM880LTE5 / ARUM900LTE5 / ARUM920LTE5 / ARUM940LTE5 / ARUM960LTE5

HP			86	88	90	92	94	96
Model Name	Combination Unit		ARUM860LTE5	ARUM880LTE5	ARUM900LTE5	ARUM920LTE5	ARUM940LTE5	ARUM960LTE5
	Independent Unit		ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM140LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM160LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM180LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM200LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM220LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM240LTE5
Capacity	Cooling (Rated)	kW	240.8	246.4	252.0	257.6	263.2	268.8
	Heating (Rated)	kW	240.8	246.4	252.0	257.6	263.2	268.8
	Heating (Max)	kW	266.9	273.2	279.5	285.8	292.1	297.0
		Btu/h	910,600	932,000	953,500	975,000	996,500	1,013,400
Input	Cooling (Rated)	kW	60.9	63.1	63.1	65.0	67.9	69.6
	Heating (Rated)	kW	55.8	58.0	57.8	59.9	61.8	63.6
	Heating (Max)	kW	66.1	68.8	68.3	71.1	73.2	75.2
EER			3.96	3.91	3.99	3.96	3.88	3.86
ESEER			6.68	6.57	6.72	6.66	6.60	6.57
ESEER (SLC)			8.07	8.00	8.04	7.95	8.00	8.05
COP	COP (Rated)		4.32	4.25	4.36	4.30	4.26	4.23
	COP (Max)		4.04	3.97	4.09	4.02	3.99	3.95
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output × Number	W × No.	5,300 × 7	5,300 × 7	(5,300 × 7) + (4,200 × 1)	(5,300 × 7) + (4,200 × 1)	(5,300 × 7) + (4,200 × 1)	5,300 × 8
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	m^3/min	320 × 4	320 × 4	320 × 4	320 × 4	320 × 4	320 × 4
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm (inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
Low Pressure Gas Pipe		mm (inch)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)
High Pressure Gas Pipe		mm (inch)	44.5(1-3/4)	44.5(1-3/4)	44.5(1-3/4)	44.5(1-3/4)	44.5(1-3/4)	44.5(1-3/4)
Dimensions (W × H × D)		mm	(1,240 ×1,690 × 760) × 4	(1,240 ×1,690 × 760) × 4	(1,240 ×1,690 × 760) × 4	(1,240 ×1,690 × 760) × 4	(1,240 ×1,690 × 760) × 4	(1,240 ×1,690 × 760) × 4
Net Weight		kg	(310 × 3) + (237 × 1)	(310 × 3) + (237 × 1)	(310 × 3) + (300 × 1)	(310 × 3) + (300 × 1)	(310 × 3) + (300 × 1)	310 × 4
Sound Pressure Level	Cooling	dB(A)	70.2	70.3	70.3	70.4	70.9	71.0
	Heating	dB(A)	72.1	72.2	72.2	72.5	72.7	73.0
Sound Power Level	Cooling	dB(A)	93.1	93.2	93.4	93.6	93.6	94.0
	Heating	dB(A)	95.1	95.2	95.3	95.4	95.6	96.0
Communication Cable		No.×mm^2 (VCTF-SB)	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	64.5	64.5	67.0	67.0	67.0	68.0
		lbs	142.2	142.2	147.7	147.7	147.7	149.9
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO_2eq		134.6	134.6	139.9	139.9	139.9	142.0
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	19,500	19,500	20,800	20,800	20,800	20,800
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			64	64	64	64	64	64

*** This product contains Fluorinated Greenhouse Gases. (R410A)**

Notes

1. Eurovent Test Condition : For more info regarding program consult www.eurovent-certification.com

2. Capacities are based on the following conditions :
   - Cooling Temperature : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
   - Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
   - Piping Length : Interconnected Pipe Length = 7.5m
   - Difference Limit of Elevation (Outdoor ~ Indoor Unit) is Zero.

3. Wiring cable size must comply with the applicable local and national code.

4. Sound Level Values can be increased owing to ambient conditions during operation.

5. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.

6. ESEER calculation corresponds with below conditions and power input of indoor units is not included.
   - Indoor temperature : 27°C(80.6°F) DB / 19°C(66.2°F) WB
   - Outdoor Temperature conditions.

Part Load Ratio	Outdoor Air Temp. (°C (°F)DB)	Weighting Coefficients
100%	35 (95)	0.03
75%	30 (86)	0.33
50%	25 (77)	0.41
25%	20 (68)	0.23

   - Formula : 0.03 × EER100% + 0.33 × EER75% + 0.41 × EER50% + 0.23 × EER25%

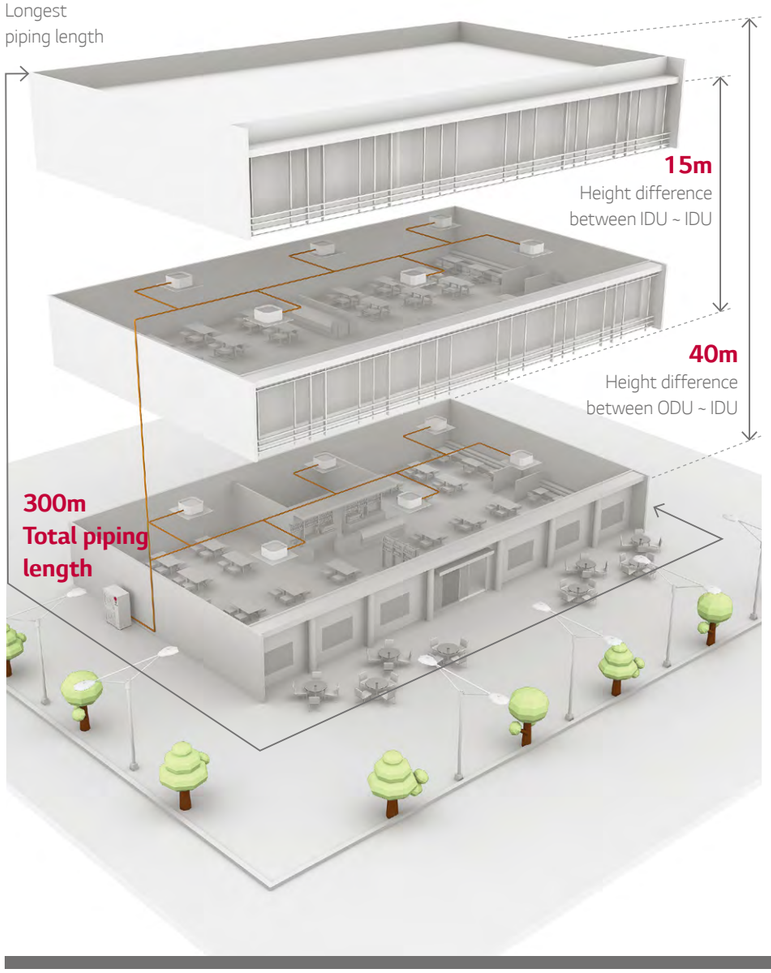
7. Due to our policy of innovation some specifications may be changed without notification.

8. Power factor could vary less than 1% according to the operating conditions.

9. This product contains Fluorinated greenhouse gases.

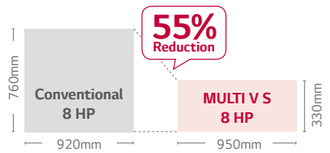
OUTDOOR UNIT KEY FEATURES

MULTI V S



MULTI V S

1. Compact Size



2. Piping Capabilities

Total Piping Length	300m
Longest piping length (Equivalent)	150m (175m)
Longest piping length after 1st branch (Conditional application)	40m (90m)
Height difference between ODU ~ IDU	40m* (50m**)
Height difference between IDU ~ IDU	15m

* In case of outdoor unit installed lower than indoor unit
** In case of outdoor unit installed upper than indoor unit

3. Operation Range

- Heating : -20 ~ 18°C WB
- Cooling : -5 ~ 43°C DB

Benefit

- Saves valuable floor space
- Flexible design applications
  - Slim, light and wide line up (4 ~ 12HP)
  - Combination of indoor unit

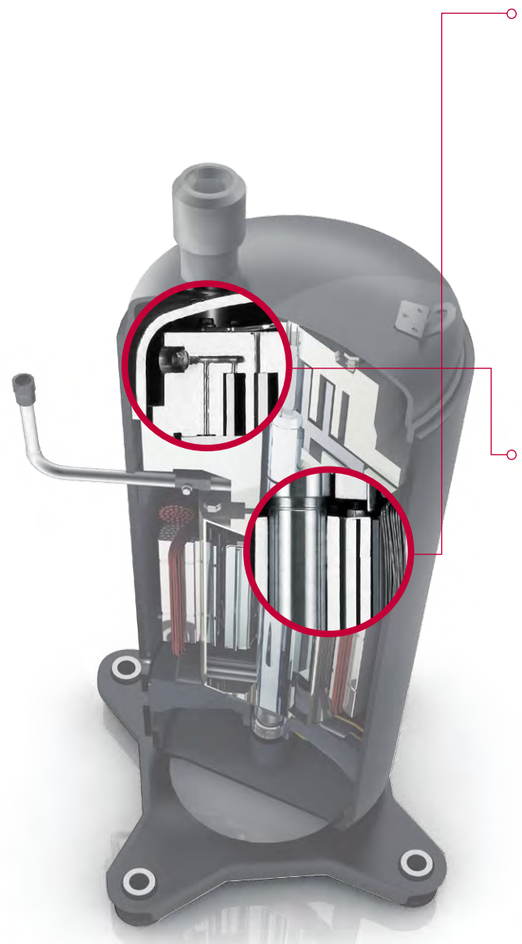
Application

- Premium residential apartment / House (With small balcony)
- Small sized office / Restaurant / Retail shops
- Building with multiple owners

EFFICIENCY

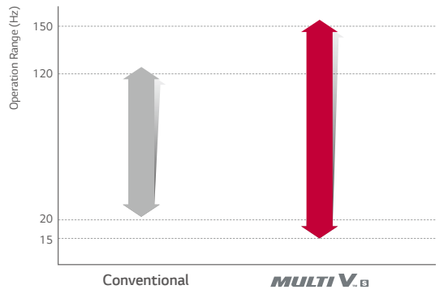
LG's 4th Generation Inverter Compressor

MULTI V S has high efficiency inverter scroll compressor with frequency range 15Hz ~ 150Hz.



World Best Class Compressor Speed

- Rapid response capability
- Compact core design (Concentrated motor)
- Down to 15Hz : Part load efficiency improvement

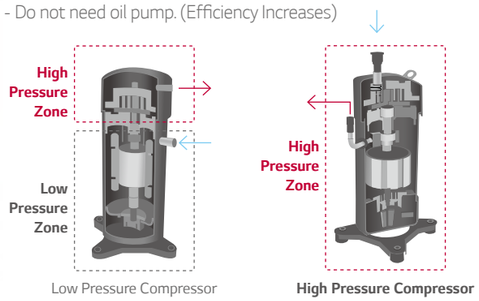


6 By-pass Valve

Compressor reliability is maximized with 6 By-pass Valve
- Prevent compressor damage due to excessively compressed refrigerant more efficiently than 4 by-pass valve

High Pressure Compressor

- Viscosity of oil is secured due to high temperature and pressure.
- Do not need oil pump. (Efficiency Increases)



Low Pressure Compressor | **High Pressure Compressor**

Inverter Scroll Compressor

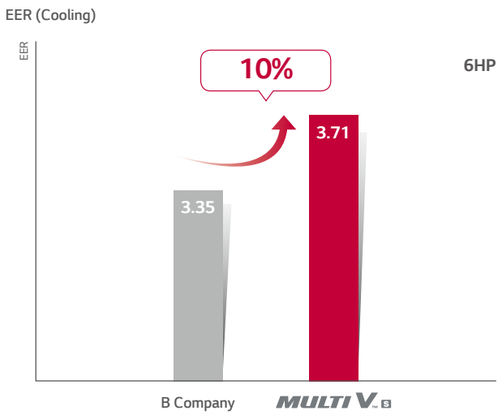
- Inverter SCROLL compressor of high efficiency
- Low vibration / Low noise

OUTDOOR UNIT KEY FEATURES

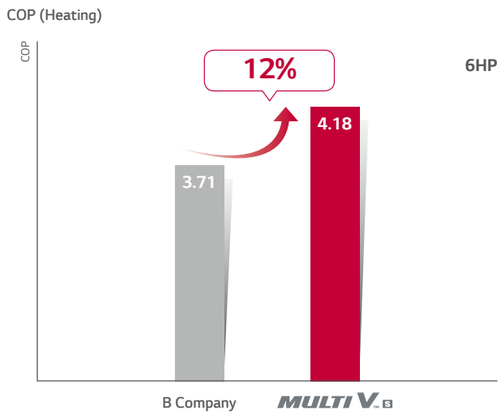
MULTI V S

EFFICIENCY

High Efficiency



* Comparison Based on 6HP in cooling mode



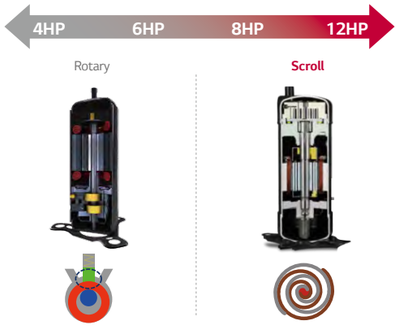
* Comparison Based on 6HP in heating mode

Reliable Inverter Compressor

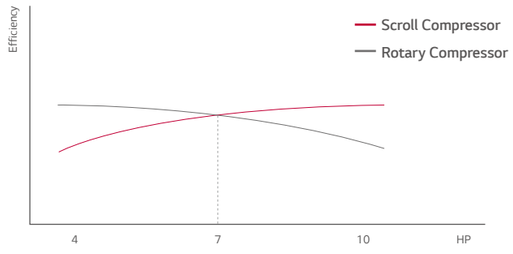
MULTI V S Inverter compressors are highly efficient and reliable for all commercial & residential applications.

MULTI V S

High reliability and efficiency at all capacity
- Below 7HP : Rotary compressor
- Upper 7HP : Scroll compressor



Compressor Efficiency Comparison



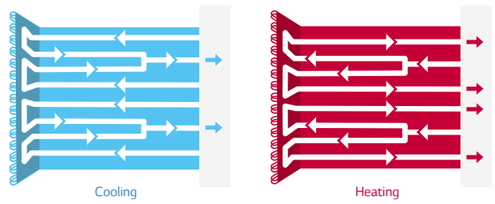
* Based on internal test data

Optimal Heat Exchanger Circuit

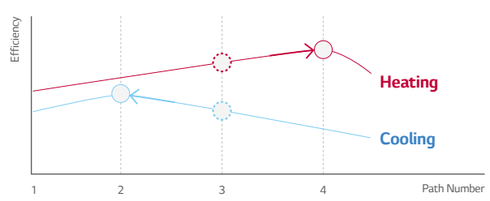
Variable Heat Exchanger Circuit is the world first technology which intelligently selects the optimal path for both heating and cooling (Efficiency increased up to 5%).

MULTI V S

Variable Heat Exchanger Circuit adjusts the path number to match temperatures and operation modes, thereby contributing to an increase in energy efficiency

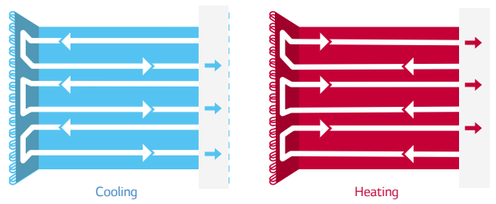


Maximizing efficiency for all operations

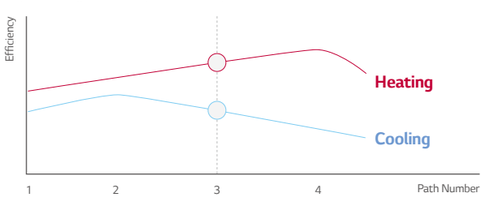


Conventional

The number and direction of path are fixed independent of temperature and operation mode. A fixed path limits efficiency



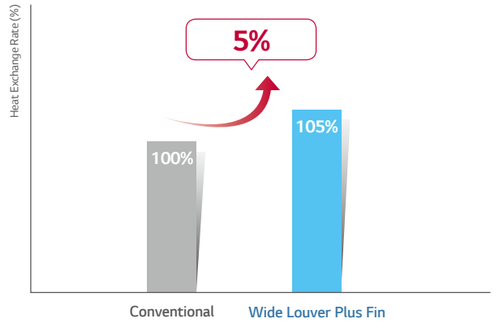
Compromising efficiency for each operation



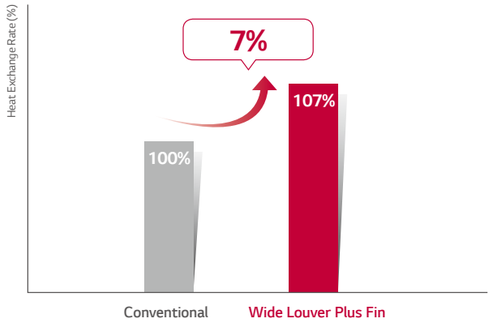
Heat Exchanger with Wide Louver Plus Fin

Improved heat exchanger efficiency of up to 7%.

Cooling



Heating



OUTDOOR UNIT KEY FEATURES

MULTI V S

EFFICIENCY

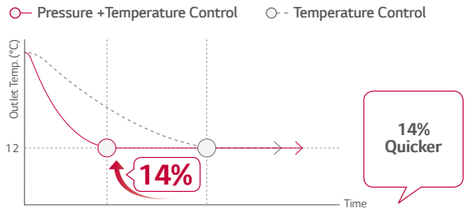
Pressure Sensor

Temperature + Pressure Control

Senses and controls pressure directly using pressure sensor for faster and more exact response to load variation

Quick Operating Response

Pressure control takes up to 14% less time in cooling mode, to reach the desired temperature.

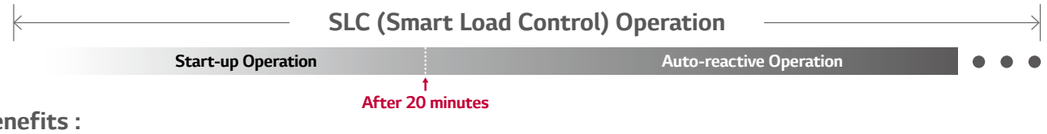


The indoor environment can be made more comfortable, faster and more accurately.

* Based on internal test data

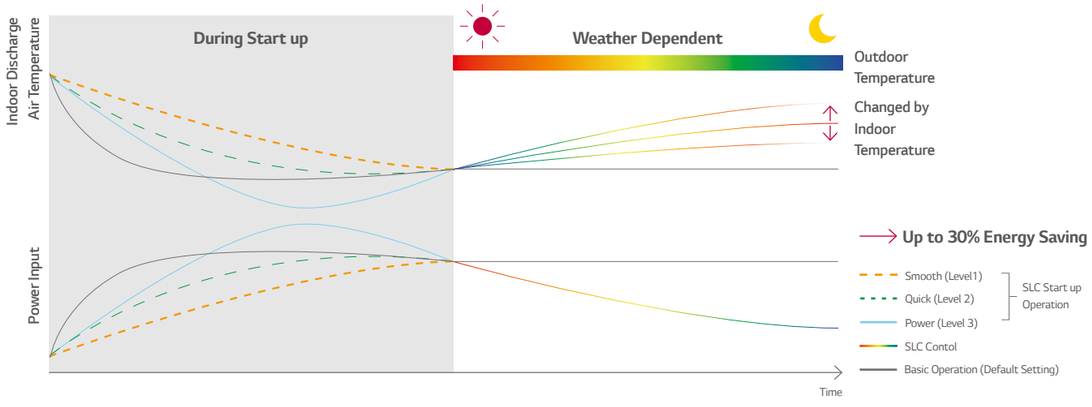
Smart Load Control

MULTI V S changes indoor discharge air temperature continuously according to load, to save energy.



Benefits :

- Energy efficiency increased by 3-step Smart Load Control during start-up phase
- Discharge air temperature adjusted according to outdoor and indoor temperature
- Comfort level in cooling / heating operations ensured



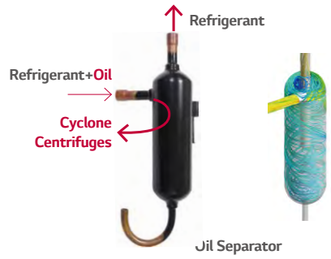
PERFORMANCE

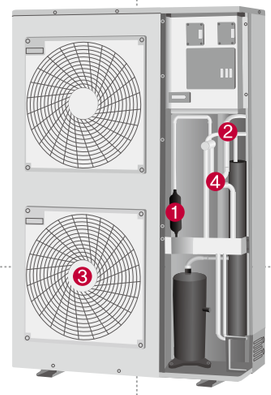
High Reliability of Refrigerant Cycle

MULTI V S improved reliability through an excellent technique of Oil separator / Accumulator / Sub-cooling.

1. Cyclone Centrifuges Oil Separator

- Highly reliable and efficient oil separation by centrifugal separation using cyclone methods
- High collection efficiency as well as outstanding resistance to high temperature and pressure





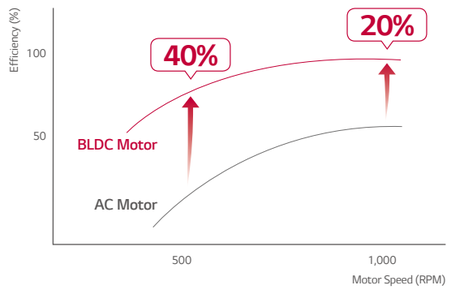
2. Large Volume Accumulator

- Improved reliability by adopting the large volume accumulator (138% volume up compared to conventional)
- Prevents the liquid refrigerant entering the compressor suction

Accumulator

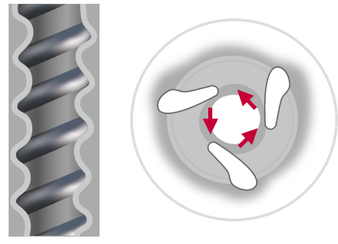
3. BLDC Fan Motor

- The BLDC Fan motor is more efficient than a conventional AC motor, offering an additional 40% energy savings at low speeds and 20% at high speeds



4. Double Sub-cool Interchanger

- Reliability is enhanced by minimizing pressure drop due to high efficiency spiral structure and 2 times larger size
  - → Long pipe is possible (up to 175m) and high elevation (up to 50m)
  - → Reduction of indoor refrigerant noise level



Double Sub-cool Interchanger

OUTDOOR UNIT KEY FEATURES

MULTI V S

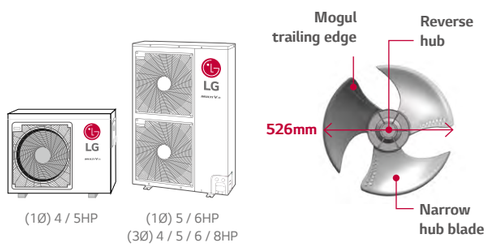
PERFORMANCE

Fan Technology and E.S.P. Control

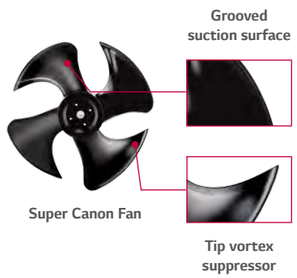
For efficient operation, newly developed fan blows higher air volume and has more high static pressure, also operating noise is decreased.

Fan Technology

The new axial fan has a mogul trailing edge, narrow hub blade and reverse hub, this provides a high efficiency, low noise, wide fan, as well as improving the air flow rate.

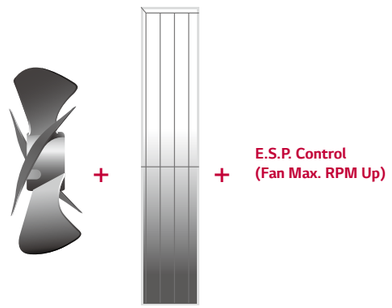


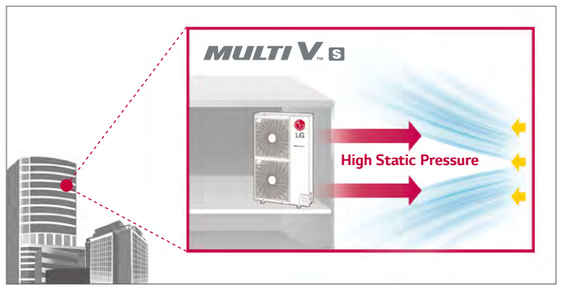
Super cannon fan increases the air volume in 50 CMM and the noise level is decreased by 4dB (A).



High E.S.P. Technology

Flow of air has straightness due to fan shroud and E.S.P. control even in high-rise building.



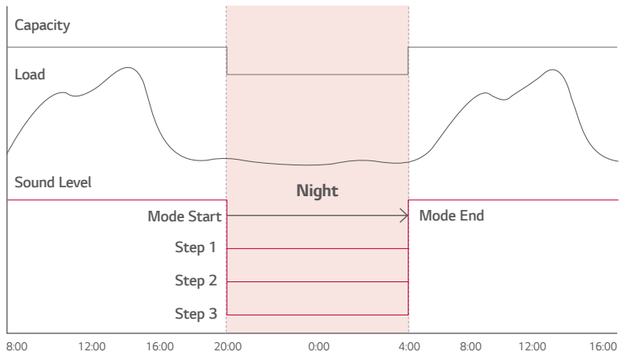


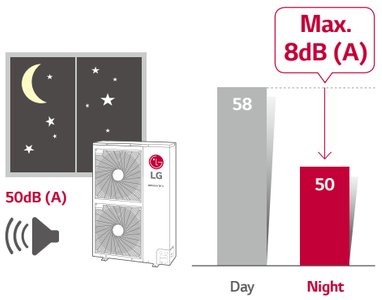
• Straight air flow
- New shroud adopted
- Performs high static pressure

* E.S.P : External Static Pressure

Night Silent Operation

At night mode, noise reduced maximum 14% compared to normal mode.



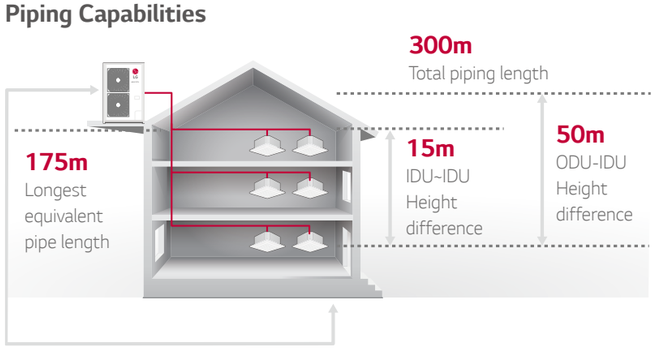


* Normal mode noise level (10HP) : 58dB(A)
* Night 3 step noise level (10HP) : 56dB(A), 53dB(A), 50dB(A)
* Sound pressure tested by following conditions :
1m distance / 1.5m height

Expanded Piping Capabilities

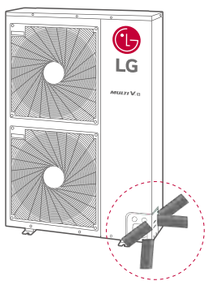
MULTI V S inverter technology and sub cooling control circuit technology allows greater piping length and outstanding elevation differences. A cooling system can be implemented more flexibly in a shop, office and even high-rise building, reducing the designer's work time and providing more efficient design.

Piping Capabilities



4 Way Piping

- Free design and installation by 4 way piping.



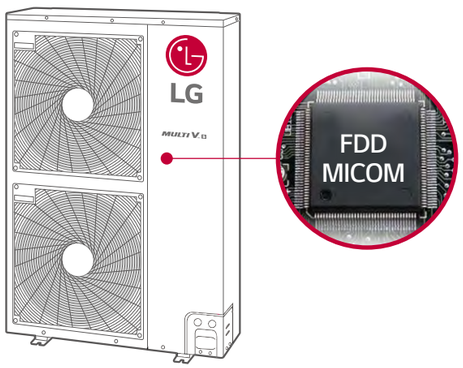
OUTDOOR UNIT KEY FEATURES

MULTI V S

CONVENIENCE

Upgraded Fault Detection and Diagnosis

The inclusion of FDD elements - Auto start-up, auto refrigerant check, black box functionality, simultaneous evaluation, and auto refrigerant collection, provides the optimal solution for user reliability and ease of maintenance.



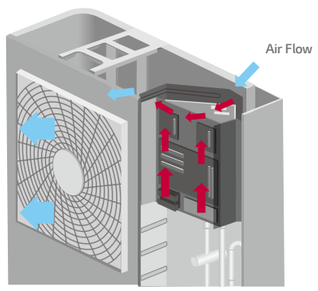
- Auto commissioning Mode
- Auto Refrigerant Collection
- Auto evaluation of refrigerant amount and charging
- Able to access LGMV (LG Monitoring View) by smartphone
- Black box function
- Piping & wiring error check-up

Self Cooled Control

MULTI V S has heat exchanger structure and diagonal shape of control box. (Efficiency increased up to 3%)

Control Box Cooling System

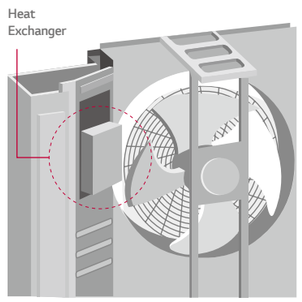
- Feature of control box is diagonal shape, it makes naturally air flowing (Directly pulling air back of the fan)
- Reduced heating / cooling efficiency loss



Front View

Heat Exchanger Technology

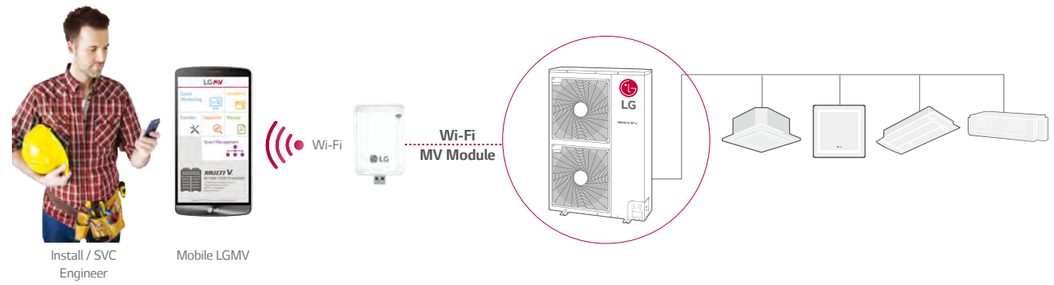
- Heat exchanger structure
- Optimal air flow by aluminum heat exchanger on control box.



Rear View

Smartphone Monitoring & Control

Mobile LGMV helps users to monitor the MULTI V S system cycle using Wi-Fi MV Module.
Technicians can check LGMV data 10m away from MULTI V S outdoor with smartphone.



Install / SVC Engineer

Mobile LGMV

Connection type : Wi-Fi / To use Mobile LGMV Application, exclusive Wi-Fi MV Module is required

Smart Phone Specification

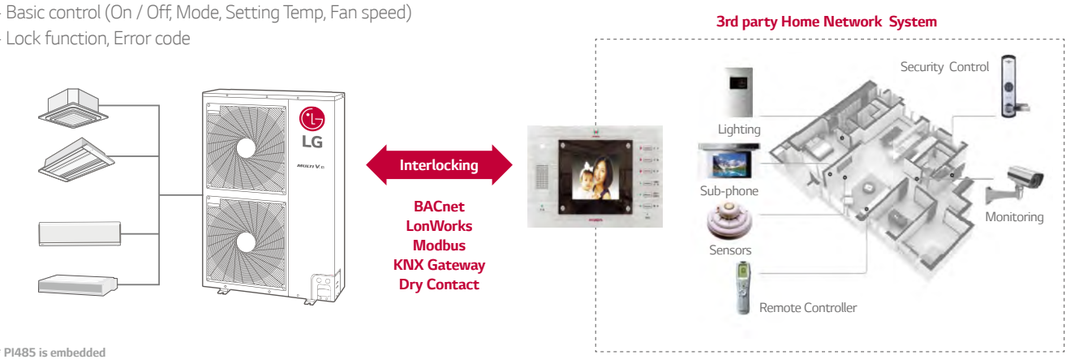
App. Name	OS	Recommended Specification	Resolution	Wireless Communication Effective Distancd
Mobile LGMV	iOS (iPad Only)	AppiOS 8.0 / 8.1	2,048 x 1,536 (Optimization) / 1,024 x 768	• Effective distance : 10m (Open Area) • The effective distance may be reduced by the communication environment
	Android	Android 4.4 (Android 3.x, Honeycomb not Supported)	480 x 800 / 720 x 1,280, 768 x 1,280 / 768 x 1,024 / 1,080 x 1,920	

With Home Network System

Interlocking with home network system enables various application.
Depending on building size and usage, various communication method can be given.

Compatibility to Home Network System

- Basic control (On / Off, Mode, Setting Temp, Fan speed)
- Lock function, Error code



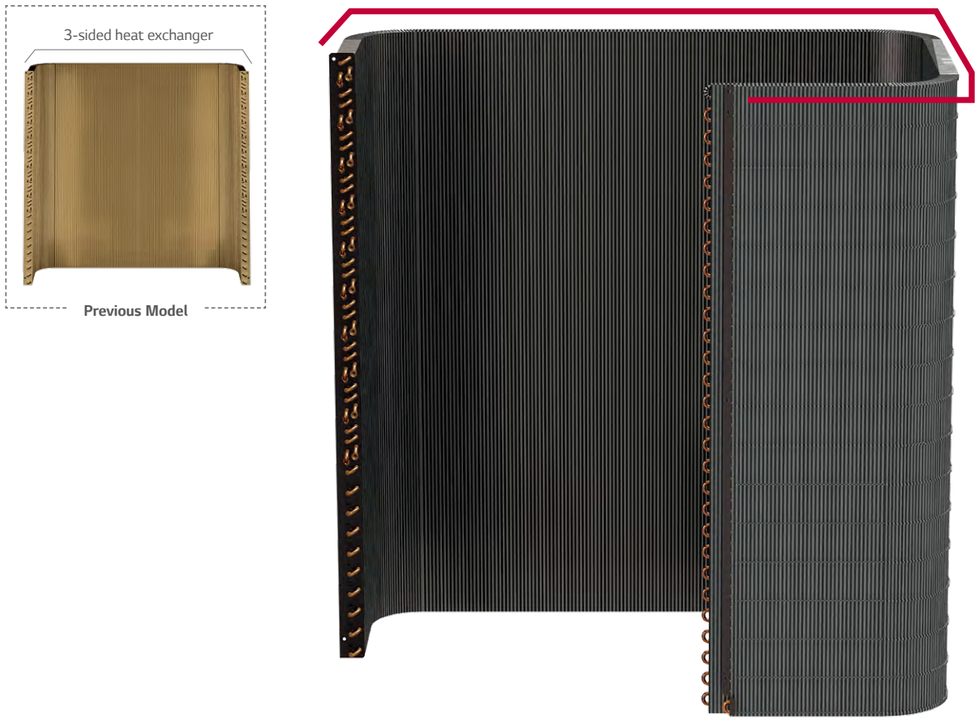
* PI485 is embedded

MULTI V S

PERFORMANCE

Heat Exchanger with Ocean Black Fin for Corrosion Resistance

LG's exclusive Ocean Black Fin is applied on the heat exchanger of MULTI V S in order to perform even in corrosive environments. The strong protection from various corrosive external environments such as seaside with high salt contamination and industrial cities with severe air pollution caused by fumes from factories keeps MULTI V S operating without breakdown. This improvement in durability prolongs the product's lifespan and lowers both the operational and maintenance costs.



Ocean Black Fin

Corrosion Resistance Proven by Certified Tests

LG Corrosion Resistance solution passed ISO accelerated corrosion test conducted by an independent test organization and the result has been certified by prestigious global certification organization, UL (Underwriters Laboratories).

Certified protection

Condition of salt spray test

Temperature	35°C
Mist of 5% sodium chloride solution	

Condition of gas exposure test

R.H.	NO_2	SO_2
95%	10×10^{-5}	5×10^{-6}


CERTIFICATE OF VALIDATION

Certificate Number / Report Reference: 4786735320-2 / 4786735320-15-2
Issue Date: 2015-03-25
Expiration Date: 2019-03-24
Issued to: LG Electronics Inc
76 Seongsan-dong, Changwon-Si, Gyeongsangnam-Do 641-713, Korea
Claim Validated: Model ARU*******, Corrosion Resistance for Outdoor Unit on Air Conditioner
Simulating the corrosive load for 27 years of exposure in a more severe traffic environment with salt contamination(Test Method B).
Tests: Test method B of ISO21207 : Salt contaminated condition + severe industrial or traffic environment
Standards / Regulations: ISO 21207, 6.3 & Annex A, LO(68)-E-9045, LO(69)-E-9159, LO(68)-E-9148 & LO(68)-E-9046

This certificate and the claim validation expire on the expiration date listed above. UL validated the claim based upon criteria defined by the client. Client's use of this validated claim on or in connection with the product is and shall remain Client's representation that the claim is true and accurate. UL neither selected the samples nor determined whether the samples were representative of production units. The test results apply only to the actual samples tested. UL is not responsible for the scope of the tests performed or for the accuracy of test data generated by third parties. Please see test report for full details including test standards.

This certificate in no way conveys or implies Listing, Classification or Recognition or other certification by UL and does not authorize the use of UL Listing, Classification or Recognition Marks on or in connection with the product. This validated claim relates solely to product performance and in no way conveys or implies evaluation of the safety of the product identified above.

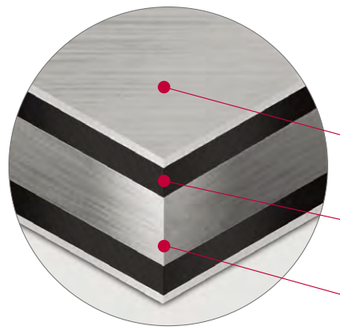
Chunbae Kim
Engineering Leader
Commercial & Industrial
UL Korea Ltd.
Parkview Tower, Jeongja-dong, Bundang-gu, Seongnam-si, Gyeonggi-do, 463-811, Korea

* Test Method B Simulation Validated
(Test condition: Salt contaminated condition + severe industrial/traffic environment(NO_2/SO_2))

* Based on 1,500 UL test hours

Enhanced Coating Layers

The black coating with enhanced epoxy resin is applied for strong protection from various corrosive external conditions such as salt contamination and air pollution including fumes from factories. Moreover, the hydrophilic film keeps water from accumulating on the heat exchanger's fin, minimizing moisture buildup and eventually making it even more corrosion resistant.



OUTDOOR UNIT SPECIFICATION

MULTI V S

LG participates in the ECP programme for EUROVENT VRF program.
Check ongoing validity of certification : www.eurovent-certification.com

ARUN040GSS0 / ARUN040GSR0 / ARUN050GSL0

HP			4	5
Model Name	Combination Unit		ARUN040GSS0 / ARUN040GSR0	ARUN050GSL0
Capacity [1] (Rated)	Cooling	kW	12.1	14.0
	Heating	kW	12.5	15.0
Input (Rated) [1]	Cooling	kW	3.57	3.78
	Heating	kW	2.91	3.75
EER			3.39	3.70
COP			4.3	4.0
Compressor	Type		BLDC Inverter Twin Rotary	BLDC Inverter Twin Rotary
	Piston Displacement	cm^3/rev	44.2	44
	Motor Output	W	4,000	4,000
	Starting Method		DC Inverter Starting	DC Inverter Starting
Fan	Type		Axial Flow Fan	Axial Flow Fan
	Motor Output x Number	W	124 x 1	124 x 1
	Air Flow Rate (High)	m^3/min	60	60
		ft^3/min	2,119	2,119
	Drive		DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side
Pipe Connections	Liquid	mm (inch)	Ø 9.52(3/8)	Ø 9.52(3/8)
	Gas	mm (inch)	Ø 15.88(5/8)	Ø 15.88(5/8)
Dimensions (W x H x D)		mm	950 × 834 × 330	950 × 834 × 330
Net Weight		kg	69	73
Sound Pressure Level	Cooling	dB(A)	50	52
	Heating	dB(A)	52	58
Sound Power Level		dB(A)	66	68
Communication Cable		No. x mm^2 (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A
	Precharged Amount	kg	1.8	2.4
		lbs	4.0	5.3
	GWP		2,087.5	2,087.5
	t-CO_2eq		3.8	5.0
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	1,300	1,300
Power Supply		V, Ø, Hz	220-240 , 1 , 50	220-240 , 1 , 50
			220, 1, 60	220, 1, 60
Number of maxmum connectable indoor units [3]			8	10

Notes:
1. Eurovent Test Condition : Type of indoor unit connected is only Ceiling Concealed Duct.
   - Refer to EUROVENT certification regulation for more detail test conditions. - Refer to EUROVENT website for test values connected Ceiling Cassette type indoors.
2. Performances are based on the following conditions :
   - Cooling Temperature : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB / Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
   - Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB / Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
3. The maximum combination ratio is 160% (the maximum combination ratio of ARUN050GSL0 is 130%)
4. Wiring cable size must comply with the applicable local and national codes.
5. Due to our policy of innovation some specifications may be changed without notification.
6. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
7. Power factor could vary less than ±1% according to the operating conditions.
8. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

LG participates in the ECP programme for EUROVENT VRF program.
Check ongoing validity of certification : www.eurovent-certification.com

ARUN050GSS0 / ARUN050GSR0
ARUN060GSS0 / ARUN060GSR0

HP			5	6
Model Name	Combination Unit		ARUN050GSS0 / ARUN050GSR0	ARUN060GSS0 / ARUN060GSR0
Capacity [1] (Rated)	Cooling	kW	14.0	15.5
	Heating	kW	16.0	18.0
Input (Rated) [1]	Cooling	kW	3.51	4.18
	Heating	kW	3.60	4.31
EER			3.99	3.71
COP			4.44	4.18
Compressor	Type		BLDC Inverter Twin Rotary	BLDC Inverter Twin Rotary
	Piston Displacement	cm^3/rev	44.2	44.2
	Motor Output	W	4,000	4,000
	Starting Method		DC Inverter Starting	DC Inverter Starting
Fan	Type		Axial Flow Fan	Axial Flow Fan
	Motor Output x Number	W	124 x 2	124 x 2
	Air Flow Rate (High)	m^3/min	110	110
		ft^3/min	3,885	3,885
	Drive		DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side
Pipe Connections	Liquid	mm (inch)	Ø 9.52(3/8)	Ø 9.52(3/8)
	Gas	mm (inch)	Ø 15.88(5/8)	Ø 19.05(3/4)
Dimensions (W x H x D)		mm	950 × 1,380 × 330	950 × 1,380 × 330
Net Weight		kg	94	94
Sound Pressure Level	Cooling	dB(A)	51	52
	Heating	dB(A)	53	54
Sound Power Level		dB(A)	67	69
Communication Cable		No. x mm^2 (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A
	Precharged Amount	kg	3.0	3.0
		lbs	6.6	6.6
	GWP		2,087.5	2,087.5
	t-CO_2eq		6.3	6.3
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	1,300	1,300
Power Supply		V, Ø, Hz	220-240 , 1 , 50	220-240 , 1 , 50
			220, 1, 60	220, 1, 60
Number of maxmum connectable indoor units [3]			10	13

Notes:
1. Eurovent Test Condition : Type of indoor unit connected is only Ceiling Concealed Duct.
   - Refer to EUROVENT certification regulation for more detail test conditions. - Refer to EUROVENT website for test values connected Ceiling Cassette type indoors.
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OUTDOOR UNIT SPECIFICATION

MULTI V S

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Check ongoing validity of certification : www.eurovent-certification.com

ARUN040LSS0 / ARUN050LSS0 / ARUN060LSS0
ARUN040LSR0 / ARUN050LSR0 / ARUN060LSR0

HP			4	5	6
Model Name	Combination Unit		ARUN040LSS0 / ARUN040LSR0	ARUN050LSS0 / ARUN050LSR0	ARUN060LSS0 / ARUN060LSR0
Capacity [1] (Rated)	Cooling	kW	12.1	14.0	15.5
	Heating	kW	12.5	16.0	18.0
Input (Rated) [1]	Cooling	kW	2.88	3.56	4.18
	Heating	kW	2.76	3.60	4.31
EER			4.20	3.93	3.71
COP			4.53	4.44	4.18
Compressor	Type		BLDC Inverter Twin Rotary	BLDC Inverter Twin Rotary	BLDC Inverter Twin Rotary
	Piston Displacement	cm^3/rev	44.2	44.2	44.2
	Motor Output	W	4,000	4,000	4,000
	Starting Method		DC Inverter Starting	DC Inverter Starting	DC Inverter Starting
Fan	Type		Axial Flow Fan	Axial Flow Fan	Axial Flow Fan
	Motor Output x Number	W	124 x 2	124 x 2	124 x 2
	Air Flow Rate (High)	m^3/min	110	110	110
		ft^3/min	3,885	3,885	3,885
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side	Side
Pipe Connections	Liquid	mm (inch)	Ø 9.52(3/8)	Ø 9.52(3/8)	Ø 9.52(3/8)
	Gas	mm (inch)	Ø 15.88(5/8)	Ø 15.88(5/8)	Ø 19.05(3/4)
Dimensions (W x H x D)		mm	950 × 1,380 × 330	950 × 1,380 × 330	950 × 1,380 × 330
Net Weight		kg	96	96	96
Sound Pressure Level	Cooling	dB(A)	50	51	52
	Heating	dB(A)	52	53	54
Sound Power Level		dB(A)	66	67	69
Communication Cable		No. x mm^2 (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	3.0	3.0	3.0
		lbs	6.6	6.6	6.6
	GWP		2,087.5	2,087.5	2,087.5
	t-CO_2eq		6.3	6.3	6.3
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	1,300	1,300	1,300
Power Supply		V, Ø, Hz	380-415 , 3 , 50	380-415 , 3 , 50	380-415 , 3 , 50
			380, 3, 60	380, 3, 60	380, 3, 60
Number of maxmum connectable indoor units [3]			8	10	13

Notes:
1. Eurovent Test Condition : Type of indoor unit connected is only Ceiling Concealed Duct.
   - Refer to EUROVENT certification regulation for more detail test conditions. - Refer to EUROVENT website for test values connected Ceiling Cassette type indoors.
2. Performances are based on the following conditions :
   - Cooling Temperature : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB / Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
   - Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB / Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
3. The maximum combination ratio is 160%.
4. Wiring cable size must comply with the applicable local and national codes.
5. Due to our policy of innovation some specifications may be changed without notification.
6. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
7. Power factor could vary less than ±1% according to the operating conditions.
8. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

LG participates in the ECP programme for EUROVENT VRF program.
Check ongoing validity of certification : www.eurovent-certification.com

ARUN080LSS0 / ARUN100LSS0 / ARUN120LSS0

HP			8	10	12
Model Name	Combination Unit		ARUN080LSS0	ARUN100LSS0	ARUN120LSS0
Capacity [1] (Rated)	Cooling	kW	22.4	28.0	33.6
	Heating	kW	24.5	30.6	36.7
Input (Rated) [1]	Cooling	kW	6.27	8.70	10.50
	Heating	kW	6.28	7.56	9.66
EER			3.57	3.22	3.20
COP			3.90	4.05	3.80
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm^3/rev	43.8	62.1	62.1
	Motor Output	W	4,200	5,300	5,300
	Starting Method		Direct On Line	Direct On Line	Direct On Line
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	124 x 2	250 x 2	250 x 2
	Air Flow Rate (High)	m^3/min	140	190	190
		ft^3/min	4,944	6,710	6,710
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side	Side
Pipe Connections	Liquid	mm (inch)	Ø 9.52(3/8)	Ø 9.52(3/8)	Ø 12.7(1/2)
	Gas	mm (inch)	Ø 19.05(3/4)	Ø 22.2(7/8)	Ø 28.58(1 1/8)
Dimensions (W x H x D)		mm	950 × 1,380 × 330	1,090 × 1,625 × 380	1,090 × 1,625 x 380
Net Weight		kg	115	144	157
Sound Pressure Level	Cooling	dB(A)	57	58	60
	Heating	dB(A)	57	58	60
Sound Power Level		dB(A)	74	77	78
Communication Cable		No. x mm^2 (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	3.5	4.5	6.0
		lbs	7.7	9.9	13.2
	GWP		2,087.5	2,087.5	2,087.5
	t-CO_2eq		7.3	9.4	12.5
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	2,400	2,600	3,400
Power Supply		V, Ø, Hz	380-415 , 3 , 50	380-415 , 3 , 50	380-415 , 3 , 50
			380 , 3 , 60	380 , 3 , 60	380 , 3 , 60
Number of maxmum connectable indoor units [3]			13	16	20

Notes:
1. Eurovent Test Condition : Type of indoor unit connected is only Ceiling Concealed Duct.
   - Refer to EUROVENT certification regulation for more detail test conditions. - Refer to EUROVENT website for test values connected Ceiling Cassette type indoors.
2. Performances are based on the following conditions :
   - Cooling Temperature : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB / Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
   - Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB / Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
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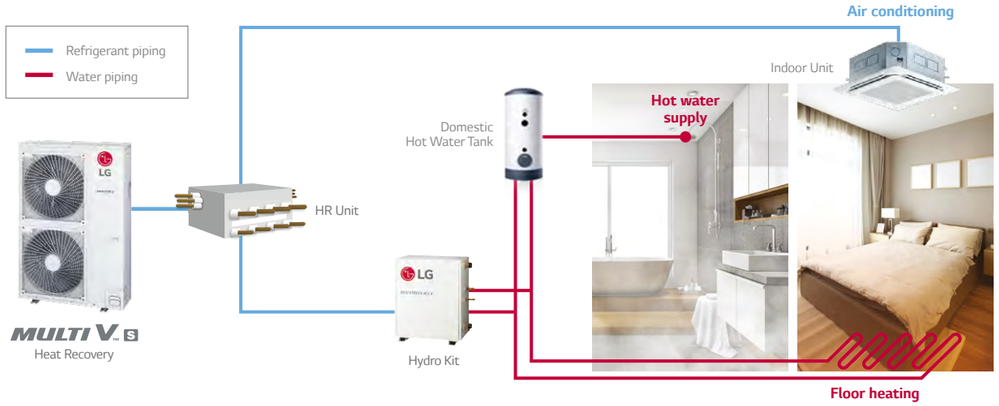
6. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
7. Power factor could vary less than ±1% according to the operating conditions.
8. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

MULTI V S HEAT RECOVERY

HEAT RECOVERY

System Diagram

Providing a total solution by heat pump, air conditioning(cooling by refrigerant & chilled water, heating by refrigerant & hot water) and domestic hot water supply.

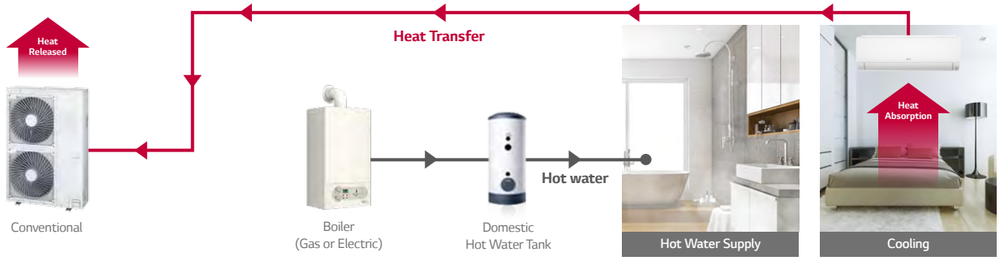


Energy Saving

Energy consumption can be reduced since absorbed heat from indoor space is used for supplying hot water.

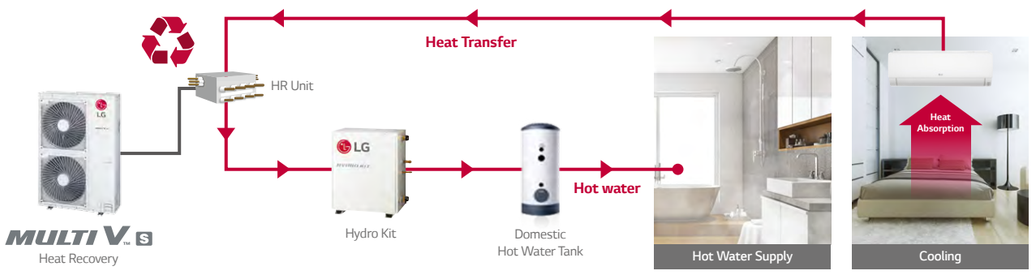
Conventional

Absorbed heat is released to outdoor air.



MULTI V S Heat Recovery with HYDRO KIT

Absorbed heat from indoor space is used for making hot water.



MULTI V S HEAT RECOVERY

LG participates in the ECP programme for EUROVENT VRF program.
Check ongoing validity of certification : www.eurovent-certification.com

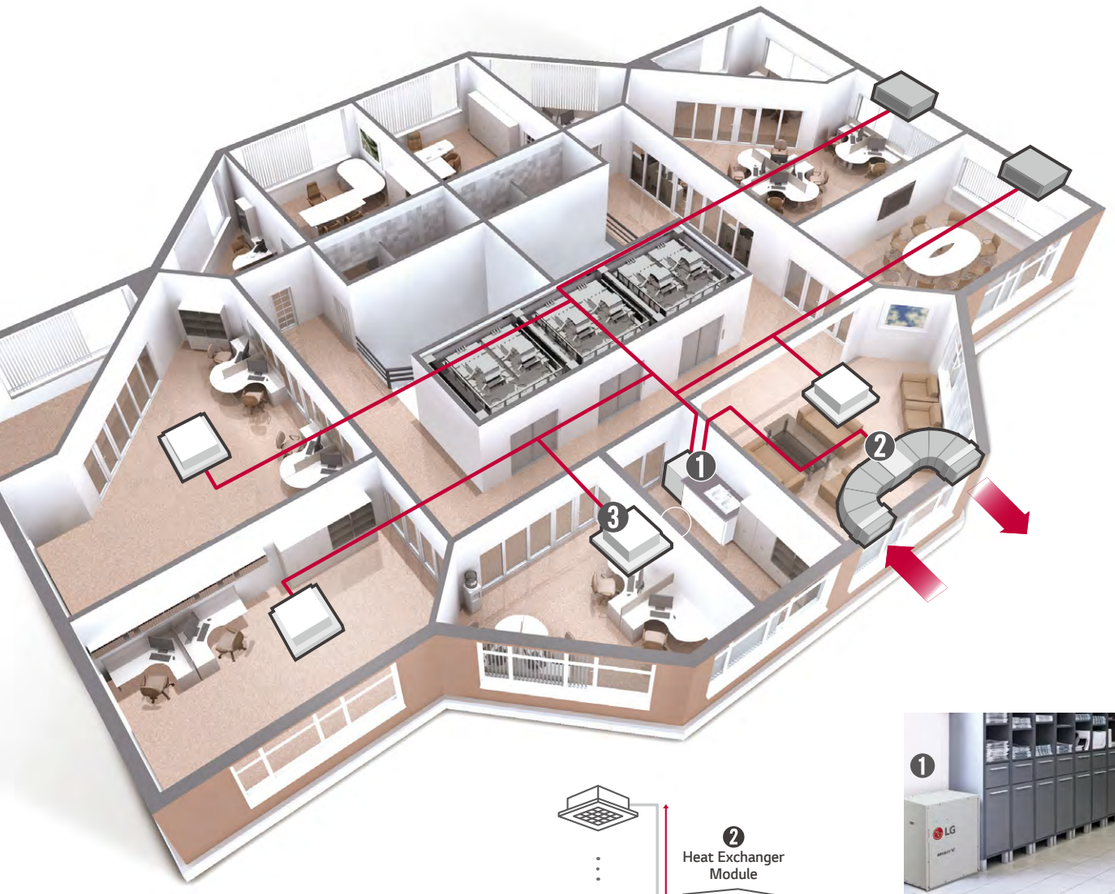
ARUB060GSS4

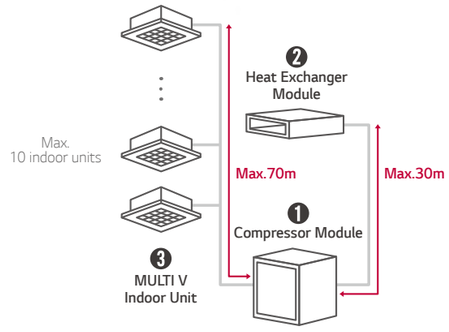
HP				6
Model				ARUB060GSS4
Capacity (Rated) [1]	Cooling	Nom	kW	15.5
	Heating	Nom	kW	18.0
Power Input (Rated) [1]	Cooling	Nom	kW	3.97
	Heating	Nom	kW	4.10
EER				3.90
COP				4.39
ESEER				7.15
SLC ESEER				8.05
Compressor	Type			Hermetically Sealed Scroll
	Piston Displacement		cm^3/rev	43.8
	Motor Output		W	4,200
	Starting Method			DC Inverter Starting
Fan	Type			Axial Flow Fan
	Motor Output x Number		W	124 x 2
	Air Flow Rate (High)		m^3/min	110
			ft^3/min	3,885
	Drive			DC INVERTER
	Discharge		Side / Top	Side
Pipe Connections	Liquid		mm (inch)	Ø 9.52 (3/8)
	Low Pressure Gas		mm (inch)	Ø 19.05 (3/4)
	High Pressure Gas		mm (inch)	Ø 15.88 (5/8)
Dimensions (W x H x D)			mm	950 × 1,380 × 330
Net Weight			kg	118
Sound Pressure Level	Cooling		dB(A)	56
	Heating		dB(A)	58
Sound Power Level	Cooling		dB(A)	69
	Heating		dB(A)	71
Communication Cable	(VCTF-SB)		No. x mm^2	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant Name			R410A
	Precharged Amount		kg	3.5
	t-CO_2eq			7.3
	Control			Electronic Expansion Valve
Refrigerant Oil	Type			FVC68D(PVE)
	Charge		cc	1,300
Power Supply			V, Ø, Hz	220-240 , 1 , 50
				220, 1, 60
Number of maxmum connectable indoor units				13

Notes:
1. Eurovent Test Condition : Type of indoor unit connected is only Ceiling Concealed Duct.
   - Refer to EUROVENT certification regulation for more detail test conditions. - Refer to EUROVENT website for test values connected Ceiling Cassette type indoors.
2. Performances are based on the following conditions :
   - Cooling Temperature : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB / Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
   - Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB / Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
3. The maximum combination ratio is 160%.
4. Wiring cable size must comply with the applicable local and national codes.
5. Due to our policy of innovation some specifications may be changed without notification.
6. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
7. Power factor could vary less than ±1% according to the operating conditions.
8. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

OUTDOOR UNIT KEY FEATURES

MULTI V MODULAR





High flexibility of installation

Heat exchanger module can be installed for direct inlet/ outlet or duct connected inlet/outlet

Quiet operation

Low sound level of compressor module can make compressor installed inside space.

Various indoor unit combinations & long distance between modules

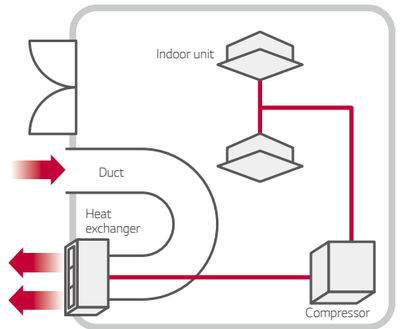
- Maximum 10 indoor units can be connected and be operated separately.
- Maximum distance between compressor module and heat exchanger module is 30m.
- Maximum distance between indoor module and compressor module is 70m.

High Flexibility of installation

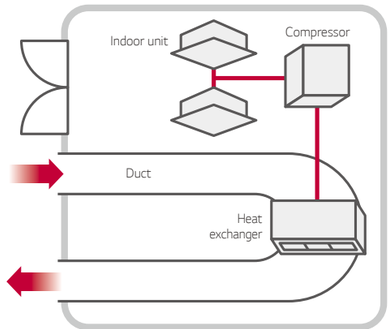
Outside unit split by compressor and heat exchanger module

Split unit can make installation much more flexible. Compressor module can be installed at any place inside such as storage room, or in a kitchen. Heat exchanger module can be installed in a false ceiling spaces in both case of direct inlet/outlet and ducted inlet/outlet. Higher maximum external static pressure can make Installation more flexible

Direct inlet/outlet case



Duct connected case



Lighter & smaller units can make installation much more easier

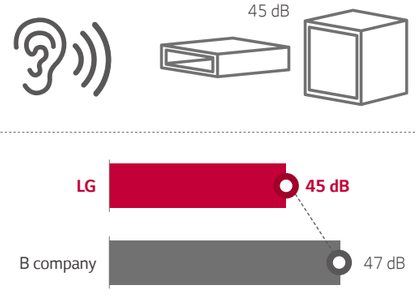
Ease and flexibility of installation
Ease and flexibility of installation thanks to the high static pressure available and adjustable and the reduced weight

Small size
Make the most of your local space thanks to its small size

Regulatory compliance
Regulatory compliance thanks to the 3600 CMM of exhausted air

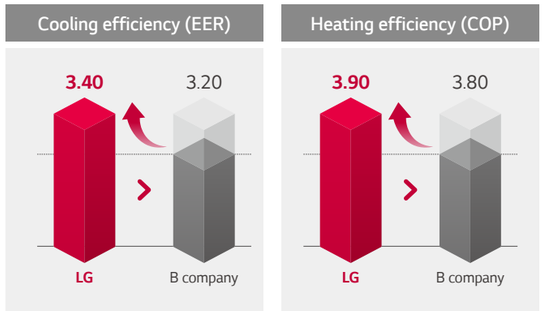
Quiet operation

Low sound level of both compressor module and heat exchanger module can make outdoor units installed and operated inside



High Efficiency

World class higher efficiency can get much more energy savings
World best inverter compressor, optimal heat exchanger circuit and smart load control make world class higher efficiency than other brands.



OUTDOOR UNIT SPECIFICATION

MULTI V MODULAR

※ Below spec can be revised until PDB distributed.

HP			5
Model Name	Combination Unit		Compressor Module
Capacity [1]	Cooling (Rated)	kW	14.0
		kcal/h	12,000
	Heating (Rated / Max.)	kW	14.0 / 16.0
		kcal/h	12,000 / 13,800
Input (Rated) [1]	Cooling (Rated)	kW	4.12
	Heating (Rated / Max.)	kW	3.59 /4.32
EER (Based on Rated capacity)			3.40
COP (Based on Rated capacity)			3.90
COP (Based on Max. capacity)			3.70
Power Factor [7]	Rated	-	0.93
Casing Color			Morning Gray
Heat Exchanger			-
Compressor	Type		Hermetic Motor Compressor
	Piston Displacement	cm^3/rev	31.6
	Number of Revolution	rev/min	3,600
	Motor Output	W	3,200
	Starting Method		DC Inverter Starting
	Oil Type		FVC68D(PVE)
	Oil Charge		1,000
Fan	Type		-
	Motor Output x Number	W	-
	Air Flow Rate (High)	m^3/min	-
		ft^3/min	-
	Drive		-
	Discharge	Side / Top	-
External Static Pressure	Nominal (Rated, Factory Set)	mmAq (Pa)	-
	Max.	mmAq (Pa)	-
Pipe Connections	Liquid / Gas	mm (inch)	Ø 9.52(3/8) - IDU / Ø 15.88(5/8) - IDU
Dimensions (W x H x D)		mm	580 × 700 × 500
		inch	22-27/32 x 27-9/16 x 19-11/16
Net Weight		kg	77
		lbs	170
Sound Pressure Level	Cooling / Heating	dB(A)	45 / 45
Protection Devices	High pressure protection	-	High pressure sensor
	Compressor / Fan	-	Over-heat protection
	Inverter	-	Over-heat protection / Over-current protection
Communication Cable		No.×mm^2 (VCTF)	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A
	Precharged Amount	kg	2.0
		lbs	4.4
	t-CO_2 eq		4.2
	Control		-
Power Supply		V, Ø, Hz	380-415 , 3 , 50
Number of maximum connectable indoor units [3]			10

Notes:
1. Eurovent Test Condition : Type of indoor unit connected is only Ceiling Concealed Duct.
 - Refer to EUROVENT certification programme for more detail test conditions. - Refer to EUROVENT website for test values connected Ceiling Cassette type indoors.
2. Performances are based on the following conditions :
- Cooling Temperature : Indoor 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor 35°C (95°F) DB / 24°C (75.2°F) WB
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB
- Heat Exchanger Module ~ Compressor Module = 5m - Compressor Module ~ Indoor Unit = 7.5m
3. The maximum combination ratio is 130%. 4. Wiring cable size must comply with the applicable local and national codes.
5. Due to our policy of innovation some specifications may be changed without notification.
6. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
7. Power factor could vary less than ±1% according to the operating conditions. 8. This product contains Fluorinated greenhouse gases. (R410A, GWP (Global warming potential) = 2087.5)

※ Below spec can be revised until PDB distributed.

HP			5
Model Name	Combination Unit		Heat Exchanger Module
Capacity [1]	Cooling (Rated)	kW	-
		kcal/h	-
	Heating (Rated / Max.)	kW	- / -
		kcal/h	- / -
Input (Rated) [1]	Cooling (Rated)	kW	-
	Heating (Rated / Max.)	kW	- / -
EER (Based on Rated capacity)			-
COP (Based on Rated capacity)			-
COP (Based on Max. capacity)			-
Power Factor [7]	Rated	-	-
Casing Color			Galvanized Steel Plate
Heat Exchanger			Ocean Black Fin (Wide Louver Plus)
Compressor	Type		-
	Piston Displacement	cm^3/rev	-
	Number of Revolution	rev/min	-
	Motor Output	W	-
	Starting Method		-
	Oil Type		-
	Oil Charge		-
Fan	Type		Sirocco Fan
	Motor Output x Number	W	400 x 2
	Air Flow Rate (High)	m^3/min	60
		ft^3/min	2,119
	Drive		Direct
	Discharge	Side / Top	Side
External Static Pressure	Nominal (Rated, Factory Set)	mmAq (Pa)	3 (29)
	Max.	mmAq (Pa)	16 (157)
Pipe Connections	Liquid / Gas	mm (inch)	Ø 12.7(1/2) - Comp. Module / Ø 19.05(3/4) - Comp. Module
Dimensions (W x H x D)		mm	1,562 x 460 x 688
		inch	61-1/2 x 18-1/8 x 27-3/32
Net Weight		kg	87
		lbs	192
Sound Pressure Level	Cooling / Heating	dB(A)	45 / 45
Protection Devices	High pressure protection	-	-
	Compressor / Fan	-	Fan driver overload protector
	Inverter	-	-
Communication Cable		No.×mm^2 (VCTF)	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		-
	Precharged Amount	kg	-
		lbs	-
	t-CO_2 eq		-
	Control		Electronic Expansion Valve
Power Supply		V, Ø, Hz	1, 220-240, 50
Number of maximum connectable indoor units [3]			-

Notes:
1. Eurovent Test Condition : Type of indoor unit connected is only Ceiling Concealed Duct.
 - Refer to EUROVENT certification programme for more detail test conditions. - Refer to EUROVENT website for test values connected Ceiling Cassette type indoors.
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- Heat Exchanger Module ~ Compressor Module = 5m - Compressor Module ~ Indoor Unit = 7.5m
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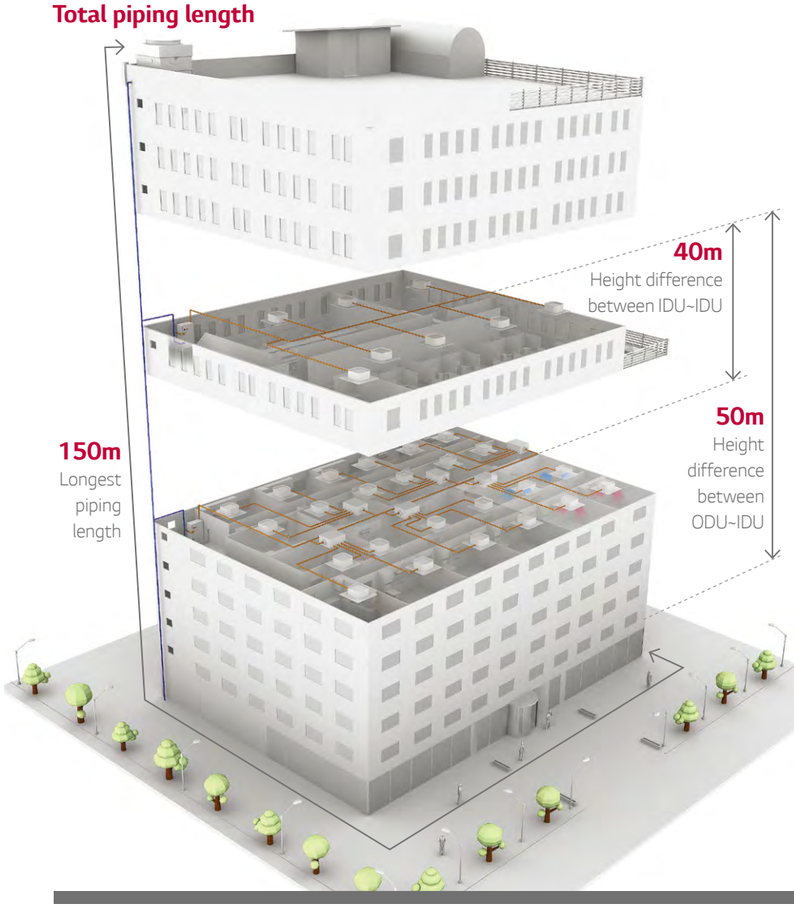
7. Power factor could vary less than ±1% according to the operating conditions. 8. This product contains Fluorinated greenhouse gases. (R410A, GWP (Global warming potential) = 2087.5)

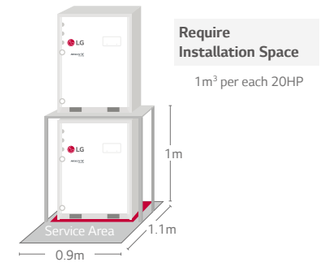
OUTDOOR UNIT KEY FEATURES

MULTI V WATER IV HEAT PUMP / HEAT RECOVERY

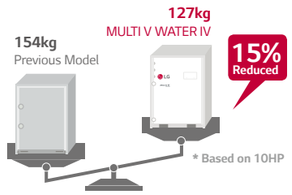


MULTI V WATER IV

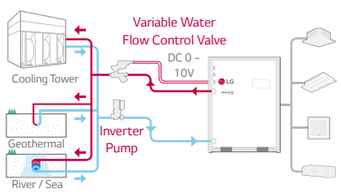
1. Compact Size



2. Light Weight



3. Variable Water Flow Control Kit



Benefit

- Saves valuable floor space
- Low noise level (no fans)
- Flexible design applications
- High efficient water source system

Application

- Large scale office
- Commercial building using geothermal / Water supply
- Luxurious residential building

Superior Efficiency via Integration of Smart Technologies

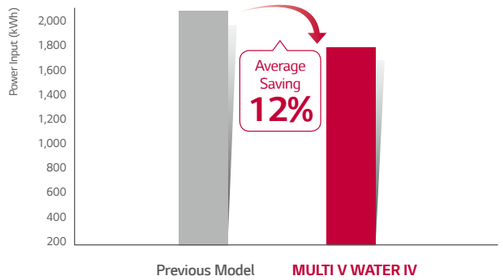
Today's businesses demand highly efficient temperature control solutions, capable of providing optimal energy savings without sacrificing performance. When it comes to cooling and heating a multi-storey or high-rise building, water cooled HVAC systems have become the solution of choice. Offering several performance enhancements and greater installation versatility, LG's MULTI V WATER IV combines intelligent functions with advanced inverter technology; boosting both energy efficiency and operational range.

Along with outstanding energy efficiency, the new solution comes with a range of truly smart features, including optimized cycle composition and smart control. For ease of installation and better economy of space, MULTI V WATER IV is both lighter in weight and smaller in overall size. LG, a leading innovator in HVAC technologies, will continue to develop and manufacture high performance, energy efficient solutions for the benefit of its growing global customer-base.

Economical, Highly Efficient System

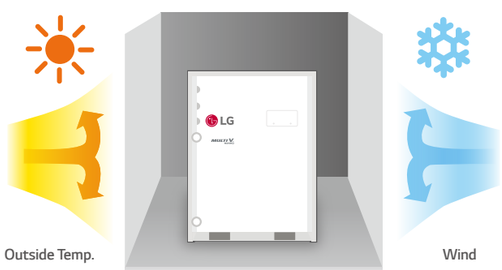
Adopting a water-based cooling method, this unit optimizes performance in comparison to compressor capacity. It also ensures heat exchange performance for high-rise buildings, thus allowing electrical-savings.

Source :
LG Energy Estimate Program (LEEP)
simulation data-5th floor building in Paris, France



High Efficiency System Regardless of External Conditions

Regardless of outdoor temperature and other environmental conditions, MULTI V WATER IV is the optimal solution for high-rise buildings.



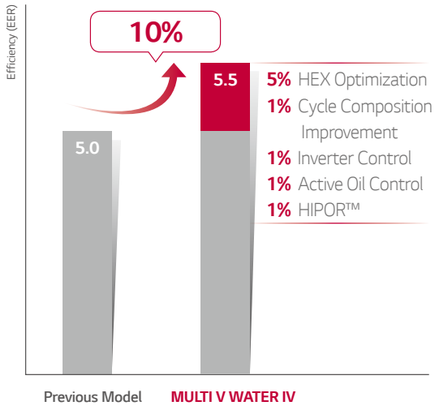
OUTDOOR UNIT KEY FEATURES

MULTI V WATER IV HEAT PUMP / HEAT RECOVERY

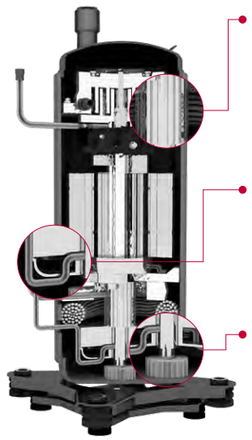
EFFICIENCY

LG's 4th Generation Inverter Compressor

With a fourth generation inverter compressor, the MULTI V WATER IV boasts top-class energy efficiency.



* Comparison between 10HP in cooling mode



Extended Compressor Speed 20Hz ~ 140Hz
- Rapid operation response
- Capable of reaching required temperature quickly
- Increase part load efficiency

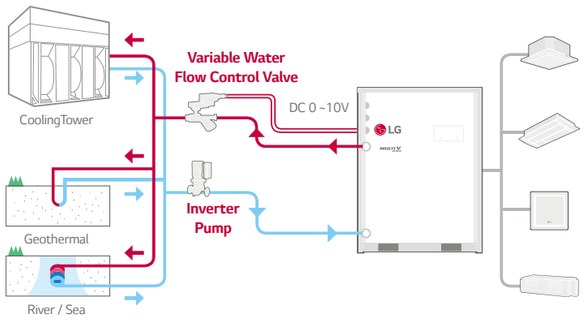
HiPOR™ (High Pressure Oil Return)
- Eliminating loss in suction gas by returning oil directly to compressor
- Resolve compressor efficiency loss caused by oil return

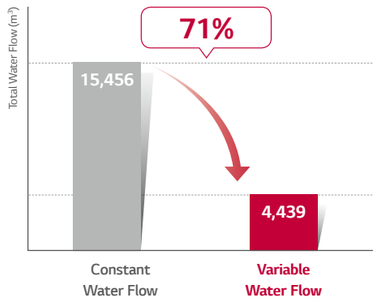
Smart Oil Return
- Oil recovery occurs only when required
- Enhanced compressor reliability & user comfort

Variable Water Flow Control Kit (Option)

The world's first variable water flow control system for water cooled VRF system.
LG applied Variable Water Flow Control to optimise water flow control regarding partial cooling or heating load conditions. Because of this it's also possible to reduce circulation pump energy consumption.

- Adjust water flow by pressure control after connecting PCB in the existing MULTI V Water Outdoor unit



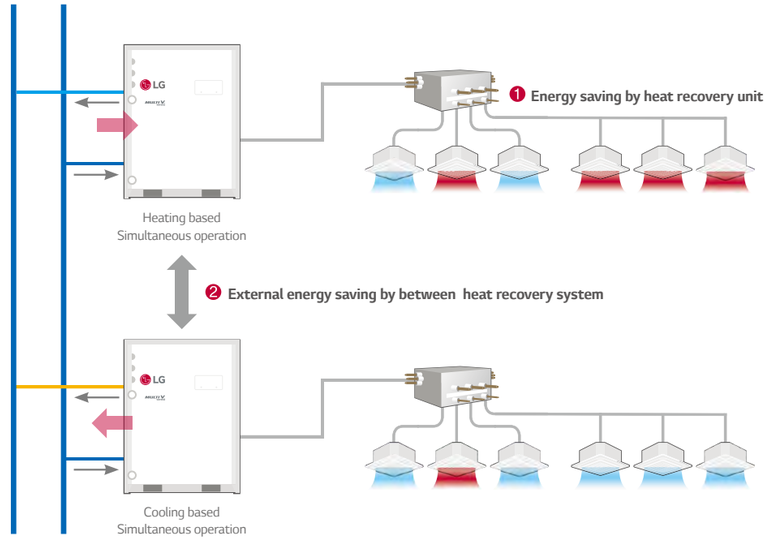


Note
1. Location : France
2. Total operationn time : 1,344hr
3. Indoor temperature : Normal office environment
4. Outdoor temperature : Average summer temperature
5. Inlet flow temperature : Approximately 30°C

PERFORMANCE

Minimizing Energy Input

Through water sourced heat recovery system, minimizing not only outside unit power input but also external energy input such as cooling tower and boiler.



Largest Capacity

Providing 8 ~ 20HP with single unit, and up to the world's largest capacity 80HP by combination.

Line up (HP)	8	10	14	20	22	24	28	30	34	40	42 ~ 60	62 ~ 80
LG	1 Unit				2 Units						3 Units	4 Units
Company B	1 Unit	-		2 Unit	-	3 Unit			-	-	-	-
Company C	1 Unit	-		2 Unit			3 Unit			-	-	-

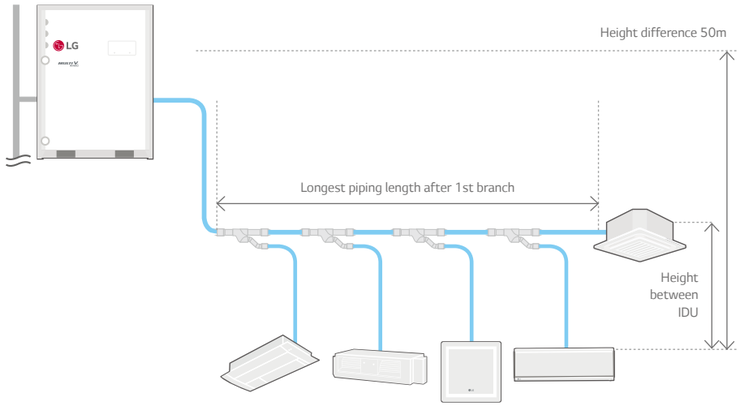
OUTDOOR UNIT KEY FEATURES

MULTI V WATER IV HEAT PUMP / HEAT RECOVERY

FLEXIBLE DESIGN

Longest Piping Length

Provide flexible installation up to 300m of total piping length.
As water pipes are not connected to indoor units, users are free from leakage problems.

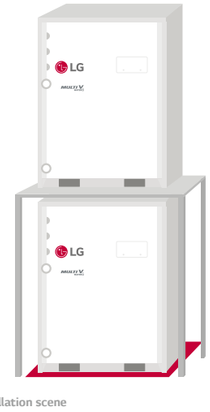


Total Piping Length	300m
Actual longest piping length (Equivalent)	150m (175m)
Longest piping length after 1st branch (Conditional application)	40m (90m)
Height difference between ODU ~ IDU	50m
Height difference between IDU ~ IDU	40m

Compact Size

The optimal design of the compact, lightweight outdoor unit enables double stacking, which results in 50% savings in installation space.

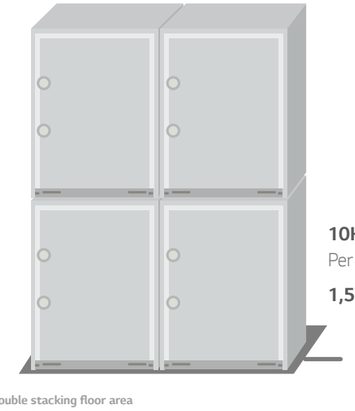
MULTI V WATER IV



20HP × 2EA
Per Each
755 × 500

* 40HP Capacity Installation scene

Company B



10HP × 4EA
Per Each
1,560 × 550

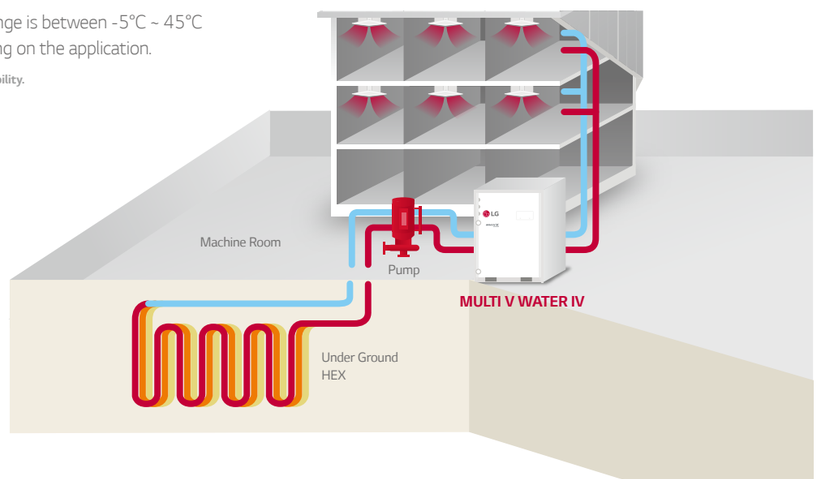
* Double stacking floor area
** 40HP Capacity Installation scene

MULTI V WATER IV System for Geothermal Applications

Uses underground heat sources such as soil, ground water, lake, river, etc. as renewable energy for cooling and Heating of a building. Water or antifreeze solution is circulated through the closed loop HDPE (High Density Poly-Ethylene) pipes buried beneath the earth's surface. It is a highly efficient and eco-friendly MULTI V system.

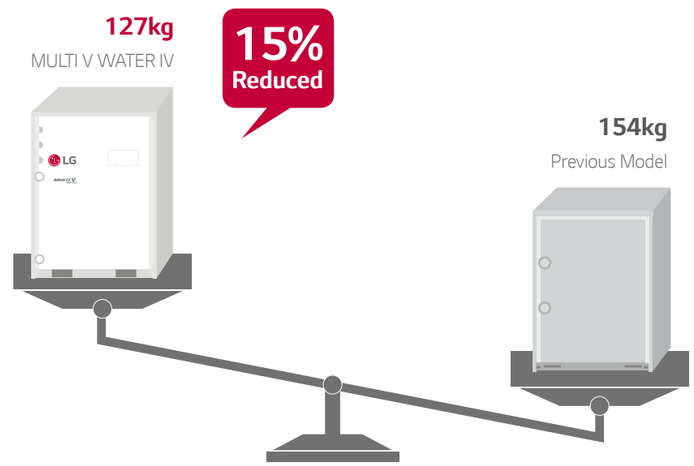
- The Circulating water temperature range is between -5℃ ~ 45℃
- Antifreeze should be applied depending on the application.

*** Please contact local LG office for application availability.**



Light Weight

Easier to transport and install thanks to 13% reduction in unit size and 15% reduction in overall weight.



* Based on 10HP

OUTDOOR UNIT SPECIFICATION

MULTI V WATER IV

ARWB080LAS4 / ARWB100LAS4 / ARWB140LAS4 / ARWB200LAS4

HP			8	10	14	20
Model Name	Combination Unit		ARWB080LAS4	ARWB100LAS4	ARWB140LAS4	ARWB200LAS4
	Independent Unit		ARWB080LAS4	ARWB100LAS4	ARWB140LAS4	ARWB200LAS4
Capacity	Cooling	kW	22.4	28.0	39.2	56.0
	Heating	kW	25.2	31.5	44.1	63.0
Input	Cooling	kW	3.86	5.09	7.84	11.20
	Heating	kW	4.20	5.34	8.17	11.67
Casing Color			Warm Gray , Mornig Gray	Warm Gray , Mornig Gray	Warm Gray , Mornig Gray	Warm Gray , Mornig Gray
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination		(Inverter) x 1	(Inverter) x 1	(Inverter) x 1	(Inverter) x 1
	Piston Displacement	cm^3/rev	43.8	43.8	43.8	62.1
	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz
	Motor Output	kW	4.2	4.2	4.2	5.3
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Oil Charge Amount	cc	1 200 + 1 600	1 200 + 1 600	1 200 + 1 600	1 400 + 1 600
Heat Exchanger	Type		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance	kgf/cm^2	45	45	45	45
	Head Loss	kPa	10.7	15.8	28.6	30.1
	Rated Water Flow	LPM	77	96	135	192
Temp. range of	Cooling		10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)
Circulation water	Heating		-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)
Refrigerant Connecting Pipes	Liquid Pipes	mm (inch)	9.52 (3/8)	9.52 (3/8)	12.7 (1/2)	12.7 (1/2)
	Low Pressure Gas Pipes	mm (inch)	22.2 (7/8)	22.2 (7/8)	25.4 (1)	28.58 (1-1/8)
	High Pressure Gas Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Water Connecting Pipes	Inlet	mm	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)
	Outlet	mm	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)
Dimensions (W x H x D)		mm	(755 × 500 × 997) × 1	(755 × 500 × 997) × 1	(755 × 500 × 997) × 1	(755 × 500 × 997) × 1
		inch	(29-23/32 x 39-1/4 x 19-11/16) x 1	(29-23/32 x 39-1/4 x 19-11/16) x 1	(29-23/32 x 39-1/4 x 19-11/16) x 1	(29-23/32 x 39-1/4 x 19-11/16) x 1
Net Weight		kg	127 x 1	127 x 1	127 x 1	140 x 1
		lbs	280 x 1	280 x 1	280 x 1	309 x 1
Transmission Cable (CVV-SB)		mm^2	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C
Refrigerant	Name		R410A	R410A	R412A	R410A
	Charge Amount	kg	5.8	5.8	5.8	3.0
	Control Device		EEV	EEV	EEV	EEV
Power Supply		Ø / V / Hz	3 / 380 - 415 / 50	3 / 380 - 415 / 50	3 / 380 - 415 / 50	3 / 380 - 415 / 50
			3 / 380 / 60	3 / 380 / 60	3 / 380 / 60	3 / 380 / 60
Sound Pressure Level	Cooling	dB(A)	47	50	58	54
	Heating	dB(A)	51	53	57	60
Sound Power Level	Cooling	dB(A)	59	62	70	66
	Heating	dB(A)	63	65	69	72

* This product contains Fluorinated Greenhouse Gases. (R410A)
Note : 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), Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB, Water inlet temp. 20°C (68°F)
2. Capacities are net capacities
3. Due to our policy of innovation some specifications may be changed without notification
4. Add an anti freeze to circulation water when outside unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

ARWB220LAS4 / ARWB240LAS4 / ARWB280LAS4 / ARWB300LAS4

HP			22	24	28	30
Model Name	Combination Unit		ARWB220LAS4	ARWB240LAS4	ARWB280LAS4	ARWB300LAS4
	Independent Unit		ARWN140LAS4 ARWN080LAS4	ARWN140LAS4 ARWN100LAS4	ARWB140LAS4 ARWB140LAS4	ARWN200LAS4 ARWN100LAS4
Capacity	Cooling	kW	61.6	67.2	78.4	84.0
	Heating	kW	69.3	75.6	88.2	94.5
Input	Cooling	kW	11.70	12.93	15.68	16.29
	Heating	kW	12.37	13.51	16.34	17.01
Casing Color			Warm Gray , Mornig Gray	Warm Gray , Mornig Gray	Warm Gray , Mornig Gray	Warm Gray , Mornig Gray
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination		(Inverter) x 2	(Inverter) x 2	(Inverter) x 2	(Inverter) x 2
	Piston Displacement	cm^3/rev	43.8 + 43.8	43.8 + 43.8	43.8 + 43.8	62.1 + 43.8
	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz
	Motor Output	kW	4.2+4.2	4.2 + 4.2	4.2 + 4.2	5.3 + 4.2
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Oil Charge Amount	cc	(1 200 + 1 600) x 2	(1 200 + 1 600) x 2	(1 200 + 1 600) x 2	(1 400 + 1 200) + 1 600 x 2
Heat Exchanger	Type		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance	kgf/cm^2	45	45	45	45
	Head Loss	kPa	28.6 + 10.7	28.6 + 15.8	28.6 + 28.6	30.1 + 15.8
	Rated Water Flow	LPM	135 + 77	135 + 96	135 + 135	192 + 96
Temp. range of	Cooling		10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)
Circulation water	Heating		-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)
Refrigerant Connecting Pipes	Liquid Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
	Low Pressure Gas Pipes	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)
	High Pressure Gas Pipes	mm (inch)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)
Water Connecting Pipes	Inlet	mm	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)
	Outlet	mm	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)
Dimensions (W x H x D)		mm	(755 × 997 × 500) x 2	(755 × 997 × 500) x 2	(755 × 997 × 500) x 2	(755 × 997 × 500) x 2
		inch	(29-23/32 x 39-1/4 x 19-11/16) x 2	(29-23/32 x 39-1/4 x 19-11/16) x 2	(29-23/32 x 39-1/4 x 19-11/16) x 2	(29-23/32 x 39-1/4 x 19-11/16) x 2
Net Weight		kg	127 x 2	127 x 2	127 x 2	(140 x 1) + (127 x 1)
		lbs	280 x 2	280 x 2	280 x 2	(309 x 1) + (280 x 1)
Transmission Cable (CVV-SB)		mm^2	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C
Refrigerant	Name		R410A	R410A	R410A	R410A
	Charge Amount	kg	5.8 + 5.8	5.8 + 5.8	5.8 + 5.8	3.0 + 5.8
	Control Device		EEV	EEV	EEV	EEV
Power Supply		Ø / V / Hz	3 / 380 - 415 / 50	3 / 380 - 415 / 50	3 / 380 - 415 / 50	3 / 380 - 415 / 50
			3 / 380 / 60	3 / 380 / 60	3 / 380 / 60	3 / 380 / 60
Sound Pressure Level	Cooling	dB(A)	58	59	59	55
	Heating	dB(A)	58	58	58	61
Sound Power Level	Cooling	dB(A)	71	72	72	68
	Heating	dB(A)	71	71	71	74

* This product contains Fluorinated Greenhouse Gases. (R410A)
Note : 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), Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB, Water inlet temp. 20°C (68°F)
2. Capacities are net capacities
3. Due to our policy of innovation some specifications may be changed without notification
4. Add an anti freeze to circulation water when outside unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

OUTDOOR UNIT SPECIFICATION

MULTI V WATER IV

ARWB340LAS4 / ARWB400LAS4 / ARWB420LAS4 / ARWB440LAS4

HP			34	40	42	44
Model Name	Combination Unit		ARWB340LAS4	ARWB400LAS4	ARWB420LAS4	ARWB440LAS4
	Independent Unit		ARWB200LAS4 ARWB140LAS4	ARWB200LAS4 ARWB200LAS4	ARWN200LAS4 ARWN140LAS4 ARWN080LAS4	ARWN200LAS4 ARWN140LAS4 ARWN100LAS4
Capacity	Cooling	kW	95.2	112.0	117.6	123.2
	Heating	kW	107.1	126.0	132.3	138.6
Input	Cooling	kW	19.04	22.40	22.90	24.13
	Heating	kW	19.84	23.34	24.04	25.18
Casing Color			Warm Gray , Mornig Gray	Warm Gray , Mornig Gray	Warm Gray , Mornig Gray	Warm Gray , Mornig Gray
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination		(Inverter) x 2	(Inverter) x 2	(Inverter) x 3	(Inverter) x 3
	Piston Displacement	cm^3/rev	43.8 + 62.1	62.1 + 62.1	62.1 + 43.8 + 43.8	62.1 + 43.8 + 43.8
	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz
	Motor Output	kW	4.2 + 5.3	5.3 + 5.3	5.3 + 4.2 + 4.2	5.3 + 4.2 + 4.2
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Oil Charge Amount	cc	(1 400 + 1 200) + 1 600 x 2	(1 400 + 1 600) x 2	(1 400 + 1 200 + 1 200) + 1 600 x 3	(1 400 + 1 200 + 1 200) + 1 600 x 3
Heat Exchanger	Type		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance	kgf/cm^2	45	45	45	45
	Head Loss	kPa	30.1 + 28.6	30.1 + 30.1	30.1 + 28.6 + 10.7	30.1 + 28.6 + 15.8
	Rated Water Flow	LPM	192 + 135	192 + 192	192 + 135 + 77	192 + 135 + 96
Temp. range of	Cooling		10℃ ~ 45℃ (50℉ ~ 113℉)	10℃ ~ 45℃ (50℉ ~ 113℉)	10℃ ~ 45℃ (50℉ ~ 113℉)	10℃ ~ 45℃ (50℉ ~ 113℉)
Circulation water	Heating		-5℃ ~ 45℃ (23℉ ~ 113℉)	-5℃ ~ 45℃ (23℉ ~ 113℉)	-5℃ ~ 45℃ (23℉ ~ 113℉)	-5℃ ~ 45℃ (23℉ ~ 113℉)
Refrigerant Connecting Pipes	Liquid Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
	Low Pressure Gas Pipes	mm (inch)	34.9 (1-3/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)
	High Pressure Gas Pipes	mm (inch)	28.58 (1-1/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)
Water Connecting Pipes	Inlet	mm	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)
	Outlet	mm	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)
Dimensions (W x H x D)		mm	(755 × 997 × 500) x 2	(755 × 997 × 500) x 2	(755 × 997 × 500) x 3	(755 × 997 × 500) x 3
		inch	(29-23/32 x 39-1/4 x 19-11/16) x 2	(29-23/32 x 39-1/4 x 19-11/16) x 2	(29-23/32 x 39-1/4 x 19-11/16) x 3	(29-23/32 x 39-1/4 x 19-11/16) x 3
Net Weight		kg	(140 x 1) + (127 x 1)	140 x 2	(140 x 1) + (127 X 2)	(140 x 1) + (127 X 2)
		lbs	(309 x 1) + (280 x 1)	309 x 2	(309 x 1) + (280 X 2)	(309 x 1) + (280 X 2)
Transmission Cable (CVV-SB)		mm^2	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C
Refrigerant	Name		R410A	R410A	R410A	R410A
	Charge Amount	kg	3.0 + 5.8	3.0 + 3.0	3.0 + 5.8 + 5.8	3.0 + 5.8 + 5.8
	Control Device		EEV	EEV	EEV	EEV
Power Supply		Ø / V / Hz	3 / 380 - 415 / 50	3 / 380 - 415 / 50	3 / 380 - 415 / 50	3 / 380 - 415 / 50
			3 / 380 / 60	3 / 380 / 60	3 / 380 / 60	3 / 380 / 60
Sound Pressure Level	Cooling	dB(A)	59	55	60	60
	Heating	dB(A)	61	61	62	62
Sound Power Level	Cooling	dB(A)	72	68	73	74
	Heating	dB(A)	74	74	76	76

* This product contains Fluorinated Greenhouse Gases. (R410A)

Note : 1. Capacities and Inputs are based on the following conditions

- Cooling : Indoor temp. 27℃ (80.6℉) DB / 19℃ (66.2℉) WB, Water inlet temp. 30℃ (86℉), Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20℃ (68℉) DB, Water inlet temp. 20℃ (68℉)

2. Capacities are net capacities
3. Due to our policy of innovation some specifications may be changed without notification
4. Add an anti freeze to circulation water when outside unit is operating under 10℃ (50℉), and change the DIP switch on main PCB. (For more information on installation section.)

ARWB480LAS4 / ARWB500LAS4 / ARWB540LAS4 / ARWB600LAS4

HP			48	50	54	60
Model Name	Combination Unit		ARWB480LAS4	ARWB500LAS4	ARWB540LAS4	ARWB600LAS4
	Independent Unit		ARWB200LAS4 ARWB140LAS4 ARWB140LAS4	ARWN200DAS4 ARWN200DAS4 ARWN100DAS4	ARWB200LAS4 ARWB200LAS4 ARWB140LAS4	ARWB200LAS4 ARWB200LAS4 ARWB200LAS4
Capacity	Cooling	kW	134.4	140.0	151.2	168.0
	Heating	kW	151.2	157.5	170.1	189.0
Input	Cooling	kW	26.88	27.49	30.24	33.60
	Heating	kW	28.01	28.68	31.51	35.01
Casing Color			Warm Gray , Mornig Gray	Warm Gray , Mornig Gray	Warm Gray , Mornig Gray	Warm Gray , Mornig Gray
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination		(Inverter) x 3	(Inverter) x 3	(Inverter) x 3	(Inverter) x 3
	Piston Displacement	cm^3/rev	62.1 + 43.8 + 43.8	62.1 + 62.1 + 43.8	62.1 + 62.1 + 43.8	62.1 + 62.1 + 62.1
	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz
	Motor Output	kW	5.3 + 4.2 + 4.2	5.3 + 5.3 + 4.2	5.3 + 5.3 + 4.2	5.3 + 5.3 + 5.3
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Oil Charge Amount	cc	(1 400 + 1 200 + 1 200) + 1 600 x 3	(1 400 + 1 400 + 1 200) + 1 600 x 3	(1 400 + 1 400 + 1 200) + 1 600 x 3	(1 400 + 1 600) x 3
Heat Exchanger	Type		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance	kgf/cm^2	45	45	45	45
	Head Loss	kPa	30.1 + 28.6 + 28.6	30.1 + 30.1 + 15.8	30.1 + 28.6 + 28.6	30.1 + 30.1 + 30.1
	Rated Water Flow	LPM	192 + 135 + 135	192 + 192 + 96	192 + 192 + 135	192 + 192+ 192
Temp. range of	Cooling		10℃ ~ 45℃ (50℉ ~ 113℉)	10℃ ~ 45℃ (50℉ ~ 113℉)	10℃ ~ 45℃ (50℉ ~ 113℉)	10℃ ~ 45℃ (50℉ ~ 113℉)
Circulation water	Heating		-5℃ ~ 45℃ (23℉ ~ 113℉)	-5℃ ~ 45℃ (23℉ ~ 113℉)	-5℃ ~ 45℃ (23℉ ~ 113℉)	-5℃ ~ 45℃ (23℉ ~ 113℉)
Refrigerant Connecting Pipes	Liquid Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
	Low Pressure Gas Pipes	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)
	High Pressure Gas Pipes	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)
Water Connecting Pipes	Inlet	mm	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)
	Outlet	mm	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)
Dimensions (W x H x D)		mm	(755 × 997 × 500) x 3	(755 × 997 × 500) x 3	(755 × 997 × 500) x 3	(755 × 997 × 500) x 3
		inch	(29-23/32 x 39-1/4 x 19-11/16) x 3	(29-23/32 x 39-1/4 x 19-11/16) x 3	(29-23/32 x 39-1/4 x 19-11/16) x 3	(29-23/32 x 39-1/4 x 19-11/16) x 3
Net Weight		kg	(140 x 1) + (127 X 2)	(140 x 2) + (127 X 1)	(140 x 2) + (127 X 1)	140 x 3
		lbs	(309 x 1) + (280 X 2)	(309 x 2) + (280X1)	(309 x 2) + (280X1)	309 x 3
Transmission Cable (CVV-SB)		mm^2	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C
Refrigerant	Name		R410A	R410A	R410A	R410A
	Charge Amount	kg	3.0 + 5.8 + 5.8	3.0 + 3.0 + 5.8	3.0 + 3.0 + 5.8	3.0 + 3.0 + 3.0
	Control Device		EEV	EEV	EEV	EEV
Power Supply		Ø / V / Hz	3 / 380 - 415 / 50	3 / 380 - 415 / 50	3 / 380 - 415 / 50	3 / 380 - 415 / 50
			3 / 380 / 60	3 / 380 / 60	3 / 380 / 60	3 / 380 / 60
Sound Pressure Level	Cooling	dB(A)	60	58	60	56
	Heating	dB(A)	62	63	62	62
Sound Power Level	Cooling	dB(A)	74	72	74	70
	Heating	dB(A)	76	77	76	76

* This product contains Fluorinated Greenhouse Gases. (R410A)

Note : 1. Capacities and Inputs are based on the following conditions

- Cooling : Indoor temp. 27℃ (80.6℉) DB / 19℃ (66.2℉) WB, Water inlet temp. 30℃ (86℉), Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20℃ (68℉) DB, Water inlet temp. 20℃ (68℉)

2. Capacities are net capacities
3. Due to our policy of innovation some specifications may be changed without notification
4. Add an anti freeze to circulation water when outside unit is operating under 10℃ (50℉), and change the DIP switch on main PCB. (For more information on installation section.)

OUTDOOR UNIT SPECIFICATION

MULTI V WATER IV

ARWB600LAS4 / ARWB600LAS4 / ARWN680LAS4 / ARWN680LAS4

HP			62	64	68	70
Model Name	Combination Unit		ARWB600LAS4	ARWB600LAS4	ARWN680LAS4	ARWN680LAS4
	Independent Unit		ARWB200LAS4 ARWB200LAS4 ARWB140LAS4 ARWB080LAS4	ARWB200LAS4 ARWB200LAS4 ARWB140LAS4 ARWB100LAS4	ARWN200LAS4 ARWN200LAS4 ARWN140LAS4 ARWN140LAS4	ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN100LAS4
Capacity	Cooling	kW	173.6	179.2	190.4	196.0
	Heating	kW	195.3	201.6	214.2	220.5
Input	Cooling	kW	34.10	35.33	38.08	38.69
	Heating	kW	35.71	36.85	39.68	40.35
Casing Color			Warm Gray , Mornig Gray	Warm Gray , Mornig Gray	Warm Gray , Mornig Gray	Warm Gray , Mornig Gray
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination		(Inverter) x 4	(Inverter) x 4	(Inverter) x 4	(Inverter) x 4
	Piston Displacement	cm^3/rev	62.1 + 62.1 + 43.8 + 43.8	62.1 + 62.1 + 43.8 + 43.8	62.1 + 62.1 + 43.8 + 43.8	62.1 + 62.1 + 62.1 + 43.8
	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz
	Motor Output	kW	5.3 + 5.3 + 4.2 + 4.2	5.3 + 5.3 + 4.2 + 4.2	5.3 + 5.3 + 4.2 + 4.2	5.3 + 5.3 + 5.3 + 4.2
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC71D (PVE)	FVC71D (PVE)
	Oil Charge Amount	cc	(1 400 x 2 + 1200 x 2) +(1 600 x 4)	(1 400 x 2 + 1200 x 2) +(1 600 x 4)	(1 400 x 2 + 1200 x 2) +(1 600 x 4)	(1 400 x 3 + 1 200) +(1 600 x 4)
Heat Exchanger	Type		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance	kgf/cm^2	45	45	45	45
	Head Loss	kPa	30.1 + 30.1 + 28.6 + 10.7	30.1 + 30.1 + 28.6 + 15.8	30.1 + 30.1 + 28.6 + 28.6	30.1 + 30.1 + 30.1 + 15.8
	Rated Water Flow	LPM	192 + 192+ 135 + 77	192 + 192+ 135 + 96	192 + 192 + 135 + 135	192 + 192 + 192 + 96
Temp. range of	Cooling		10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 116°F)	10°C ~ 45°C (50°F ~ 116°F)
Circulation water	Heating		-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 116°F)	-5°C ~ 45°C (23°F ~ 116°F)
Refrigerant Connecting Pipes	Liquid Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	22.2 (7/8)	22.2 (7/8)
	Low Pressure Gas Pipes	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	53.98 (2-1/8)	53.98 (2-1/8)
	High Pressure Gas Pipes	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	44.5 (1-3/4)	44.5 (1-3/4)
Water Connecting Pipes	Inlet	mm	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT 40 + PT 40 + PT 40 + PT40	PT 40 + PT 40 + PT 40 + PT40
	Outlet	mm	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT 40 + PT 40 + PT 40 + PT40	PT 40 + PT 40 + PT 40 + PT40
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)
Dimensions (W x H x D)		mm	(755 × 997 × 500) x 4	(755 × 997 × 500) x 4	(755 × 997 × 500) x 4	(755 × 997 × 500) x 4
		inch	(29-23/32 x 39-1/4 x 19-11/16) x 4	(29-23/32 x 39-1/4 x 19-11/16) x 4	(29-23/32 x 39-1/4 x 19-11/16) x 4	(29-23/32 x 39-1/4 x 19-11/16) x 4
Net Weight		kg	(140 x 2) + (127 X 2)	(140 x 2) + (127 X 2)	(140 x 2) + (127 X 2)	(140 x 2) + (127 X 2)
		lbs	(309 x 2) + (280X2)	(309 x 2) + (280X2)	(309 x 2) + (280 X 2)	(309 x 2) + (280 X 2)
Transmission Cable (CVV-SB)		mm^2	1.0 ~1.5 x 2C	1.0 ~1.5 x 2C	1.0 ~1.5 x 5C	1.0 ~1.5 x 5C
Refrigerant	Name		R410A	R410A	R410A	R410A
	Charge Amount	kg	5.8 + 5.8 + 3.0 + 3.0	5.8 + 5.8 + 3.0 + 3.0	5.8 + 5.8 + 3.0 + 3.0	5.8 + 5.8 + 3.0 + 3.0
	Control Device		EEV	EEV	EEV	EEV
Power Supply		Ø / V / Hz	3 / 380 - 415 / 50	3 / 380 - 415 / 50	6 / 380 - 415 / 50	6 / 380 - 415 / 50
			3 / 380 / 60	3 / 380 / 60	6 / 380 / 60	6 / 380 / 60
Sound Pressure Level	Cooling	dB(A)	61	61	61	60
	Heating	dB(A)	64	64	63	65
Sound Power Level	Cooling	dB(A)	75	75	75	74
	Heating	dB(A)	79	79	77	80

* This product contains Fluorinated Greenhouse Gases. (R410A)

Note : 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), Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB, Water inlet temp. 20°C (68°F)

2. Capacities are net capacities
3. Due to our policy of innovation some specifications may be changed without notification
4. Add an anti freeze to circulation water when outside unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

ARWB400LAS4

HP			74	80
Model Name	Combination Unit		ARWN740LAS4	ARWN800LAS4
	Independent Unit		ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN140LAS4	ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN200LAS4
Capacity	Cooling	kW	184.8	201.6
	Heating	kW	207.9	226.8
Input	Cooling	kW	35.53	38.76
	Heating	kW	37.14	40.52
Casing Color			Warm Gray , Mornig Gray	Warm Gray , Mornig Gray
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination		(Inverter) x 4	(Inverter) x 4
	Piston Displacement	cm^3/rev	62.1 + 62.1 + 62.1 + 43.8	62.1 + 62.1 + 62.1 + 62.1
	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz
	Motor Output	kW	5.3 + 5.3 + 5.3 + 4.2	5.3 + 5.3 + 5.3 + 5.3
	Starting Method		Direct On Line	Direct On Line
	Oil Type		FVC74D (PVE)	FVC77D (PVE)
	Oil Charge Amount	cc	(1 400 x 3 + 1 200) + (1 600 x 4)	(1 400 + 1 600) x 4
Heat Exchanger	Type		Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance	kgf/cm^2	45	45
	Head Loss	kPa	30.1 + 30.1 + 30.1 + 28.6	30.1 + 30.1 + 30.1 + 30.1
	Rated Water Flow	LPM	192 + 192 + 192 + 135	192 + 192 + 192 + 192
Temp. range of	Cooling		10°C ~ 45°C (50°F ~ 119°F)	10°C ~ 45°C (50°F ~ 122°F)
Circulation water	Heating		-5°C ~ 45°C (23°F ~ 119°F)	-5°C ~ 45°C (23°F ~ 122°F)
Refrigerant Connecting Pipes	Liquid Pipes	mm (inch)	22.2 (7/8)	22.2 (7/8)
	Low Pressure Gas Pipes	mm (inch)	53.98 (2-1/8)	53.98 (2-1/8)
	High Pressure Gas Pipes	mm (inch)	44.5 (1-3/4)	44.5 (1-3/4)
Water Connecting Pipes	Inlet	mm	PT 40 + PT 40 + PT 40 + PT 40	PT 40 + PT 40 + PT 40 + PT 40
	Outlet	mm	PT 40 + PT 40 + PT 40 + PT 40	PT 40 + PT 40 + PT 40 + PT 40
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)
Dimensions (W x H x D)		mm	(755 × 997 × 500) x 4	(755 × 997 × 500) x 4
		inch	(29-23/32 x 39-1/4 x 19-11/16) x 4	(29-23/32 x 39-1/4 x 19-11/16) x 4
Net Weight		kg	(140 x 3) + (127 x 1)	140 x 4
		lbs	(309 x 3) + (280 x 1)	309 x 4
Transmission Cable (CVV-SB)		mm^2	1.0 ~1.5 x 8C	1.0 ~1.5 x 11C
Refrigerant	Name		R410A	R410A
	Charge Amount	kg	3.0 + 3.0 + 3.0 + 5.8	3.0 + 3.0 + 3.0 + 3.0
	Control Device		EEV	EEV
Power Supply		Ø / V / Hz	9 / 380 - 415 / 50	12 / 380 - 415 / 50
			9 / 380 / 60	12 / 380 / 60
Sound Pressure Level	Cooling	dB(A)	61	57
	Heating	dB(A)	63	63
Sound Power Level	Cooling	dB(A)	75	71
	Heating	dB(A)	77	77

* This product contains Fluorinated Greenhouse Gases. (R410A)

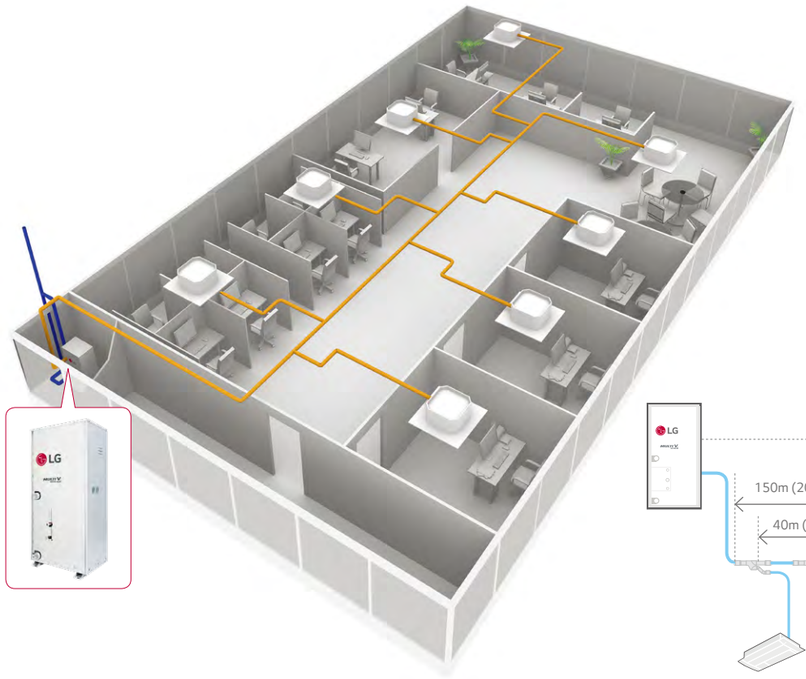
Note : 1. Capacities and Inputs are based on the following conditions

- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp. 30°C (86°F), Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB, Water inlet temp. 20°C (68°F)

2. Capacities are net capacities
3. Due to our policy of innovation some specifications may be changed without notification
4. Add an anti freeze to circulation water when outside unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

OUTDOOR UNIT KEY FEATURES

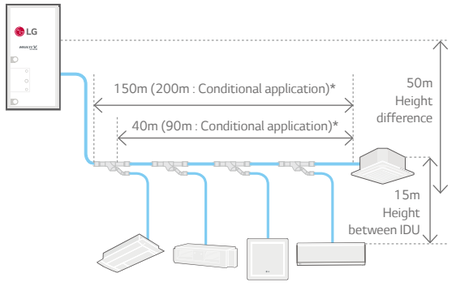
MULTI V WATER S



MULTI V WATER S

1. Piping Length

Total Piping Length	300m
Actual longest piping length** (Equivalent)	175m
Longest piping length after 1st branch (Conditional application)	40m
Height difference between ODU ~ IDU	50m
Height difference between IDU ~ IDU	15m



* Assume equivalent piping length of Y Branch to be 0.5m, that of header to be 1m, calculation purpose.
** To apply Conditional Application

Benefit

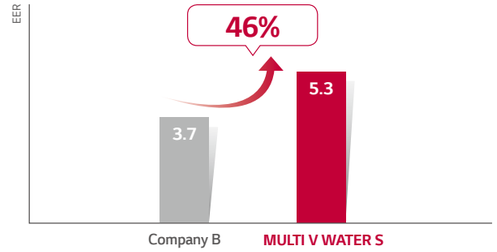
- Saves valuable floor space
- Low noise level (no fans)
- Flexible design applications
- High efficient water source system

Application

- Building remodeling case (initially equipped with Chillers)
- Residential building with geothermal / Water supply
- High-rise commercial building

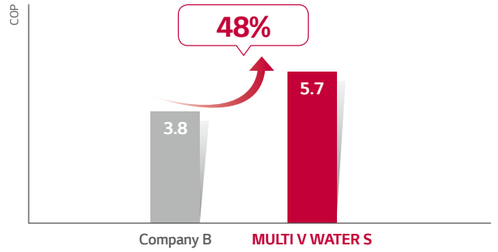
World's First Class Cooling and Heating Efficiency

EER (Rated Efficiency)



* Comparison between 4HP model, based on internal test data

COP (Rated Efficiency)

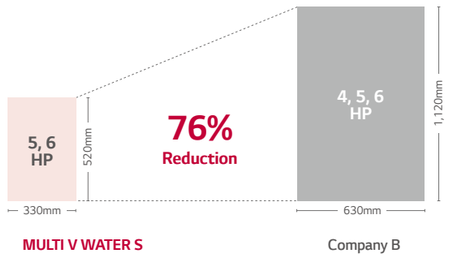


* Comparison between 4HP model, based on internal test data

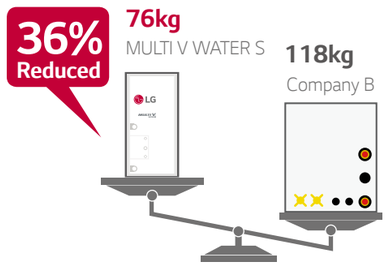
Compact Size

Outdoor unit can be placed inside a closet, no need for roof or outside space. It can be applicable for small space application such as shops in city centers and malls.

Foot print area



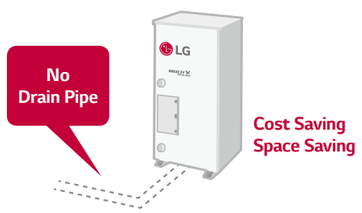
Weight



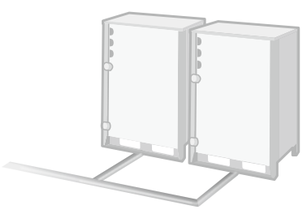
Convenient Installation

Absence of drain pipe makes installation easier.

MULTI V WATER S



Conventional



MULTI V WATER S

ARWN60GA0

HP				6
Model	Independent Unit			ARWN60GA0
Capacity	Cooling	Nom	kW	15.5
	Heating	Nom	kW	18.0
Power Input	Cooling	Nom	kW	3.20
	Heating	Nom	kW	3.50
EER				4.84
COP				5.14
Operation Range of Circulation water [5]	Cooling	Min ~ Max	°C	10°C ~ 45°C
	Heating	Min ~ Max	°C	-5°C ~ 45°C
Compressor	Type			BLDC Inverter Twin Rotary
	Number of Compressor			1
Sound Pressure	Cooling	Nom	dBA	50
	Heating	Nom	dBA	50
Sound Power	Cooling	Nom	dBA	61
	Heating	Nom	dBA	61
Dimensions		W x H x D	mm	520 x 1,080 x 330
Net Weight			kg	76
Refrigerant	Type			R410A
	Precharged Amount		kg	1.0
			lbs	2.2
	GWP			2,087.5
	TCO_2eq			2.1
Refrigerant Oil	Type			FVC68D
	Charge		cc	1,300
Power Supply			Ø / V / Hz	1 / 220-240 / 50, 60
Transmission Cable (VCTF-SB)			No. x mm^2	2C × 1.0~1.5
Piping Length	Total	Max	m	145
	Actual Longest Piping Length	Max	m	90
	After 1st Y Branch	Max	m	40
Piping Level Difference	IDU - ODU	Max	m	30
	IDU - IDU	Max	m	15
Piping Connection	Liquid		mm (inch)	9.52 (3/8)
	Gas		mm (inch)	19.05 (3/4)
Number of Outdoor Units				1
Number of Connectable Indoor Units		Max		9
Ratio of the Connectable Indoor Units		Min ~ Max		50 ~ 130%
Heat Exchanger	Type			Stainless Steel Plate
	Pressure Resistance	Max	kgf/cm^2	4,413
	Nom Water Flow		L/min	60
	Head Loss		kPa	28.4
Water Connection Pipe	Inlet		mm	PT32 (1-1/4)
	Outlet		mm	PT32 (1-1/4)
	Drain Outlet		mm	-

* This product contains Fluorinated Greenhouse Gases. (R410A)

Note : 1. Capacities are based on the following conditions :
- Cooling Temperature : Indoor 27°C (80.6°F) DB / 19°C (66.2°F) WB / Water 30°C (86°F)
- Heating Temperature : Indoor 20°C (68°F) DB / 15°C (59°F) WB / Water 20°C (68°F)
- Piping Length : Interconnected Pipe Length = 7.5m
- Difference Limit of Elevation (Outside ~ Indoor Unit) is Zero.

2. Wiring cable size must comply with the applicable local and national codes.
3. Due to our policy of innovation some specifications may be changed without notification.
4. Sound Level Values are measured at Anechoic chamber.
Therefore, these values can be increased owing to ambient conditions during operation.
5. Add an anti freeze to circulation water when outside unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

MULTI V WATER S

REFERENCE SITE

Bouygues Challenger

LG MULTI V Water Solution with Geothermal Application

Site Information

The industrial group Bouygues was established in France in 1952. It now maintains operations in 80 countries and employs more than 131,000 people. In 1988, after two years of construction, the new headquarters for Bouygues Construction was officially opened for business. Named Challenger, the complex became a technological showcase for late 20th century architecture.

LG Solution

Bouygues decided to convert their headquarters into an eco-friendly building by significantly reducing its energy footprint. The LG MULTI V Water system was chosen as the ideal HVAC solution for this project. The system not only saves energy but also reduces water usage as it recycles water in order to regulate the temperature of the building. With LG's advanced technology, the building's water consumption was reduced by more than 70 percent.

INDOOR UNIT

WALL MOUNTED UNIT / CEILING MOUNTED CASSETTE / CEILING CONCEALED DUCT
FRESH AIR INTAKE UNIT / CEILING & FLOOR CONVERTIBLE UNIT / CEILING SUSPENDED UNIT
CONSOLE / FLOOR STANDING UNIT (WITH CASE / WITHOUT CASE) / MULTI V INDOOR COMPATIBILITY

INDOOR UNIT

LINE-UP

kW		1.5	2.2	2.8	3.6	4.5	5.6	6.2	7.1	8.2	9.0	10.6	12.3	14.1	15.8	22.4	28.0
Type	**Btu/h**	5k	7k	9k	12k	15k	18k	21k	24k	28k	30k	36k	42k	48k	54k	76k	96k
4th generation Wall Mounted Unit	Artcool Gallery		●	●	●												
	Artcool Mirror	●	●	●	●	●	●		●								
	Standard	●	●	●	●	●	●		●		●	●					
4th generation Ceiling Mounted Cassette	4 Way Cassette (570 x 570)	●	●	●	●	●	●	●									
	4 Way Cassette (840 x 840)								●	●	●	●	●	●	●		
	2 Way Cassette			●	●		●		●								
	1 Way Cassette		●	●	●		●		●								
4th generation Ceiling Concealed Duct	Mid / High Statics		●	●	●	●	●		●	●		●	●	●	●	●	●
	Low Statics	●	●	●	●	●	●	●	●								
	High Sensible		●	●	●	●	●		●	●		●	●	●			
4th generation Fresh Air Intake Units														●		●	●
4th generation Ceiling & Floor Convertible Unit				●	●												
4th generation Ceiling Suspended Unit							●		●			●		●			
4th generation Console			●	●	●	●											
4th generation Floor Standing Unit	Floor Standing Unit with case		●	●	●	●	●		●								
	Floor Standing Unit without case		●	●	●	●	●		●								
4th generation HYDRO KIT	Low Temperature													●			●
	High Temperature													●		●	
4th generation Energy Recovery Ventilator with DX Coil	with Humidifier					●			●		●						
	without Humidifier					●			●		●						

INDOOR UNIT

FEATURE OVERVIEW

		Energy Monitoring	2 Set Point	Occupied / Unoccupied Scheduling Function	Group Control	Test Run (Cooling)	Test Run (Heating)	Model Information Monitoring	Auto Addressing	Refrigerant Leakage Detection	Thermo On / Off Range Setting (Cooling)	Thermo On / Off Range Setting (Heating)	Static Pressure 11 Step Control (Only for Ceiling Concealed Duct Type)	1 Point External Input (On / Off Control)	Filter Sign (Remaining Time)	Auto Rerstart Function Disable / Enable	Wi-Fi Ready
4th generation Wall Mounted Unit	Artcool Gallery	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●
	Artcool Mirror	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●
	Standard	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●
4th generation Ceiling Mounted Cassette	4 Way Cassette (570 x 570)	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●
	4 Way Cassette (840 x 840)	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●
	2 Way Cassette	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●
	1 Way Cassette	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●
4th generation Ceiling Concealed Duct	Mid / High Statics	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Low Statics	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	High Sensible	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
4th generation Fresh Air Intake Units		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
4th generation Ceiling & Floor Convertible Unit		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
4th generation Ceiling Suspended Unit		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
4th generation Console		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
4th generation Floor Standing Unit	Floor Standing Unit with case	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Floor Standing Unit without case	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
4th generation HYDRO KIT	Low Temperature					●	●				●	●					
	High Temperature					●	●					●					
4th generation Energy Recovery Ventilator with DX Coil	with Humidifier																
	without Humidifier																

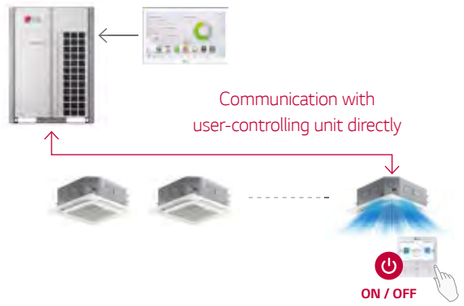
1) If 4th generation indoors are connected to MULTIV WATER S outdoor, some of function will not be activated.
2) If 4th generation indoors are combined to 2nd generation indoors, some of function will not be activated.
→ More detailed information, refer to the "MULTI V INDOOR COMPATIBILITY"

COMFORT

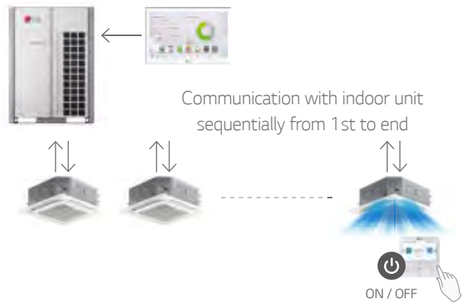
Quick Control

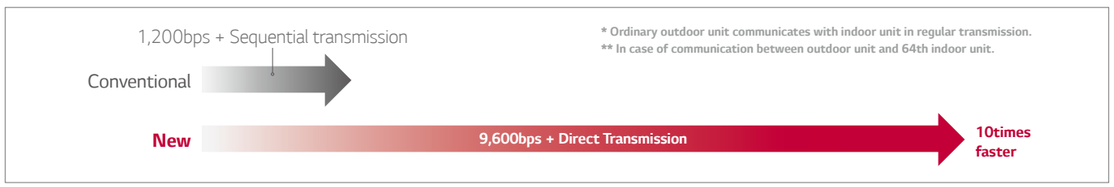
4th Generation indoor unit offers rapid heating and cooling about 10times faster than conventional through communication mode change and improved communication speed.

New



Conventional

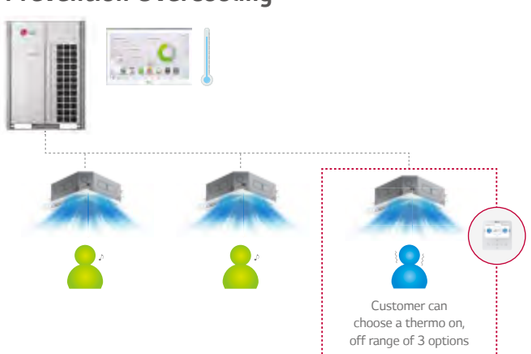




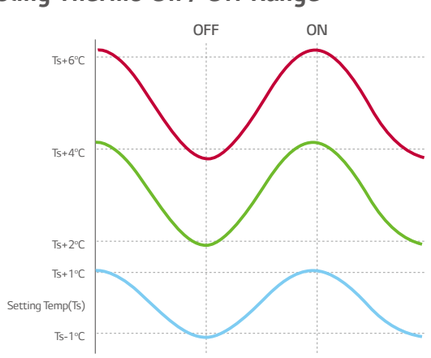
Thermo On / Off Range Setting (Cooling)

User can set cooling thermo on / off range with wired remote controller for prevention overcooling and making optimized indoor environment.

Prevention Overcooling



Cooling Thermo On / Off Range



Filter Sign (Remaining Time)

The alarm is activated when the filter needs to be cleaned, and the time remaining for cleaning is displayed on the screen, which is convenient for users.

New

Remain Time Until Indoor Filter Cleaning + Alarm

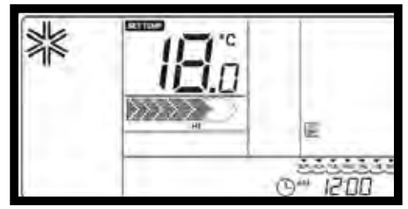
Remain time until indoor filter cleaning 2400hr.

Premium Wired
Remote Controller

Remain time until indoor filter cleaning 1729hr.

Conventional

Only Alarm

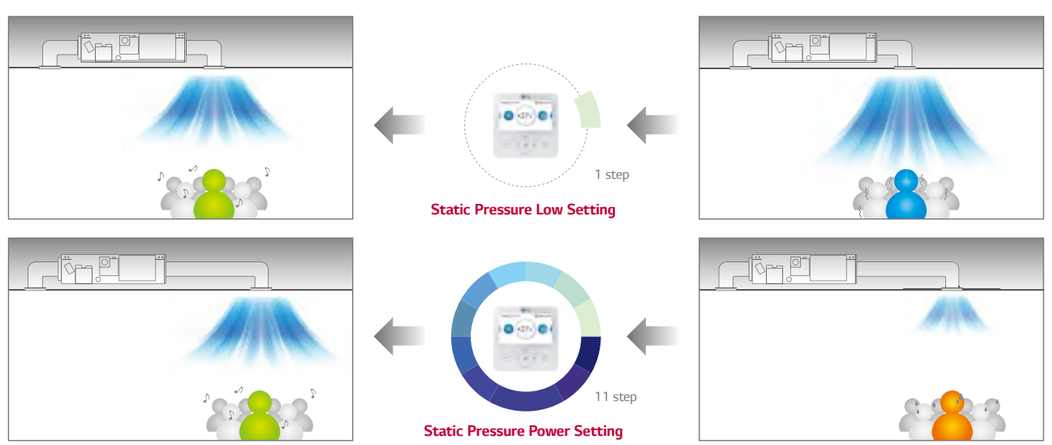


Static Pressure 11 Step Control (Only for Ceiling Concealed Duct)

Depending on the installation environment, 4series ceiling concealed duct is controlled the static pressure to 11 step, for providing comfortable environment suitable for any environment.

New

Conventional



CONVENIENCE

Group Control

In case of group control, user can control much more function than conventional.

New

Cooling / Heating Dehumidification
Fan only operating Setting temp.

Standard Operation
+
In Case of Group Control

Conventional

Cooling / Heating Dehumidification
Fan only operating Setting temp.

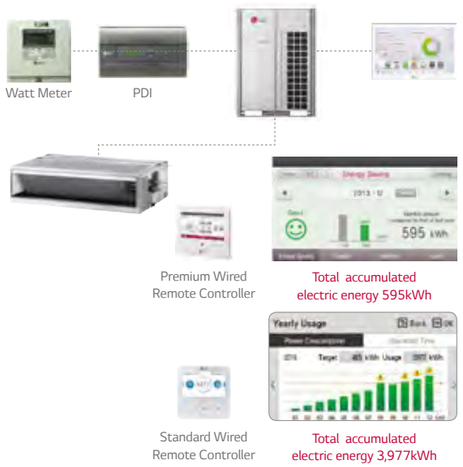
Standard Operation

Sub function
isn't operating

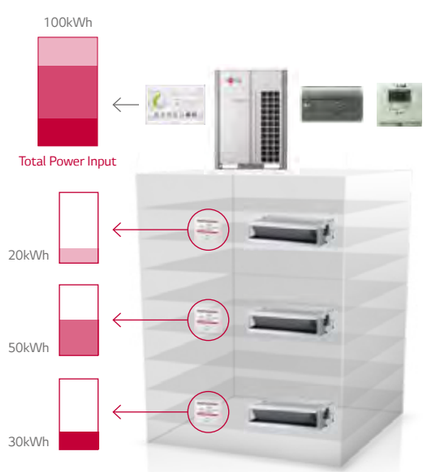
Energy Monitoring (Accumulated Electric Energy Check)

Accumulated electric energy of the indoor unit can be identified with wired remote control, as well as with the central controller. This function is an advantage for energy management.

Install Scene



Apply for multistory building



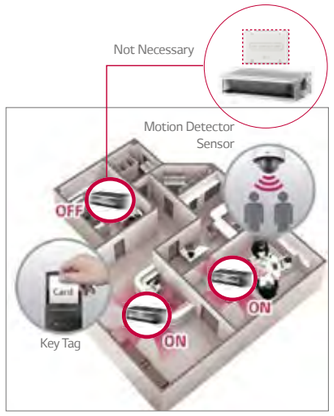
* Outdoor unit's accumulated electric energy / using rate of individual indoor unit + indoor unit's accumulated electric energy is displayed in wired remote controller, only when central controller, digital integrating electricity meter and PDI are installed and PDI, outdoor unit and indoor unit are connected with power wire. Only total accumulated electric energy is displayed in standard wired remote controller. In premium wired remote controller, that are displayed into week / month / year.

1 Point External Input (On / Off Control)

Indoor unit can control external devices without dry contact, so customer can save cost of installation.

New

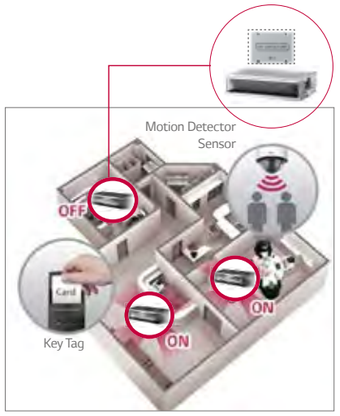
Connection between an indoor unit and external devices directly



Cost Savings

Conventional

Connection between an indoor unit and external devices through dry contact



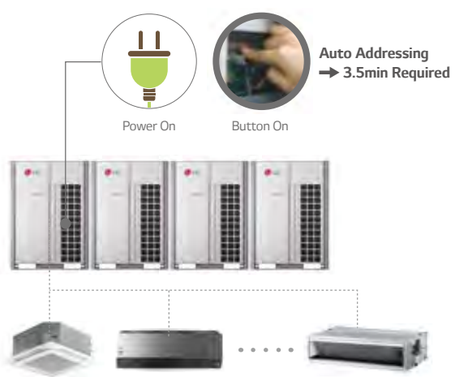
* In case of needing more functions beside on / off control, a dry contact is required to be installed.

Auto Addressing

Addressing time has been reduced up to 1.5min., that needed only power on without any process. Auto addressing takes shorter as 57% as compared to conventional.

New

Conventional



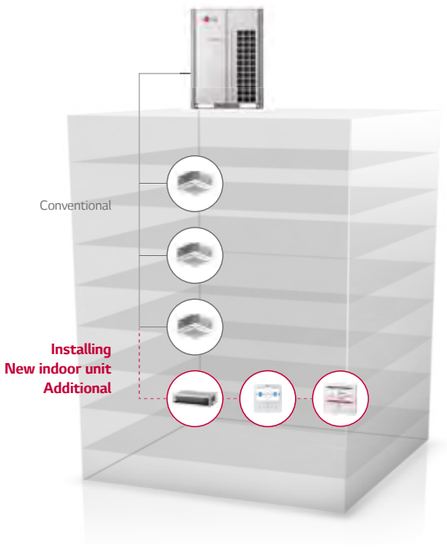
* 64ea indoor units installing time

INDOOR UNIT KEY FEATURES

CONVENIENCE

Compatibility

- **Outdoor unit**
  - Any MULTI V series outdoor unit can be installed
- **Indoor unit**
  - Any MULTI V series can be installed
- **Wired remote controller**
  - Standard III : PREMTB100, PREMTBB10
  - Standard II : PREMTB001, PREMTBB01
  - Premium : PREMTA000, PREMTA000A, PREMTA000B
- **Implementable Functions**
  - Static Pressure 11 Step Control
  - Cooling thermo on / off range setting
  - Filter Sign
  - Control the external devices
  - Heating test run mode
  - Convenient check information



Model Information Monitoring

User can check indoor unit and outdoor unit's information with wired remote controller, so that is convenient for service.

Category	No.	Model
First number : Outdoor unit	0	MULTI V
	1	MULTI
	2	Single

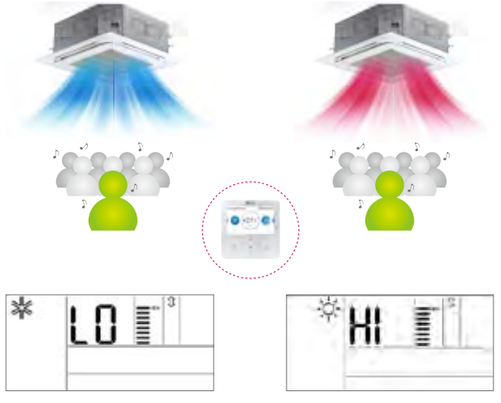
Category	No.	Model	No.	Model	No.	Model
Second Number : Indoor Unit	0	CST	6	Console	A	HYDRO KIT for Medium Temp.
	1	Duct	7	Single Package	B	HYDRO KIT for High Temp.
	2	CVT	8	General Ventilation	-	-
	3	PAC	9	AWHP	-	-
	4	RAC	-	-	-	-

Category		No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity
Third number : capacity of the indoor unit	MULTI V	0	5K	4	15K	8	36K	C	76K
		1	7K	5	18K	9	42K	D	96K
		2	9K	6	24K	A	48K	-	-
		3	12K	7	28K	B	54K	-	-
	MULTI	0	5K	4	12K	8	20K	-	-
		1	7K	5	14K	9	24K	-	-
		2	8K	6	15K	A	30K	-	-
		3	9K	7	18K	B	36K	-	-
	Single	0	9K	4	24K	8	48K	-	-
		1	12K	5	30K	9	60K	-	-
		2	18K	6	36K	-	-	-	-
		3	21K	7	42K	-	-	-	-

Test Run (Heating)

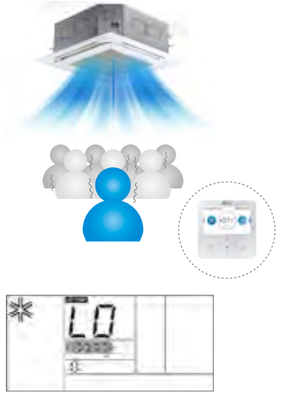
Test run mode can be operated cooling mode and heating mode for easy service.

New



Heating and cooling test run mode are available

Conventional

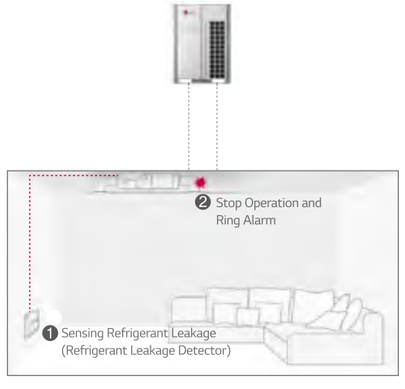


Heating test run mode is unavailable

Refrigerant Leakage Detection (Option Function)

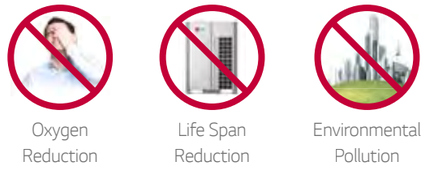
To meet the Global refrigerant leakage regulation, LG uses refrigerant leakage detection kit. This detector senses refrigerant leakage and when the refrigerant concentration exceeds 6,000ppm not only stopping the indoor unit operation but also giving an alarm using buzzer and sensor LED (The green and red LED lights blink simultaneously).

Refrigerant Leakage Detection



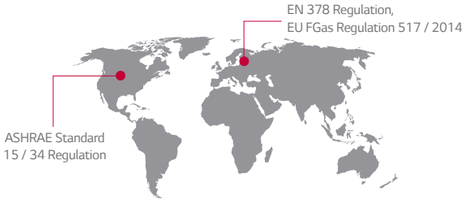
*** Refrigerant leakage detector is option accessory.**

In Case of Leak Refrigerant



Oxygen Reduction | Life Span Reduction | Environmental Pollution

Global Regulation



SMART

Wi-Fi Control

Control your air conditioners via using the smart internet devices as Android or iOS based smartphones. This advanced technology provides you the best convenience.

LG SmartThinQ

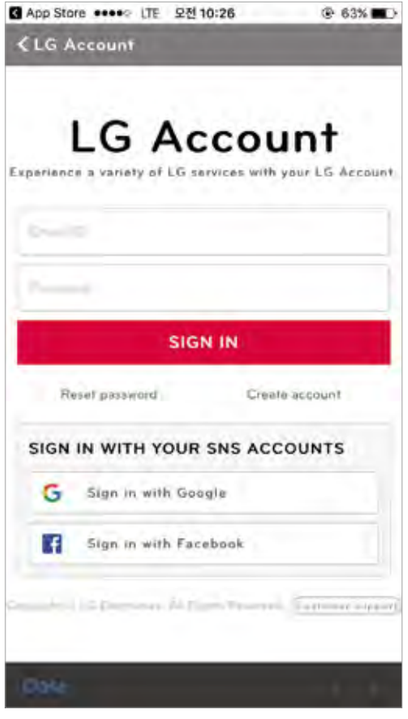
Search "LG SmartThinQ" on Google market or Appstore then download the app.

LG SmartThinQ

How it Works

Easy Registration and Log-in

Follow the easy set-up steps that will activate SmartThinQ's impressive feature.



Wi-Fi Connectivity

Let's every member of your family choose their own preferred air conditioning temperature and fan speed, then save the settings in their app to run later. You can save the setting for each air conditioner as well.

Multiple Devices

Multi-Control

* Can be controlled by multiple users, but not simultaneously

WALL MOUNTED UNIT

Aesthetic Design

You no longer need to be told what your air conditioner should look like. With LG's revolutionary ARTCOOL Gallery, you can change the look of your air conditioner to whatever you want, whenever you want. The ARTCOOL series have outstanding designs and have been awarded the International Forum Design Award, the Reddot Design Award and the G Mark.

Gallery

How to Change the Picture

ARTCOOL Mirror

Mirror

Standard

5K / 7K / 9K / 12K / 15K

18K / 24K

30K / 36K

INDOOR UNIT KEY FEATURES

WALL MOUNTED UNIT

Plasmaster™ Ionizer+PLUS

The powerful plasma Ionizer protects you from odors and harmful substances in the air with over 3 million ions to sterilize not only the air passing through the air conditioner, but also surrounding surfaces for a safer, cleaner environment.

* Specifications may vary for each model.
* Depending on the experimental conditions.
* This function will be available with following models and date.
  - ARNU**GSJN4, ARNU**GSKN4 : From `17 May

How It Works

Sterilization and Deodorization (Utilizes Over 3 Million Ions)

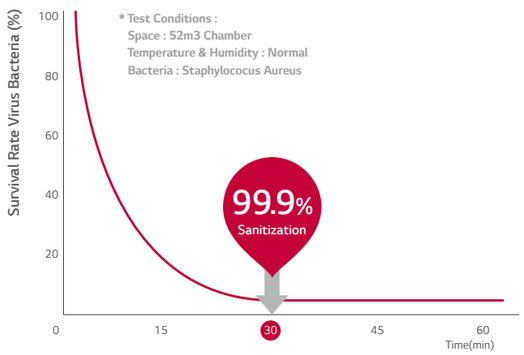
Plasmaster Ionizer+ reduces harmful microscopic particles by infusing the air passing through the air conditioner with over 3 millions ions.

Ion Cluster Generation	Surrounding Harmful Substances	OH Radical Production	Chemical Reaction	Sterilization
Ions are released into air	H- and O- bond to harmful particles	OH radicles inactivate harmful substances	OH radicles bond with H particles in the air	H_2O molecules are produced

Test Result

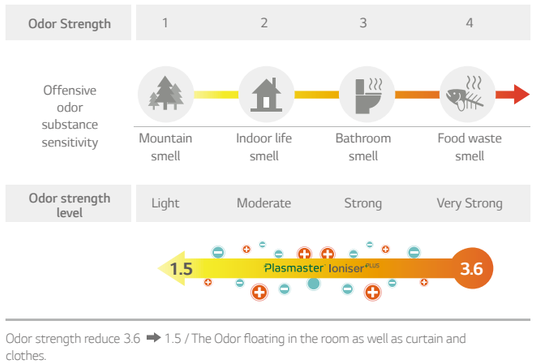
Sterilization Performance Evaluations

Plasmaster Ionizer+ reduces harmful microscopic particles by infusing the air passing through the air conditioner with over 3 millions ions.



2.1 odor strength decrease in 60 minutes

An odor of strength 2 or less indicates that there is odor but no sense of displeasure (degree of odor permissible).



Odor strength reduce 3.6 ➡ 1.5 / The Odor floating in the room as well as curtain and clothes.

Quick & Easy Installation

LG air conditioner is designed for an easy and efficient installation, making possible to install several units in a short period of time

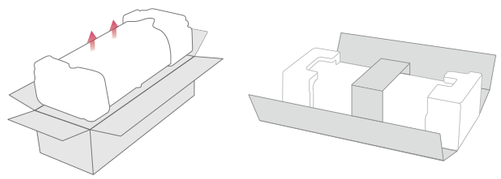
* Specifications may vary for each model.

Concept

By reducing the manpower and time required for installation, it is now possible to install more units in less time.

How It Works

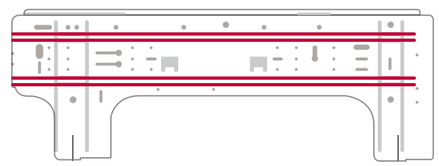
One Simple Packing Box



Conventional — LG

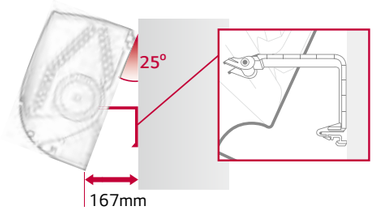
Installation Plate Improvement

LG's installation plate is larger and customized to reduce installation time.



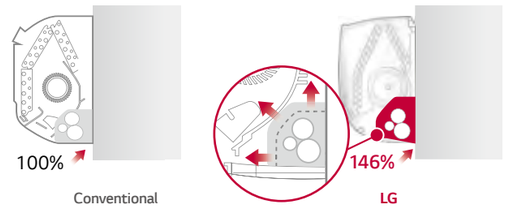
Installation Support Clip

A support clip creates adequate space between the wall and the unit for easier installation.



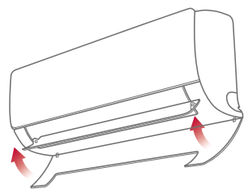
Wider Tubing Space

The space provided for tubing facilitates the whole installation process and hides the unorganized parts, making it appear clean and tidy.



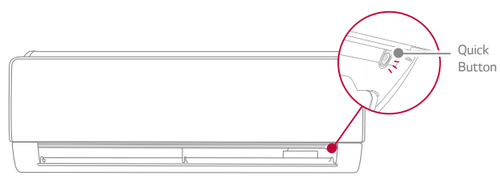
Detachable Bottom Cover

The air conditioner's bottom cover is detachable for easier installation and access.



Quick button for running test

The test button is conveniently located and easy to find.



INDOOR UNIT SPECIFICATION

ARTCOOL MIRROR

ARNU05GSJR4 / ARNU07GSJR4 / ARNU09GSJR4
ARNU12GSJR4 / ARNU15GSJR4

Model	Independent Unit			ARNU05GSJR4	ARNU07GSJR4	ARNU09GSJR4	ARNU12GSJR4	ARNU15GSJR4
Capacity	Cooling	Nom	kW	1.6	2.2	2.8	3.6	4.5
	Heating	Nom	kW	1.8	2.5	3.2	4.0	5.0
Power Input	Cooling / Heating	Nom [1]	W	12	13	15	19	21
	Cooling / Heating	Rated [2]	W	21	21	21	21	21
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	6.5 / 6.0 / 5.5	7.0 / 6.5 / 5.5	8.2 / 7.0 / 5.5	9.5 / 8.2 / 6.5	10.5 / 9.0 / 7.0
	Heating	H / M / L	m^3/min	6.5 / 6.0 / 5.5	7.0 / 6.5 / 5.5	8.2 / 7.0 / 5.5	9.5 / 8.2 / 6.5	10.5 / 9.0 / 7.0
Sound Pressure		H / M / L	dBA	30 / 29 / 28	32 / 30 / 28	34 / 32 / 28	37 / 34 / 30	42 / 39 / 32
Sound Power		H / M / L	dBA	54 / 53 / 52	54 / 53 / 52	55 / 54 / 52	55 / 54 / 53	58 / 56 / 54
Dimensions	Body	W x H x D	mm	895 × 285 × 205	895 × 285 × 205	895 × 285 × 205	895 × 285 × 205	895 × 285 × 205
Net Weight			kg	10.8	10.8	10.8	10.8	10.8
Piping Connection	Liquid		mm	6.35	6.35	6.35	6.35	6.35
	Gas		mm	12.7	12.7	12.7	12.7	12.7
	Drain	I.D	mm	16.0	16.0	16.0	16.0	16.0

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '

Accessories

Model		ARNU05GSJR4	ARNU07GSJR4	ARNU09GSJR4	ARNU12GSJR4	ARNU15GSJR4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000				
	2 Contact Point	PDRYCB400				
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300				
	Modbus Communication	PDRYCB500				
EEV Kit for MULTI V Indoor		PRGK024A0				

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

ARNU18GSKR4 / ARNU24GSKR4

Model	Independent Unit			ARNU18GSKR4	ARNU24GSKR4
Capacity	Cooling	Nom	kW	5.6	7.1
	Heating	Nom	kW	6.3	8.0
Power Input	Cooling / Heating	Nom [1]	W	27	39
	Cooling / Heating	Rated [2]	W	40	40
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	12.5 / 12.0 / 11.3	14.0 / 12.7 / 11.5
	Heating	H / M / L	m^3/min	12.5 / 12.0 / 11.3	14.0 / 12.7 / 11.5
Sound Pressure		H / M / L	dBA	38 / 35 / 33	43 / 39 / 35
Sound Power		H / M / L	dBA	57 / 54 / 52	62 / 58 / 54
Dimensions	Body	W x H x D	mm	1,030 × 325 × 245	1,030 × 325 × 245
Net Weight			kg	15.4	15.4
Piping Connection	Liquid		mm	6.35	9.52
	Gas		mm	12.7	15.88
	Drain	I.D	mm	16.0	16.0

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '

Accessories

Model		ARNU18GSKR4	ARNU24GSKR4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000	
	2 Contact Point	PDRYCB400	
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300	
	Modbus Communication	PDRYCB500	
EEV Kit for MULTI V Indoor		PRGK024A0	

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT SPECIFICATION

ARTCOOL GALLERY

ARNU07GSF14 / ARNU09GSF14 / ARNU12GSF14

Model	Independent Unit			ARNU07GSF14	ARNU09GSF14	ARNU12GSF14
Capacity	Cooling	Nom	kW	2.2	2.8	3.6
	Heating	Nom	kW	2.5	3.2	4.0
Power Input	Cooling / Heating	Nom [1]	W	28	28	35
	Cooling / Heating	Rated [2]	W	35	35	35
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	8.1 / 6.3 / 4.2	8.1 / 6.3 / 4.2	9.3 / 7.7 / 6.0
	Heating	H / M / L	m^3/min	8.1 / 6.3 / 4.2	8.1 / 6.3 / 4.2	9.3 / 7.7 / 6.0
Sound Pressure		H / M / L	dBA	38 / 32 / 27	38 / 32 / 27	44 / 38 / 32
Sound Power		H / M / L	dBA	48 / 44 / 39	48 / 44 / 39	54 / 48 / 42
Dimensions	Body	W x H x D	mm	600 X 600 X 146	600 X 600 X 146	600 X 600 X 146
Net Weight			kg	15.0	15.0	15.0
Piping Connection	Liquid		mm	6.35	6.35	6.35
	Gas		mm	12.7	12.7	12.7
	Drain	I.D	mm	12.2	12.2	12.2

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '

Accessories

Model		ARNU07GSF14	ARNU09GSF14	ARNU12GSF14
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000		
	2 Contact Point	PDRYCB400		
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300		
	Modbus Communication	PDRYCB500		
EEV Kit for MULTI V Indoor		PRGK024A0		

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT SPECIFICATION

STANDARD

ARNU05GSJN4 / ARNU07GSJN4 / ARNU09GSJN4 / ARNU12GSJN4 / ARNU15GSJN4 / ARNU18GSKN4 / ARNU24GSKN4 / ARNU30GSVA4 / ARNU36GSVA4

Model	Independent Unit			ARNU05GSJN4	ARNU07GSJN4	ARNU09GSJN4	ARNU12GSJN4	ARNU15GSJN4	ARNU18GSKN4	ARNU24GSKN4	ARNU30GSVA4	ARNU36GSVA4
Capacity	Cooling	Nom	kW	1.6	2.2	2.8	3.6	4.5	5.6	7.1	8.5	10.4
	Heating	Nom	kW	1.8	2.5	3.2	4.0	5.0	6.3	7.5	9.2	10.8
Power Input	Cooling / Heating	Nom [1]	W	10.0	11.0	12.0	15.0	23.0	32.0	39.0	83	98
	Cooling / Heating	Rated [2]	W	30.0	30.0	30.0	30.0	30.0	53.0	53.0	154	154
Power Supply			Ø/V/Hz	1 / 220 ~ 240 / 50 1 / 220 / 60	1 / 220 ~ 240 / 50 1 / 220 / 60	1 / 220 ~ 240 / 50 1 / 220 / 60	1 / 220 ~ 240 / 50 1 / 220 / 60	1 / 220 ~ 240 / 50 1 / 220 / 60	1 / 220 ~ 240 / 50 1 / 220 / 60	1 / 220 ~ 240 / 50 1 / 220 / 60	1 / 220 ~ 240 / 50 1 / 220 / 60	1 / 220 ~ 240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	6.8 / 6.5 / 5.9	7.2 / 6.8 / 5.9	7.8 / 7.2 / 5.9	8.5 / 7.8 / 6.8	10.5 / 9.5 / 6.8	14.0 / 12.0 / 10.5	15.2 / 12.7 / 10.5	22.0 / 19.0 / 16.0	27.0 / 24.0 / 20.0
	Heating	H / M / L	m^3/min	6.8 / 6.5 / 5.9	7.2 / 6.8 / 5.9	7.8 / 7.2 / 5.9	8.5 / 7.8 / 6.8	10.5 / 9.5 / 6.8	14.0 / 12.0 / 10.5	15.2 / 12.7 / 10.5	22.0 / 19.0 / 16.0	27.0 / 24.0 / 20.0
Sound Pressure		H / M / L	dBA	30 / 29 / 28	32 / 30 / 28	34 / 32 / 28	37 / 34 / 30	42 / 39 / 32	43/ 39 / 34	46 / 41 / 34	48 / 45 / 42	50 / 47 / 43
Sound Power		H / M / L	dBA	54 / 53 / 52	54 / 53 / 52	55 / 54 / 52	55 / 54 / 53	58 / 56 / 54	63 / 57 / 52	65 / 60 / 54	61 / 58 / 55	63 / 60 / 57
Dimensions	Body	W x H x D	mm	837 x 302 x 189	837 x 302 x 189	837 x 302 x 189	837 x 302 x 189	837 x 302 x 189	998 x 330 x 210	998 x 330 x 210	1,190 x 346 x 265	1,190 x 346 x 265
Net Weight			kg	8.5	8.5	8.5	8.5	8.5	12.2	12.2	19.0	19.0
Piping Connection	Liquid		mm	6.35	6.35	6.35	6.35	6.35	6.35	9.52	9.52	9.52
	Gas		mm	12.7	12.7	12.7	12.7	12.7	12.7	15.88	15.88	15.9
	Drain	I.D	mm	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '

Accessories

Model		ARNU05GSJN4	ARNU07GSJN4	ARNU09GSJN4	ARNU12GSJN4	ARNU15GSJN4	ARNU18GSKN4	ARNU24GSKN4	ARNU30GSVA4	ARNU36GSVA4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000								
	2 Contact Point	PDRYCB400								
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300								
	Modbus Communication	PDRYCB500								
EEV Kit for MULTI V Indoor		PRGK024A0							-	

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT KEY FEATURES

CEILING MOUNTED CASSETTE (4 Way)

Compact Size

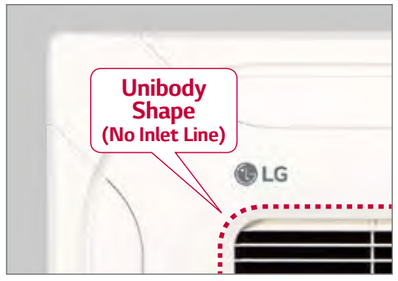
The indoor unit with slim and compact dimensions has reduced the restriction which enables successful installation in various spaces.

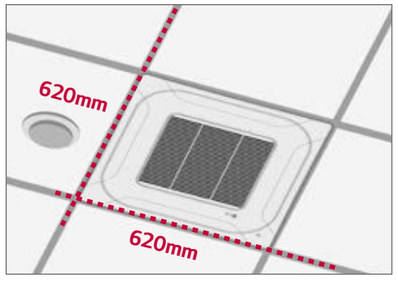
Length Width
: 840 x 840mm

Standard Inverter	Height
7.1 ~ 8.0kW	204mm
10.0kW	246mm
12.5 ~ 15kW	288mm

620 Panel – Compact and Stylish Design

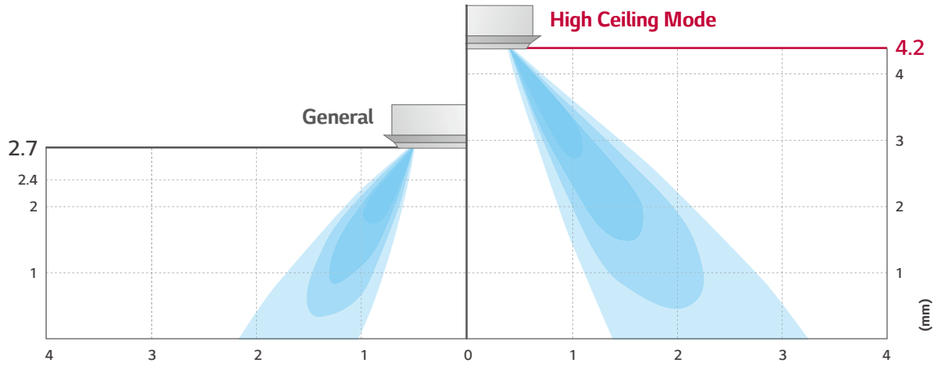
• New 4 way cassette panel adapted unibody shape and matching with into the ceiling
• Panel size is fit into the ceiling tile





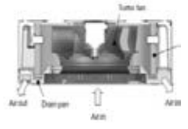
High Ceiling Mode

High ceiling mode provides powerful cooling and heating up to 4.2m in height, from ceiling to floor.



Human detect sensor & humidity sensor

Human detection sensor
(PTVSMA0)



Apply human detection sensor
Apply vision sensor
- Saving energy
- Supply comfortable flow
- Sensor is optional accessary
  only can be applied to PT-MCHW0

Comfortable and Power Saving Control based on Humidity
Apply humidity sensor
- Saving energy
  (To apply humidity sensor, new remote controller, PREMTB100 or PREMTBB10 is needed)

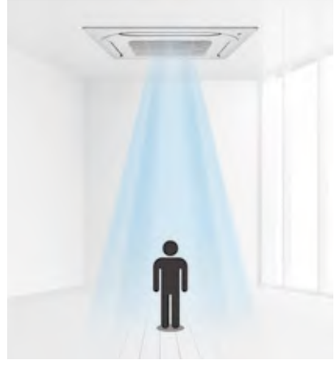
• Detection

Checking no. of people and movement per 20seconds

20seconds

• Detection range

Height 3.2 (15 x 8m)



Height 3.5 (16 x 10m)

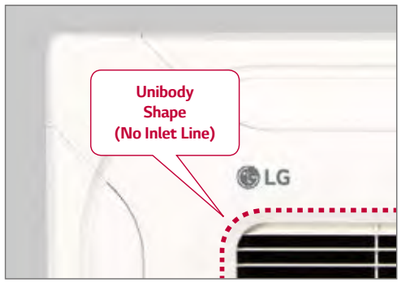
A sensor is installed 90˚rotation
12 × 6m ⟶ 6 × 12m detecting

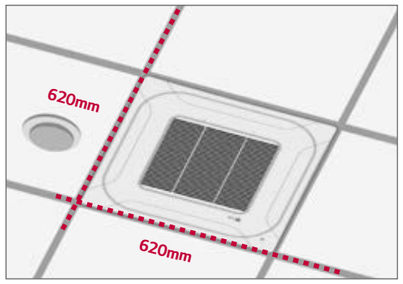
INDOOR UNIT KEY FEATURES

CEILING MOUNTED CASSETTE (4 Way)

Compact and Stylish Design

- New 4 Way cassette panel adapted unibody shape and matching with into the ceiling
- Panel size is fit into the ceiling tile



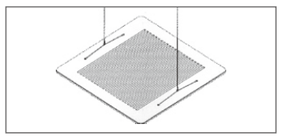


Auto Elevation Grille

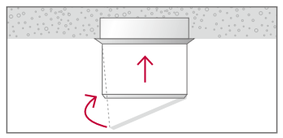
The Independent Vane Operation feature uses separate motors, making it possible to control all four vanes independently.

Easy filter cleaning with elevation grill.

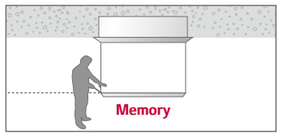
4-Point Support Structure



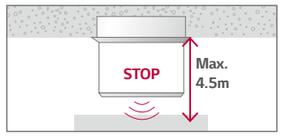
Auto Leveling



Memory for User's Level



Auto Stop Detection

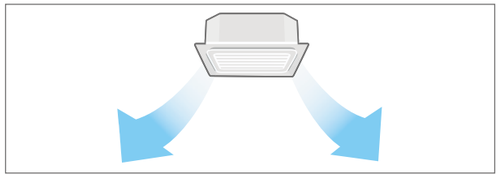


* Operating with wired remote controller (Model Name : PREMTB001,PREMTBB01) and wireless remote controller included in PTEGM0.
* Except ARNU05GTRC4, ARNU07GTRC4, ARNU09GTRC4, ARNU12GTRC4, ARNU15GTQC4, ARNU18GTQC4, ARNU21GTQC4
* Applied to Cassette panel PT-UMC1

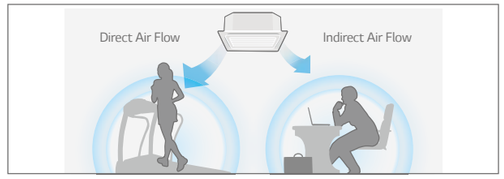
Independent Vane Control

The Independent Vane Operation feature uses separate motors, making it possible to control all four vanes independently.

All Vane Operation

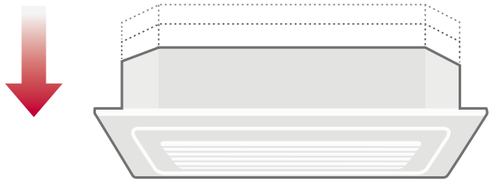


Independent Vane Control



Compact Size

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



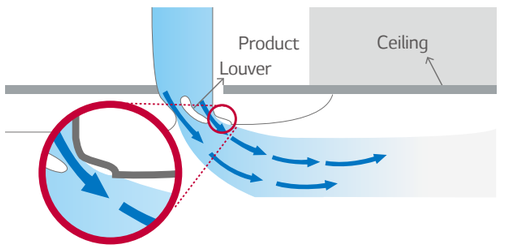
Capacity	Height
7.1 ~ 9.0kW	204mm
10.6kW	246mm
12.3 ~ 15.8kW	288mm

* Length Width : 840 x 840mm

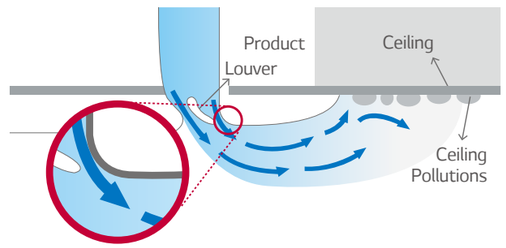
Prevent Ceiling Pollution

Coanda design of air outlet can prevent contamination of ceiling.

Coanda Design



Conventional

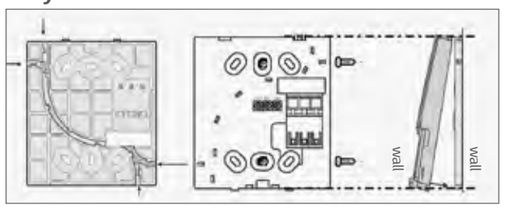


CEILING MOUNTED CASSETTE (4 Way / 2 Way)

Flexible Connection

Flexible connection of remote controller.
- Group control : 1 remote controller up to 16 indoor units. / Second remote control : 2 remote controllers to 1 indoor unit.

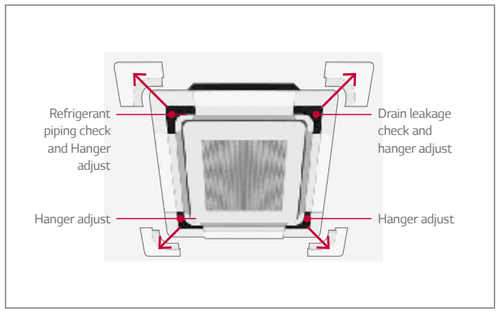
Easy & Solid Attachment to the Wall



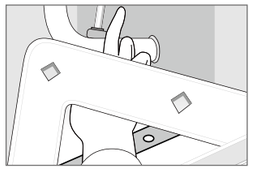
Convenient Panel Installation

The detachable corner design makes it easy to adjust the hanger during installation and to check for leakages in the drain connection pipe.

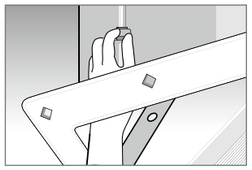
Detachable Corner Design



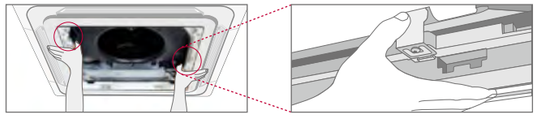
Drain leakage check



Hanger adjust

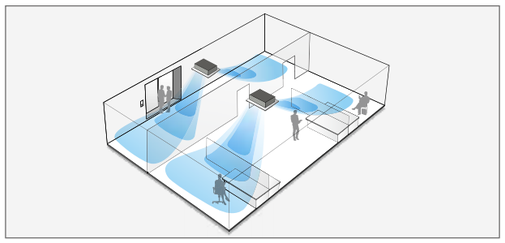


It is easy to install the panel to the body, using the button type panel design.



2 Way air flow without temperature variation

2 Way cassette is suitable for narrow type of space such as office / hotel / dormitory corridor and it provides thermal comfort without temperature variation.

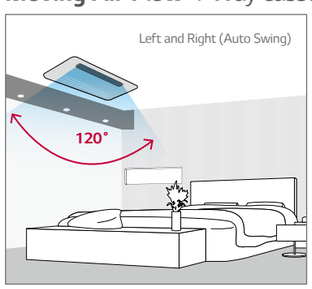


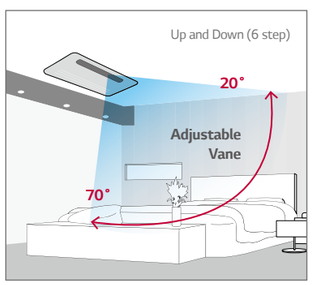
CEILING MOUNTED CASSETTE (1 Way)

6-Step Vane Control

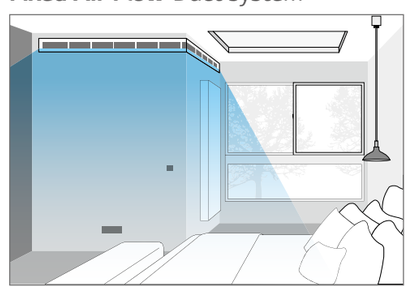
There are 6 different steps to control air flow direction. Also 1 way cassette has vane to move auto swing between left and right as 120 degree.

Moving Air Flow 1 Way cassette





Fixed Air Flow Duct system



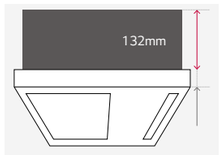
Minimized Height

LG 1 Way cassette isn't affected by installation environment. LG 1 Way cassette height is 132mm and duct is 190mm, so it can provide ideal solution for installation in limited space.

Size Comparison

(Unit : mm)

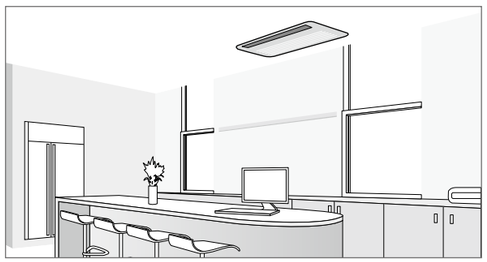
	LG	A Company	B Company
1 Way Cassette	132	215	230
Duct	190	200	200



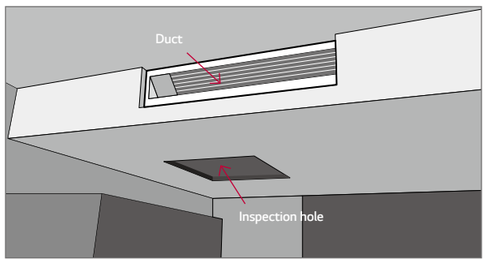
Flexible Installation

The access for inspection at 1 Way Cassette does not require additional ducted space making the installation environment uncomplicated.

1 Way cassette



Duct



INDOOR UNIT SPECIFICATION

4 Way CASSETTE (570 × 570)

ARNU05GTRD4 / ARNU07GTRD4 / ARNU09GTRD4 / ARNU12GTRD4
ARNU15GTQD4 / ARNU18GTQD4 / ARNU21GTQD4

Model	Independent Unit			ARNU05GTRD4	ARNU07GTRD4	ARNU09GTRD4	ARNU12GTRD4	ARNU15GTQD4	ARNU18GTQD4	ARNU21GTQD4
Capacity	Cooling	Nom	kW	1.6	2.2	2.8	3.6	4.5	5.6	6.0
	Heating	Nom	kW	1.8	2.5	3.2	4.0	5.0	6.3	6.8
Power Input	Cooling / Heating	Nom 1)	W	13	13	14	17	24	25	28
	Cooling / Heating	Rated 2)	W	30	30	30	30	30	30	30
Power Supply			Ø/V/Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	7.5 / 7.0 / 6.6	7.5 / 7.0 / 6.6	8.0 / 7.5 / 7.1	8.7 / 8.0 / 7.0	11.0 / 10.0 / 9.3	11.2 / 11.0 / 10.0	12.0 / 11.1 / 9.4
	Heating	H / M / L	m^3/min	7.5 / 7.0 / 6.6	7.5 / 7.0 / 6.6	8.0 / 7.5 / 7.1	8.7 / 8.0 / 7.0	11.0 / 10.0 / 9.3	11.2 / 11.0 / 10.0	12.0 / 11.1 / 9.4
Sound Pressure		H / M / L	dBA	29 / 27 / 26	29 / 27 / 26	30 / 29 / 27	32 / 30 / 27	36 / 34 / 32	37 / 35 / 34	40 / 38 / 34
Sound Power		H / M / L	dBA	46 / 44 / 43	46 / 44 / 43	47 / 46 / 44	48 / 47 / 44	51 / 49 / 47	52 / 50 / 49	55 / 53 / 49
Dimensions	Body	W x H x D	mm	570 x 214 x 570	570 x 214 x 570	570 x 214 x 570	570 x 214 x 570	570 x 256 x 570	570 x 256 x 570	570 x 256 x 570
Net Weight			kg	12.6	12.6	13.7	13.7	15.0	15.0	15.0
Piping Connection	Liquid		mm	6.35	6.35	6.35	6.35	6.35	6.35	9.52
	Gas		mm	12.7	12.7	12.7	12.7	12.7	12.7	15.88
	Drain	I.D	mm	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Decoration Panel 1	Model			PT-UQC	PT-UQC	PT-UQC	PT-UQC	PT-UQC	PT-UQC	PT-UQC
	Color (RAL Code)			Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)
	Dimensions	W x H x D	mm	700 x 22 x 700	700 x 22 x 700	700 x 22 x 700	700 x 22 x 700	700 x 22 x 700	700 x 22 x 700	700 x 22 x 700
	Weight		kg	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Decoration Panel 2	Model			PT-QCHW0	PT-QCHW0	PT-QCHW0	PT-QCHW0	PT-QCHW0	PT-QCHW0	PT-QCHW0
	Color (RAL Code)			Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)
	Dimensions	W x H x D	mm	620 x 35 x 620	620 x 35 x 620	620 x 35 x 620	620 x 35 x 620	620 x 35 x 620	620 x 35 x 620	620 x 35 x 620
	Weight		kg	3.1	3.1	3.1	3.1	3.1	3.1	3.1

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511 2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification 3. I.D : ' Internal Diameter '

Accessories

Model		ARNU05GTRD4	ARNU07GTRD4	ARNU09GTRD4	ARNU12GTRD4	ARNU15GTQD4	ARNU18GTQD4	ARNU21GTQD4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000						
	2 Contact Point	PDRYCB400						
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300						
	Modbus Communication	PDRYCB500						
Front Panel		PT-QCHW0 / PT-UQC						
Ventilation Kit		PTVK430						
EEV Kit for MULTI V Indoor		PRGK024A0					-	

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT SPECIFICATION

4 Way CASSETTE (840 × 840)

ARNU24GTPC4 / ARNU28GTPC4 / ARNU30GTPC4 / ARNU36GTNC4
ARNU42GTMC4 / ARNU48GTMC4 / ARNU54GTMC4

Model	Independent Unit			ARNU24GTPC4	ARNU28GTPC4	ARNU30GTPC4	ARNU36GTNC4	ARNU42GTMC4	ARNU48GTMC4	ARNU54GTMC4
Capacity	Cooling	Nom	kW	7.1	8.2	9.0	10.6	12.3	14.1	15.8
	Heating	Nom	kW	8.0	9.2	10.0	11.9	13.8	15.9	18.0
Power Input	Cooling / Heating	Nom 1)	W	31	40	40	70	104	120	135
	Cooling / Heating	Rated 2)	W	40	40	40	144	144	144	144
Power Supply			Ø/V/Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	17.0 / 15.0 / 13.0	19.0 / 16.0 / 14.0	24.3 / 22.8 / 19.5	25.0 / 21.0 / 19.0	30.0 / 27.0 / 24.0	31.0 / 29.0 / 27.0	34.0 / 32.0 / 27.0
	Heating	H / M / L	m^3/min	17.0 / 15.0 / 13.0	19.0 / 16.0 / 14.0	24.3 / 22.8 / 19.5	25.0 / 21.0 / 19.0	30.0 / 27.0 / 24.0	31.0 / 29.0 / 27.0	34.0 / 32.0 / 27.0
Sound Pressure		H / M / L	dBA	36 / 34 / 31	39 / 35 / 33	40 / 36 / 33	43 / 40 / 37	44 / 41 / 38	46 / 43 / 41	50 / 48 / 44
Sound Power		H / M / L	dBA	55 / 53 / 50	56 / 54 / 52	57 / 54 / 52	62 / 59 / 56	63 / 59 / 56	65 / 61 / 59	69 / 67 / 63
Dimensions	Body	W x H x D	mm	840 x 204 x 840	840 x 204 x 840	840 x 204 x 840	840 x 246 x 840	840 x 288 x 840	840 x 288 x 840	840 x 288 x 840
Net Weight			kg	20.8	20.8	20.8	23.5	25.6	25.6	26.5
Piping Connection	Liquid		mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Gas		mm	15.88	15.88	15.88	15.88	15.88	15.88	15.88
	Drain	I.D	mm	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Decoration Panel	Model			PT-UMC1	PT-UMC1	PT-UMC1	PT-UMC1	PT-UMC1	PT-UMC1	PT-UMC1
	Color (RAL Code)			Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)
	Dimensions	W x H x D	mm	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950
	Weight		kg	5.6	5.6	5.6	5.6	5.6	5.6	5.6

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511 2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification 3. I.D : ' Internal Diameter '

Accessories

Model		ARNU24GTPC4	ARNU28GTPC4	ARNU30GTPC4	ARNU36GTNC4	ARNU42GTMC4	ARNU48GTMC4	ARNU54GTMC4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000						
	2 Contact Point	PDRYCB400						
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300						
	Modbus Communication	PDRYCB500						
Front Panel		PT-UMC1						
Ventilation Kit		PTEGM0						
EEV Kit for MULTI V Indoor		PTVK410 / PTVK420 / PTVK430						

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT SPECIFICATION

CASSETTE

ARNU07GTNA4 / ARNU09GTNA4 / ARNU12GTNA4
ARNU15GTNA4 / ARNU18GTNA4

Model	Independent Unit			ARNU07GTNA4	ARNU09GTNA4	ARNU12GTNA4	ARNU15GTNA4	ARNU18GTNA4
Capacity	Cooling	Nom	kW	2.2	2.8	3.6	4.5	5.6
	Heating	Nom	kW	2.5	3.2	4.0	5.0	6.3
Power Input	Cooling / Heating	Nom	W	18	19	22	25	27
	Cooling / Heating	Rated	W	144	144	144	144	144
Power Supply			Ø / V / Hz	1/220~240/50 1/220/60	1/220~240/50 1/220/60	1/220~240/50 1/220/60	1/220~240/50 1/220/60	1/220~240/50 1/220/60
Airflow Rate	Cooling	H / M / L	m^3/min	13.0 / 12.0 / 11.0	13.5 / 12.0 / 11.0	14.0 / 13.0 / 12.0	15.0 / 13.0 / 12.0	16.0 / 14.0 / 12.0
	Heating	H / M / L	m^3/min	13.0 / 12.0 / 11.0	13.5 / 12.0 / 11.0	14.0 / 13.0 / 12.0	15.0 / 13.0 / 12.0	16.0 / 14.0 / 12.0
Sound Pressure		H / M / L	dBA	35 / 33 / 30	36 / 33 / 30	37 / 35 / 33	39 / 35 / 33	40 / 35 / 33
Sound Power		H / M / L	dBA	42 / 38 / 36	42 / 38 / 36	43 / 40 / 38	44 / 40 / 38	45 / 41 / 38
Dimensions		W x H x D	mm	840 x 246 x 840	840 x 246 x 840	840 x 246 x 840	840 x 246 x 840	840 x 246 x 840
Net Weight			kg	23.5	23.5	23.5	23.5	23.5
Piping Connection	Liquid		mm	9.52	9.52	9.52	9.52	9.52
	Gas		mm	15.88	15.88	15.88	15.88	15.88
	Drain	I.D	mm	25	25	25	25	25
Decoration Panel	Model			PT-UMC	PT-UMC	PT-UMC	PT-UMC	PT-UMC
	Color (RAL Code)			Morning fog (RAL 120-4)	Morning fog (RAL 120-4)	Morning fog (RAL 120-4)	Morning fog (RAL 120-4)	Morning fog (RAL 120-4)
	Dimensions	W x H x D	mm	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950
	Weight		kg	5.6	5.6	5.6	5.6	5.6

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511 2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification 3. I.D : ' Internal Diameter '

Accessories

Model		ARNU07GTNA4	ARNU09GTNA4	ARNU12GTNA4	ARNU15GTNA4	ARNU18GTNA4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000				
	2 Contact Point	PDRYCB400				
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300				
	Modbus Communication	PDRYCB500				
Front Panel		PT-QCHW0 / PT-UQC				
Ventilation Kit		PTVK430				
EEV Kit for MULTI V Indoor		PRGK024A0				

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT SPECIFICATION

CASSETTE

ARNU24GTMA4 / ARNU28GTMA4
ARNU36GTMA4 / ARNU42GTMA4

Model	Independent Unit			ARNU24GTMA4	ARNU28GTMA4	ARNU36GTMA4	ARNU42GTMA4
Capacity	Cooling	Nom	kW	7.1	8.2	10.6	12.3
	Heating	Nom	kW	8.0	9.2	11.9	13.8
Power Input	Cooling / Heating	Nom	W	47	52	64	104
	Cooling / Heating	Rated	W	144	144	144	144
Power Supply			Ø / V / Hz	1/220~240/50 1/220/60	1/220~240/50 1/220/60	1/220~240/50 1/220/60	1/220~240/50 1/220/60
Airflow Rate	Cooling	H / M / L	m^3/min	22.0 / 20.0 / 18.0	23.0 / 21.0 / 18.0	26.0 / 23.0 / 20.0	30.0 / 26.0 / 23.0
	Heating	H / M / L	m^3/min	22.0 / 20.0 / 18.0	23.0 / 21.0 / 18.0	26.0 / 23.0 / 20.0	30.0 / 26.0 / 23.0
Sound Pressure		H / M / L	dBA	42 / 40 / 38	43 / 41 / 38	46 / 42 / 39	49 / 45 / 42
Sound Power		H / M / L	dBA	48 / 45 / 43	49 / 47 / 43	52 / 48 / 44	55 / 51 / 48
Dimensions		W x H x D	mm	840 x 288 x 840	840 x 288 x 840	840 x 288 x 840	840 x 288 x 840
Net Weight			kg	25.6	25.6	25.6	25.6
Piping Connection	Liquid		mm	9.52	9.52	9.52	9.52
	Gas		mm	15.88	15.88	15.88	15.88
	Drain	I.D	mm	25	25	25	25
Decoration Panel	Model			PT-UMC	PT-UMC	PT-UMC	PT-UMC
	Color (RAL Code)			Morning fog (RAL 120-4)	Morning fog (RAL 120-4)	Morning fog (RAL 120-4)	Morning fog (RAL 120-4)
	Dimensions	W x H x D	mm	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950	950 x 25 x 950
	Weight		kg	5.6	5.6	5.6	5.6

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511 2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification 3. I.D : ' Internal Diameter '

Accessories

Model		ARNU24GTMA4	ARNU28GTMA4	ARNU36GTMA4	ARNU42GTMA4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000			
	2 Contact Point	PDRYCB400			
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300			
	Modbus Communication	PDRYCB500			
Front Panel		PT-UMC1			
Ventilation Kit		PTEGM0			
EEV Kit for MULTI V Indoor		PTVK410 / PTVK420 / PTVK430			

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT SPECIFICATION

2 Way CASSETTE

ARNU09GTSD4 / ARNU12GTSD4
ARNU18GTSD4 / ARNU24GTSD4

Model	Independent Unit			ARNU09GTSD4	ARNU12GTSD4	ARNU18GTSD4	ARNU24GTSD4
Capacity	Cooling	Nom	kW	2.8	3.6	5.6	7.1
	Heating	Nom	kW	3.2	4.0	6.3	8.0
Power Input	Cooling / Heating	Nom [1]	W	16	18	19	31
	Cooling / Heating	Rated [2]	W	70	70	70	70
Power Supply			Ø/V/Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	10.8 / 9.8 / 9.1	11.1 / 10.3 / 9.1	11.8 / 10.8 / 9.8	14.5 / 12.4 / 10.3
	Heating	H / M / L	m^3/min	10.8 / 9.8 / 9.1	11.1 / 10.3 / 9.1	11.8 / 10.8 / 9.8	14.5 / 12.4 / 10.3
Sound Pressure		H / M / L	dBA	33 / 31 / 29	34 / 32 / 29	35 / 33 / 31	40 / 37 / 33
Sound Power		H / M / L	dBA	42 / 40 / 38	43 / 41 / 39	44 / 43 / 41	49 / 46 / 41
Dimensions	Body	W×H×D	mm	830 × 225 × 600	830 × 225 × 600	830 × 225 × 600	830 × 225 × 600
Net Weight			kg	18.1	18.1	18.1	18.1
Piping Connection	Liquid		mm	6.35	6.35	6.35	9.52
	Gas		mm	12.7	12.7	12.7	15.88
	Drain	I.D	mm	25.0	25.0	25.0	25.0
Decoration Panel	Model			PT-USC	PT-USC	PT-USC	PT-USC
	Color			Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)	Morning Fog (RAL 120-4)
	Dimensions	W×H×D	mm	1,100 x 28 x 690	1,100 x 28 x 690	1,100 x 28 x 690	1,100 x 28 x 690
	Weight		kg	4.65	4.65	4.65	4.65

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '

Accessories

Model		ARNU09GTSD4	ARNU12GTSD4	ARNU18GTSD4	ARNU24GTSD4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000			
	2 Contact Point	PDRYCB400			
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300			
	Modbus Communication	PDRYCB500			
Front Panel		PT-USC			
EEV Kit for MULTI V Indoor		PRGK024A0		-	

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT SPECIFICATION

1 Way CASSETTE

ARNU07GTUD4 / ARNU09GTUD4 / ARNU12GTUD4
ARNU18GTTD4 / ARNU24GTTD4

Model	Independent Unit			ARNU07GTUD4	ARNU09GTUD4	ARNU12GTUD4	ARNU18GTTD4	ARNU24GTTD4
Capacity	Cooling	Nom	kW	2.2	2.8	3.6	5.6	7.1
	Heating	Nom	kW	2.5	3.2	4.0	6.3	7.1
Power Input	Cooling / Heating	Nom [1]	W	20	22	24	38	51
	Cooling / Heating	Rated [2]	W	40	40	40	70	70
Power Supply			Ø/V/Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	8.2 / 7.3 / 6.4	9.2 / 8.6 / 8.2	10.0 / 9.2 / 8.2	13.3 / 12.1 / 10.9	14.6 / 13.3 / 11.5
	Heating	H / M / L	m^3/min	8.2 / 7.3 / 6.4	9.2 / 8.6 / 8.2	10.0 / 9.2 / 8.2	13.3 / 12.1 / 10.9	14.6 / 13.3 / 11.5
Sound Pressure		H / M / L	dBA	32 / 29 / 25	35 / 34 / 32	38 / 35 / 32	40 / 37 / 35	43 / 40 / 36
Sound Power		H / M / L	dBA	50 / 47 / 43	53 / 52 / 50	57 / 53 / 50	59 / 56 / 54	62 / 59 / 55
Dimensions	Body	W×H×D	mm	860 x 132 x 450	860 x 132 x 450	860 x 132 x 450	1,180 x 132 x 450	1,180 x 132 x 450
Net Weight			kg	13.6	13.6	13.6	15.6	15.6
Piping Connection	Liquid		mm	6.35	6.35	6.35	6.35	9.52
	Gas		mm	12.7	12.7	12.7	12.7	15.88
	Drain	I.D	mm	25.0	25.0	25.0	25.0	25.0
Decoration Panel	Model			PT-UUC (Grill) / PT-UUD (Panel)	PT-UUC (Grill) / PT-UUD (Panel)	PT-UUC (Grill) / PT-UUD (Panel)	PT-UTC (Grill) / PT-UTD (Panel)	PT-UTC (Grill) / PT-UTD (Panel)
	Color (RAL Code)			Noble White (RAL 110-1)	Noble White (RAL 110-1)	Noble White (RAL 110-1)	Noble White (RAL 110-1)	Noble White (RAL 110-1)
	Dimensions	W×H×D	mm	1,100 x 34 x 500	1,100 x 34 x 500	1,100 x 34 x 500	1,420 x 34 x 500	1,420 x 34 x 500
	Weight		kg	4.6	4.6	4.6	5.5	5.5

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '

Accessories

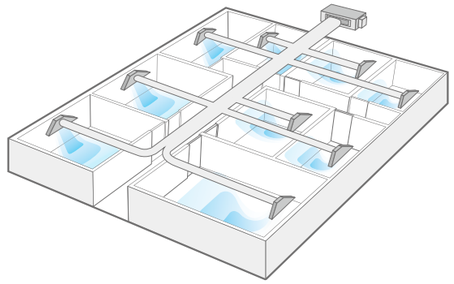
Model		ARNU07GTUD4	ARNU09GTUD4	ARNU12GTUD4	ARNU18GTTD4	ARNU24GTTD4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000				
	2 Contact Point	PDRYCB400				
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300				
	Modbus Communication	PDRYCB500				
Front Panel		PT-UUC (Grill) / PT-UUD (Panel)			PT-UTC (Grill) / PT-UTD (Panel)	
EEV Kit for MULTI V Indoor		PRGK024A0			-	

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

CEILING CONCEALED DUCT

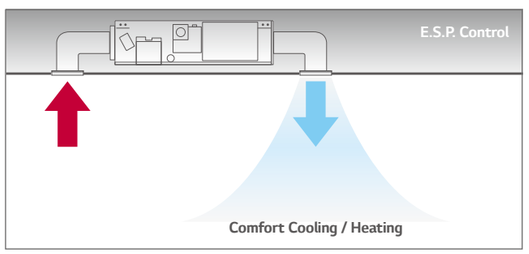
Operation for Multiple Rooms

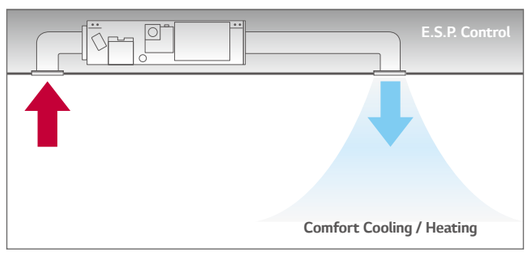
Using a spiral duct (embedded or flexible type) and stream chamber, it is possible to operate cooling / heating for several rooms simultaneously.



E.S.P. (External Static Pressure) Control

E.S.P. control function can make air volume controlled easily with remote controller. The BLDC motor can control fan speed and air volume regardless of the external static pressure. No additional accessories are necessary to control air flow.

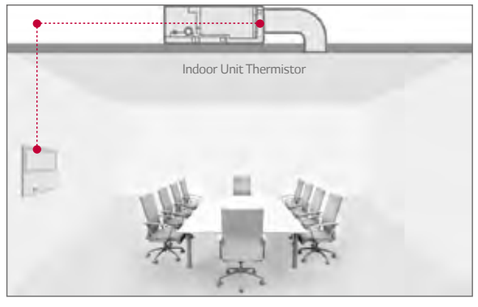




Two Thermistors Control

The indoor temperature can be checked using the thermistors in the remote controller as well as from the indoor unit. There may be a significant difference between ceiling and floor air temperature. Two thermistors can optimise indoor air temperature for a more comfortable environment.

Compares temperatures sensed from different positions, and automatically selects the optimum temperature for users.

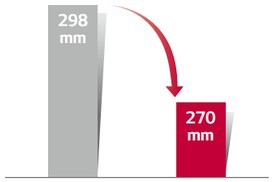


Remote Controller Thermistor

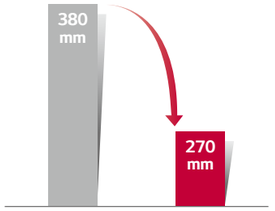
Minimized Height

New mid-static ducts provide ideal solution for installation in limited space.

8 / 10kW



12.5kW

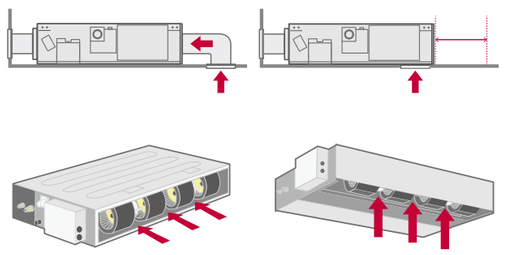


Flexible Installation (Low Static Duct Only)

The new low static duct allows the air intake at the rear or bottom under installation condition.

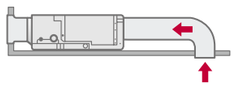
New Low Static Duct

Air intake at the rear or bottom



Conventional

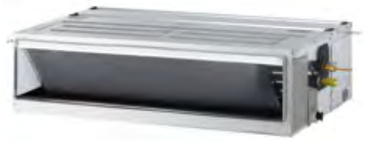
Air intake at the only rear



INDOOR UNIT SPECIFICATION

MID / HIGH STACTICS

ARNU07GM1A4 / ARNU09GM1A4 / ARNU12GM1A4
ARNU15GM1A4 / ARNU18GM1A4 / ARNU24GM1A4



Model	Independent Unit			ARNU07GM1A4	ARNU09GM1A4	ARNU12GM1A4	ARNU15GM1A4	ARNU18GM1A4	ARNU24GM1A4
Capacity	Cooling	Nom	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	Nom	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power Input	Cooling / Heating	Nom [1]	W	39	40	46	67	85	91
	Cooling / Heating	Rated [2]	W	190	190	190	190	190	190
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	9.0 / 7.5 / 6.0	9.5 / 7.5 / 6.0	11.0 / 9.0 / 7.0	16.0 / 12.0 / 9.0	17.0 / 14.5 / 12.0	19.0 / 16.0 / 14.0
	Heating	H / M / L	m^3/min	9.0 / 7.5 / 6.0	9.5 / 7.5 / 6.0	11.0 / 9.0 / 7.0	16.0 / 12.0 / 9.0	17.0 / 14.5 / 12.0	19.0 / 16.0 / 14.0
External Static Pressure		Min ~ Max	mmAq(Pa)	2(20) ~ 15(147)	2(20) ~ 15(147)	2(20) ~ 15(147)	2(20) ~ 15(147)	2(20) ~ 15(147)	2(20) ~ 15(147)
Sound Pressure		H / M / L	dBA	26 / 24 / 23	27 / 25 / 23	27 / 25 / 23	30 / 27 / 23	31 / 28 / 25	32 / 29 / 26
Sound Power		H / M / L	dBA	55 / 54 / 51	55 / 54 / 52	55 / 54 / 52	56 / 54 / 53	58 / 56 / 54	59 / 58 / 56
Dimensions	Body	W x H x D	mm	900 × 270 × 700	900 × 270 × 700	900 × 270 × 700	900 × 270 × 700	900 × 270 × 700	900 × 270 × 700
Net Weight			kg	25.5	25.5	25.5	25.5	25.5	26.5
Piping Connection	Liquid		mm	6.35	6.35	6.35	6.35	6.35	9.52
	Gas		mm	12.7	12.7	12.7	12.7	12.7	15.88
	Drain	I.D	mm	25.0	25.0	25.0	25.0	25.0	25.0

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '
4. The Sound Pressure test condition is based on 50 Pa for middle static duct.

ARNU28GM2A4 / ARNU36GM2A4 / ARNU42GM2A4 / ARNU48GM3A4
ARNU54GM3A4 / ARNU76GB8A4 / ARNU96GB8A4

Model	Independent Unit			ARNU28GM2A4	ARNU36GM2A4	ARNU42GM2A4	ARNU48GM3A4	ARNU54GM3A4	ARNU76GB8A4	ARNU96GB8A4
Capacity	Cooling	Nom	kW	8.2	10.6	12.3	14.1	15.8	22.4	28.0
	Heating	Nom	kW	9.2	11.9	13.8	15.9	18.0	25.2	31.5
Power Input	Cooling / Heating	Nom [1]	W	123	184	231	172	260	747	800
	Cooling / Heating	Rated [2]	W	350	350	350	400	400	800	800
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	28.0 / 24.0 / 21.0	32.0 / 28.0 / 24.0	38.0 / 33.0 / 28.0	40.0 / 34.0 / 28.0	50.0 / 45.0 / 40.0	60.0 / 50.0 / 50.0	72.0 / 64.0 / 64.0
	Heating	H / M / L	m^3/min	28.0 / 24.0 / 21.0	32.0 / 28.0 / 24.0	38.0 / 33.0 / 28.0	40.0 / 34.0 / 28.0	50.0 / 45.0 / 40.0	60.0 / 50.0 / 50.0	72.0 / 64.0 / 64.0
External Static Pressure		Min ~ Max	mmAq(Pa)	4(39) ~ 15(147)	4(39) ~ 15(147)	4(39) ~ 15(147)	4(39) ~ 15(147)	4(39) ~ 15(147)	6(59) ~ 25(245)	6(59) ~ 25(245)
Sound Pressure		H / M / L	dBA	36 / 34 / 33	37 / 36 / 34	38 / 37 / 36	39 / 37 / 35	42 / 40 / 39	45 / 41 / 40	47 / 42 / 41
Sound Power		H / M / L	dBA	59 / 57 / 55	60 / 59 / 57	62 / 61 / 60	65 / 61 / 59	66 / 64 / 63	70 / 68 / 68	72 / 69 / 68
Dimensions	Body	W x H x D	mm	1,250 × 270 × 700	1,250 × 270 × 700	1,250 × 270 × 700	1,250 × 360 × 700	1,250 × 360 × 700	1,562 × 460 × 688	1,562 × 460 × 688
Net Weight			kg	38.0	38.0	39.5	44.0	44.0	87.0	87.0
Piping Connection	Liquid		mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52
	Gas		mm	15.88	15.88	15.88	15.88	19.05	19.05	22.2
	Drain	I.D	mm	25.0	25.0	25.0	25.0	25.0	25.0	25.0

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '
4. B8 : The Sound Pressure test condition is based on 220 Pa (High Static Pressue) as standard.
5. The Sound Pressure test condition is based on 50 Pa for middle static duct.

Accessories

Model		ARNU07GM1A4	ARNU09GM1A4	ARNU12GM1A4	ARNU15GM1A4	ARNU18GM1A4	ARNU24GM1A4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000					
	2 Contact Point	PDRYCB400					
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300					
	Modbus Communication	PDRYCB500					
EEV Kit for MULTI V Indoor		PRGK024A0					-
IR Receiver		PWLRVN000					

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

Accessories

Model		ARNU28GM2A4	ARNU36GM2A4	ARNU42GM2A4	ARNU48GM3A4	ARNU54GM3A4	ARNU76GB8A4	ARNU96GB8A4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000						
	2 Contact Point	PDRYCB400						
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300						
	Modbus Communication	PDRYCB500						
EEV Kit for MULTI V Indoor		-						
IR Receiver		PWLRVN000						

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT SPECIFICATION

LOW STACTICS

ARNU05GL1G4 / ARNU07GL1G4 / ARNU09GL1G4

Model	Independent Unit			ARNU05GL1G4	ARNU07GL1G4	ARNU09GL1G4
Capacity	Cooling	Nom	kW	1.7	2.2	2.8
	Heating	Nom	kW	1.9	2.5	3.2
Power Input	Cooling / Heating	Nom [1]	W	29	31	39
	Cooling / Heating	Rated [2]	W	40	40	40
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	6.7 / 6.2 / 5.5	7.5 / 6.5 / 5.5	9.0 / 7.0 / 5.5
	Heating	H / M / L	m^3/min	6.7 / 6.2 / 5.5	7.5 / 6.5 / 5.5	9.0 / 7.0 / 5.5
External Static Pressure		Min ~ Max	mmAq(Pa)	0(0) ~ 5(49)	0(0) ~ 5(49)	0(0) ~ 5(49)
Sound Pressure		H / M / L	dBA	25 / 24 / 22	26 / 24 / 22	28 / 25 / 22
Sound Power		H / M / L	dBA	47 / 46 / 44	48 / 46 / 44	49 / 47 / 44
Dimensions	Body	W x H x D	mm	700 x 190 x 700	700 x 190 x 700	700 x 190 x 700
Net Weight			kg	17.5	17.5	17.5
Piping Connection	Liquid		mm	6.35	6.35	6.35
	Gas		mm	12.7	12.7	12.7
	Drain	I.D	mm	25.4	25.4	25.4

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '
4. L1 : The Sound Pressure test condition is based on 20 Pa (Static Pressue) as standard.

Accessories

Model		ARNU05GL1G4	ARNU07GL1G4	ARNU09GL1G4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000		
	2 Contact Point	PDRYCB400		
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300		
	Modbus Communication	PDRYCB500		
EEV Kit for MULTI V Indoor		PRGK024A0		
IR Receiver		PWLRVN000		

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

ARNU12GL2G4 / ARNU15GL2G4 / ARNU18GL2G4
ARNU21GL3G4 / ARNU24GL3G4

Model	Independent Unit			ARNU12GL2G4	ARNU15GL2G4	ARNU18GL2G4	ARNU21GL3G4	ARNU24GL3G4
Capacity	Cooling	Nom	kW	3.6	4.5	5.6	6.2	7.1
	Heating	Nom	kW	4.0	5.0	6.3	7.0	8.0
Power Input	Cooling / Heating	Nom [1]	W	41	56	71	72	103
	Cooling / Heating	Rated [2]	W	85	85	85	115	115
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	10.0 / 8.5 / 7.0	12.5 / 10.0 / 8.5	15.0 / 12.5 / 10.0	17.5 / 14.0 / 12.0	20.0 / 16.0 / 12.0
	Heating	H / M / L	m^3/min	10.0 / 8.5 / 7.0	12.5 / 10.0 / 8.5	15.0 / 12.5 / 10.0	17.5 / 14.0 / 12.0	20.0 / 16.0 / 12.0
External Static Pressure		Min ~ Max	mmAq(Pa)	0(0) ~ 5(49)	0(0) ~ 5(49)	0(0) ~ 5(49)	0(0) ~ 5(49)	0(0) ~ 5(49)
Sound Pressure		H / M / L	dBA	30 / 27 / 25	33 / 30 / 28	35 / 32 / 29	35 / 29 / 28	36 / 33 / 28
Sound Power		H / M / L	dBA	52 / 49 / 46	53 / 52 / 50	54 / 53 / 52	56 / 53 / 51	58 / 54 / 51
Dimensions	Body	W x H x D	mm	900 x 190 x 700	900 x 190 x 700	900 x 190 x 700	1,100 x 190 x 700	1,100 x 190 x 700
Net Weight			kg	23.0	23.0	23.0	27.0	27.0
Piping Connection	Liquid		mm	6.35	6.35	6.35	9.52	9.52
	Gas		mm	12.7	12.7	12.7	15.88	15.88
	Drain	I.D	mm	25.4	25.4	25.4	25.4	25.4

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '
4. L2, L3 : The Sound Pressure test condition is based on 20 Pa (Static Pressue) as standard.

Accessories

Model		ARNU12GL2G4	ARNU15GL2G4	ARNU18GL2G4	ARNU21GL3G4	ARNU24GL3G4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000				
	2 Contact Point	PDRYCB400				
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300				
	Modbus Communication	PDRYCB500				
EEV Kit for MULTI V Indoor		PRGK024A0			-	
IR Receiver		PWLRVN000				

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT SPECIFICATION

HIGH SENSIBLE SITE

ARNU07GBGA4 / ARNU09GBGA4 / ARNU12GBGA4 / ARNU15GBGA4 / ARNU18GBRA4

Model	Independent Unit			ARNU07GBGA4	ARNU09GBGA4	ARNU12GBGA4	ARNU15GBGA4	ARNU18GBRA4
Capacity	Cooling	Nom	kW	2.2	2.8	3.6	4.5	5.6
	Heating	Nom	kW	2.5	3.2	4.0	5.0	6.3
Power Input	Cooling / Heating	Nom 1)	W	50	50	50	130	130
	Cooling / Heating	Rated 2)	W	450	450	450	450	450
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	12.5 / 11.5 / 9.4	12.8 / 11.5 / 9.4	13.5 / 12.1 / 9.4	13.8 / 11.8 / 8.3	15.2 / 13.8 / 11.8
	Heating	H / M / L	m^3/min	12.5 / 11.5 / 9.4	12.8 / 11.5 / 9.4	13.5 / 12.1 / 9.4	13.8 / 11.8 / 8.3	15.2 / 13.8 / 11.8
External Static Pressure		Min ~ Max	mmAq(Pa)	3(29) ~ 18(177)	3(29) ~ 18(177)	3(29) ~ 18(177)	3(29) ~ 18(177)	5(49) ~ 20(196)
Sound Pressure		H / M / L	dBA	31 / 30 / 29	32 / 31 / 29	32 / 31 / 30	33 / 32 / 31	33 / 32 / 31
Sound Power		H / M / L	dBA	58 / 56 / 55	59 / 56 / 55	59 / 58 / 56	59 / 58 / 56	59 / 58 / 56
Dimensions	Body	W x H x D	mm	1,182 x 298 x 450	1,182 x 298 x 450	1,182 x 298 x 450	1,182 x 298 x 450	1,230 x 380 x 590
Net Weight			kg	38.0	38.0	38.0	38.0	53.0
Piping Connection	Liquid		mm	9.52	9.52	9.52	9.52	9.52
	Gas		mm	15.88	15.88	15.88	15.88	15.88
	Drain	I.D	mm	25.0	25.0	25.0	25.0	25.0

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '

Accessories

Model		ARNU07GBGA4	ARNU09GBGA4	ARNU12GBGA4	ARNU15GBGA4	ARNU18GBRA4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000				
	2 Contact Point	PDRYCB400				
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300				
	Modbus Communication	PDRYCB500				
EEV Kit for MULTI V Indoor		PRGK024A0				
IR Receiver		PWLRVN000				

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

ARNU24GBRA4 / ARNU28GBRA4 / ARNU36GB8A4 / ARNU42GB8A4 / ARNU48GB8A4

Model	Independent Unit			ARNU24GBRA4	ARNU28GBRA4	ARNU36GB8A4	ARNU42GB8A4	ARNU48GB8A4
Capacity	Cooling	Nom	kW	7.1	8.2	10.6	12.3	14.1
	Heating	Nom	kW	8.0	9.2	11.9	13.8	15.9
Power Input	Cooling / Heating	Nom 1)	W	233	402	420	528	538
	Cooling / Heating	Rated 2)	W	450	450	800	800	800
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	29.8 / 27.3 / 23.8	36.2 / 32.1 / 28.5	49.0 / 37.3 / 30.2	54.2 / 41.3 / 31.8	57.2 / 43.0 / 34.0
	Heating	H / M / L	m^3/min	29.8 / 27.3 / 23.8	36.2 / 32.1 / 28.5	49.0 / 37.3 / 30.2	54.2 / 41.3 / 31.8	57.2 / 43.0 / 34.0
External Static Pressure		Min ~ Max	mmAq(Pa)	5(49) ~ 20(196)	5(49) ~ 20(196)	6(59) ~ 25(245)	6(59) ~ 25(245)	6(59) ~ 25(245)
Sound Pressure		H / M / L	dBA	44 / 43 / 42	45 / 44 / 43	46 / 45 / 42	47 / 46 / 43	47 / 46 / 44
Sound Power		H / M / L	dBA	63 / 62 / 60	64 / 63 / 62	66 / 64 / 60	67 / 66 / 62	67 / 66 / 63
Dimensions	Body	W x H x D	mm	1,230 x 380 x 590	1,230 x 380 x 590	1,562 x 460 x 688	1,562 x 460 x 688	1,562 x 460 x 688
Net Weight			kg	53.0	53.0	87.0	87.0	87.0
Piping Connection	Liquid		mm	9.52	9.52	9.52	9.52	9.52
	Gas		mm	15.88	15.88	19.05	19.05	19.05
	Drain	I.D	mm	25.0	25.0	25.0	25.0	25.0

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '

Accessories

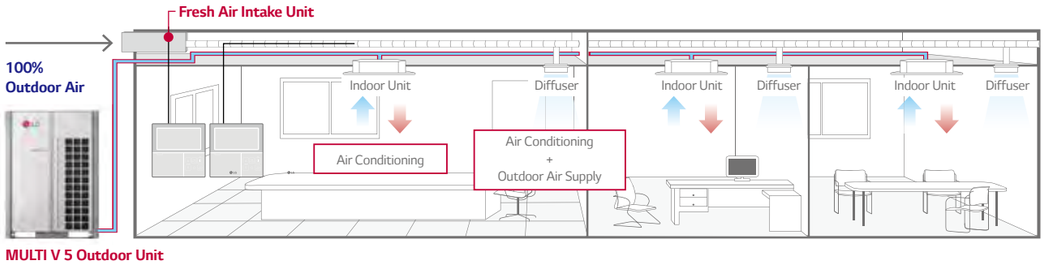
Model		ARNU24GBRA4	ARNU28GBRA4	ARNU36GB8A4	ARNU42GB8A4	ARNU48GB8A4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000				
	2 Contact Point	PDRYCB400				
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300				
	Modbus Communication	PDRYCB500				
EEV Kit for MULTI V Indoor		-				
IR Receiver		PWLRVN000				

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

FRESH AIR INTAKE UNIT

Fresh Outdoor Air Supply

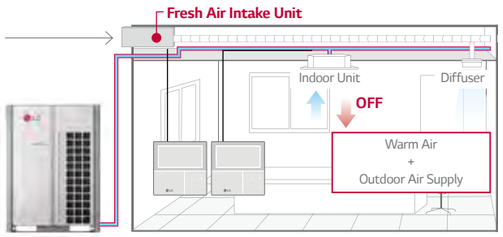
The LG Fresh Air Intake Unit (FAU) is the alternative solution for ventilation, which supplies the fresh outdoor air indoors as well as being able to cool and heat air inside simultaneously. It means the indoor space can have positive air pressure consistently, which can block cold, hot or contaminated air from outside.



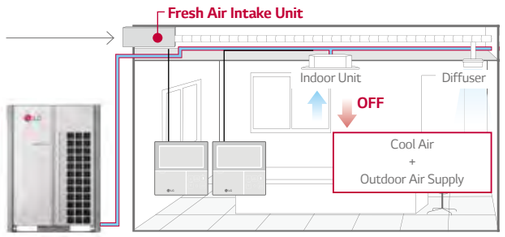
Economic Operation

Using the free cooling and heating can save costs by blowing the natural outdoor air inside when the season change.

Spring Season



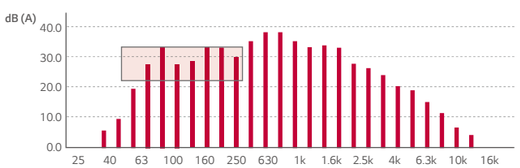
Autumn Season



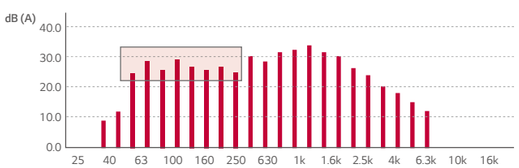
BLDC Fan Motor

It can reduce a noise at low frequencies.

AC Tap Motor



BLDC Motor



FRESH AIR INTAKE UNIT

ARNU48GBRZ4 / ARNU76GB8Z4 / ARNU96GB8Z4

Model	Independent Unit			ARNU48GBRZ4	ARNU76GB8Z4	ARNU96GB8Z4
Capacity	Cooling	Nom	kW	14.1	22.4	28.0
	Heating	Nom	kW	13.5	21.4	26.7
Power Input	Cooling / Heating	Nom [1]	W	169	253	360
	Cooling / Heating	Rated [2]	W	169	360	360
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	18.8 / 14.7 / 14.7	23.7 / 13.2 / 13.2	35.7 / 23.7 / 23.7
	Heating	H / M / L	m^3/min	18.8 / 14.7 / 14.7	23.7 / 13.2 / 13.2	35.7 / 23.7 / 23.7
Sound Pressure		H / M / L	dBA	41 / 40 / 38	45 / 43 / 43	47 / 45 / 45
Sound Power		H / M / L	dBA	62 / 63 / 62	70 / 67 / 67	72 / 68 / 68
Dimensions	Body	W x H x D	mm	1,230 x 380 x 590	1,562 x 460 x 688	1,562 x 460 x 688
Net Weight			kg	45.0	73.0	73.0
Piping Connection	Liquid		mm	9.52	9.52	9.52
	Gas		mm	15.88	19.05	22.2
	Drain	I.D	mm	25.0	25.0	25.0

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Capacities are net capacities
3. Noise Level is under standard mode [For actual High Mode (Factory set) condition, Noise Level may exceed the standard level by 1.5db (A)]
4. Due to our policy of innovation some specifications may be changed without prior notification.
5. I.D : ' Internal Diameter '

CAUTION

1. Operation range (Cooling : 5°C ~ 43°C, Heating : -5°C ~ 43°C) 2. Installation of exhaust fan is recommended for a sealed room. 3. Indoor Unit Connection

No	Connection Condition	Combination
1	Fresh air intake units only are connected with outdoor units	1) The total capcity of fresh air intak unit should be 50 ~ 100% of outdoor unit. 2) The max quantity of fresh air intake is 4 units.
2	Mixture connection with general indoor unit and fresh intake units	1) The total capacity of indoor units (Standard Indoor Unit + Fresh Air Intake Unit) should be 50 ~ 100% of outdoor unit. 2) The total capacity of fresh air intake unit should be less than 30% of the total capacity of indoor units.

Accessories

Model		ARNU48GBRZ4	ARNU76GB8Z4	ARNU96GB8Z4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000		
	2 Contact Point	PDRYCB400		
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300		
	Modbus Communication	PDRYCB500		
IR Receiver		PWLRVN000		

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT KEY FEATURES

CEILING & FLOOR CONVERTIBLE UNIT

Differentiated Design

With its stunning V-shaped design and black vane, LG's new ceiling-suspended air conditioner exudes modern elegance appropriate for any space. The tasteful aesthetics of the air conditioner helped earn it the iF Design Award.

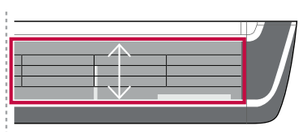
Powerful Cooling & Heating

The new LG Ceiling Suspended Unit is efficient for using in large areas due to its powerful cooling and heating operation. The powerful air speed and volume means the air flow can reach up to 15m away from the air conditioner.

With enlarged outlet space, optimized the Air flow Path and improved Heat Exchanger's performance

Outlet Space

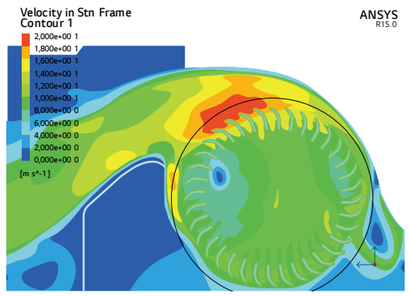
New LG



Conventional

115% ENLARGED

Optimized the Air flow Path

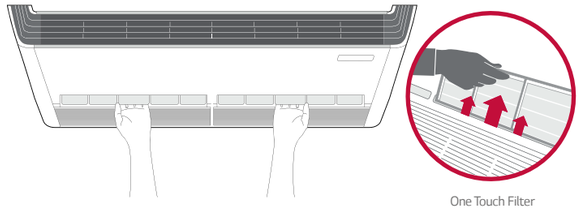


105% IMPROVED

CEILING SUSPENDED UNIT

One Touch & 2 Piece Filter

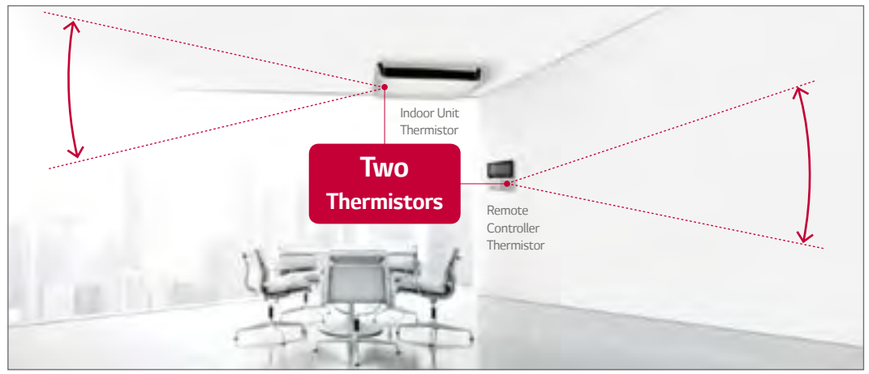
Easy in / out filter structure as well as a simplified two-piece filter, which slides out for easy cleaning and maintenance.



One Touch Filter

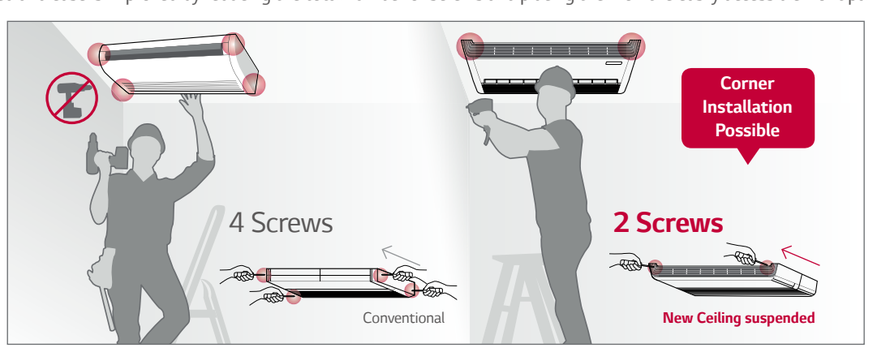
Two Thermistors Control

Users can purchase an optional control panel that includes a second thermistor, allowing for temperature checks from multiple locations.



Easy installation

Installation speed and ease is improved by reducing the total number of screws and placing them on the easily accessible front panel.



INDOOR UNIT SPECIFICATION

CEILING & FLOOR CONVERTIBLE UNIT

ARNU09GVEA4 / ARNU12GVEA4

Model	Independent Unit			ARNU09GVEA4	ARNU12GVEA4
Capacity	Cooling	Nom	kW	2.8	3.6
	Heating	Nom	kW	3.2	4.0
Power Input	Cooling / Heating	Nom 1)	W	22	30
	Cooling / Heating	Rated 2)	W	30	30
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	7.6 / 6.9 / 6.2	9.2 / 7.6 / 6.9
	Heating	H / M / L	m^3/min	7.6 / 6.9 / 6.2	9.2 / 7.6 / 6.9
Sound Pressure		H / M / L	dBA	36 / 32 / 28	38 / 36 / 30
Sound Power		H / M / L	dBA	55 / 51 / 45	56 / 55 / 49
Dimensions	Body	W x H x D	mm	900 x 490 x 200	900 x 490 x 200
Net Weight			kg	13.7	13.7
Piping Connection	Liquid		mm	6.35	6.35
	Gas		mm	12.7	12.7
	Drain	I.D	mm	16.0	16.0

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '

Accessories

Model		ARNU09GVEA4	ARNU12GVEA4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000	
	2 Contact Point	PDRYCB400	
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300	
	Modbus Communication	PDRYCB500	
EEV Kit for MULTI V Indoor		PRGK024A0	

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT SPECIFICATION

CEILING SUSPENDED UNIT

ARNU18GV1A4 / ARNU24GV1A4
ARNU36GV2A4 / ARNU48GV2A4

Model	Independent Unit			ARNU18GV1A4	ARNU24GV1A4	ARNU36GV2A4	ARNU48GV2A4
Capacity	Cooling	Nom	kW	5.6	7.1	10.6	14.1
	Heating	Nom	kW	6.3	8.0	11.9	15.9
Power Input	Cooling / Heating	Nom 1)	W	23	25	84	91
	Cooling / Heating	Rated 2)	W	130	130	184	184
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	13.5 / 12.5 / 12	14 / 13 / 12	27 / 24 / 20	29 / 24 / 20
	Heating	H / M / L	m^3/min	13.5 / 12.5 / 12	14 / 13 / 12	27 / 24 / 20	29 / 24 / 20
Sound Pressure		H / M / L	dBA	36 / 34 / 33	37 / 35 / 33	48 / 46 / 44	49 / 47 / 44
Sound Power		H / M / L	dBA	61 / 59 / 56	62 / 59 / 56	68 / 66 / 64	68 / 67 / 66
Dimensions	Body	W x H x D	mm	1200 x 690 x 235	1200 x 690 x 235	1,600 x 690 x 235	1,600 x 690 x 235
Net Weight			kg	29.0	29.0	37.0	37.0
Piping Connection	Liquid		mm	6.35	9.52	9.52	9.52
	Gas		mm	12.7	15.88	15.88	15.88
	Drain	I.D	mm	16.0	16.0	16.0	16.0

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '

Accessories

Model		ARNU18GV1A4	ARNU24GV1A4	ARNU36GV2A4	ARNU48GV2A4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000			
	2 Contact Point	PDRYCB400			
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300			
	Modbus Communication	PDRYCB500			

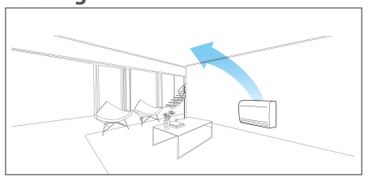
Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

CONSOLE

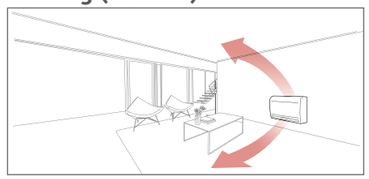
Installation Support Clip

During the cooling operation, the vane adjusts upwards to direct the air flow towards the ceiling.
When heating, the vane directs the warm air downwards to balance the room temperature especially for floor.

Cooling



Heating (Normal)



Quick Floor Heating

Console air conditioners offer a fast and powerful performance.
Using the floor heating mode, console air conditioners provide faster floor heating and help to reach the desired temperature quickly.

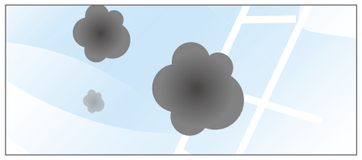
		Company A	Electric Heater	LG	LG Floor Heating Mode
27°C / 15°C	Vertical				
	Horizontal				
Lead Time for Heating (13°C ~ 21°C)		12 minutes 30 seconds	50 minutes	**9 minutes 30 seconds**	**8 minutes 40 seconds**

(Test Condition : Target Temp.23°C, Indoor Room : 13°C~ , Outdoor Room : 7°C)

5-Step Vane Control

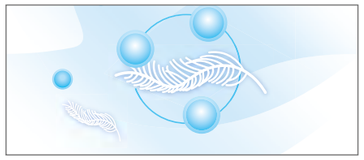
There are 5 different stages to control air flow direction.

Healthier Air (3 Stage Air Filter System)



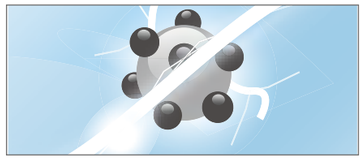
1st Advanced pre filter :

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



2nd Allergy Filter :

Filter consists of enzyme that breaks down allergens, apatite and organic / inorganic binders. When the air passes through the filter, allergens cling to the filter, and the filter deactivates the allergens.



3rd Plasma Ion Generator :

The sterilised ion generator emits around 1.2 million ions, and traps some of the airborne hazardous substances.

CONSOLE

ARNU07GQAA4 / ARNU09GQAA4
ARNU12GQAA4 / ARNU15GQAA4

Model	Independent Unit			ARNU07GQAA4	ARNU09GQAA4	ARNU12GQAA4	ARNU15GQAA4
Capacity	Cooling	Nom	kW	2.2	2.8	3.6	4.5
	Heating	Nom	kW	2.5	3.2	4.0	5.0
Power Input	Cooling / Heating	Nom 1)	W	15	15	18	24
	Cooling / Heating	Rated 2)	W	30	30	30	30
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	6.7 / 5.9 / 4.8	6.7 / 5.9 / 4.8	7.5 / 5.9 / 4.8	8.7 / 6.7 / 5.9
	Heating	H / M / L	m^3/min	6.7 / 5.9 / 4.8	6.7 / 5.9 / 4.8	7.5 / 5.9 / 4.8	8.7 / 6.7 / 5.9
Sound Pressure		H / M / L	dBA	37 / 34 / 28	37 / 34 / 28	39 / 34 / 28	42 / 37 / 31
Sound Power		H / M / L	dBA	53 / 50 / 44	53 / 50 / 44	56 / 50 / 44	58 / 53 / 50
Dimensions	Body	W x H x D	mm	700 x 600 x 210	700 x 600 x 210	700 x 600 x 210	700 x 600 x 210
Net Weight			kg	14.0	14.0	14.0	14.0
Piping Connection	Liquid		mm	6.35	6.35	6.35	6.35
	Gas		mm	12.7	12.7	12.7	12.7
	Drain	I.D	mm	12.2	12.2	12.2	12.2

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '

Accessories

Model		ARNU07GQAA4	ARNU09GQAA4	ARNU12GQAA4	ARNU15GQAA4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000			
	2 Contact Point	PDRYCB400			
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300			
	Modbus Communication	PDRYCB500			
EEV Kit for MULTI V Indoor		PRGK024A0			

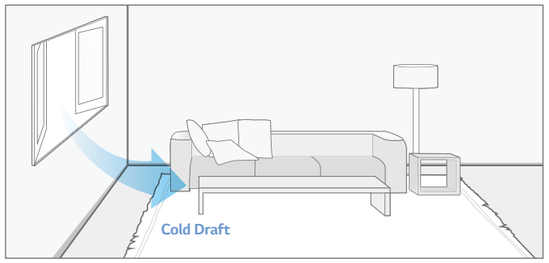
Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

FLOOR STANDING UNIT

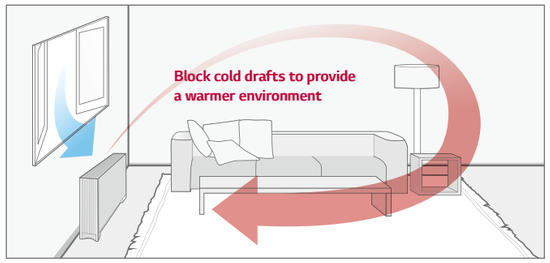
Block Cold Draft

The floor standing unit can block cold drafts from windows to provide a warmer environment for places such as libraries and offices.

Without Floor Standing

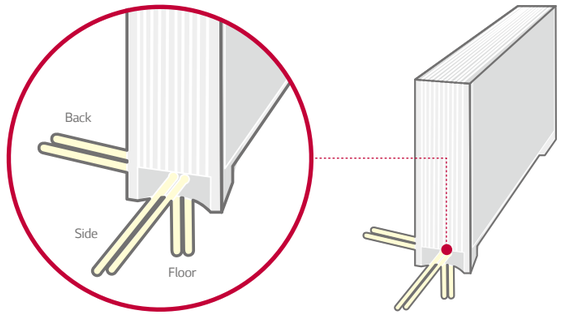


With Floor Standing



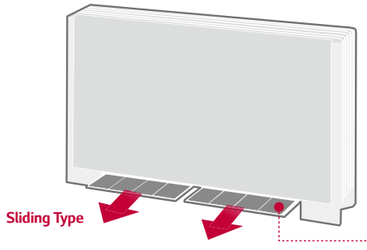
3 Way Flexible Installation

It is possible to install and connect the outdoor unit in 3 different ways (Side, Back, Floor).

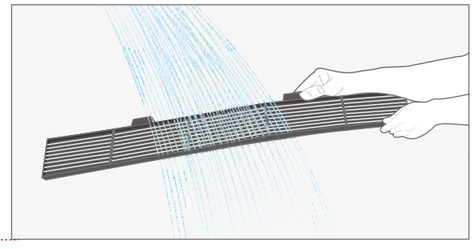


Sliding Type Filter

Easy maintenance and extended product life with sliding type filter.



Easy cleaning



FLOOR STANDING UNIT

ARNU07GCE*4 / ARNU09GCE*4 / ARNU12GCE*4
ARNU15GCE*4 / ARNU18GCF*4 / ARNU24GCF*4

* A : Floor Standing with case

* U : Floor Standing without case

Model	Independent Unit			ARNU07GCE*4	ARNU09GCE*4	ARNU12GCE*4	ARNU15GCE*4	ARNU18GCF*4	ARNU24GCF*4
Capacity	Cooling	Nom	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	Nom	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power Input	Cooling / Heating	Nom 1)	W	24	30	36	44	54	84
	Cooling / Heating	Rated 2)	W	85	85	85	85	115	115
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Airflow Rate	Cooling	H / M / L	m^3/min	8.5 / 7.5 / 6.5	9.5 / 8.5 / 7.5	10.5 / 9.5 / 8.5	11.5 / 10.0 / 9.5	16.0 / 14.0 / 12.0	18.0 / 16.0 / 14.0
	Heating	H / M / L	m^3/min	8.5 / 7.5 / 6.5	9.5 / 8.5 / 7.5	10.5 / 9.5 / 8.5	11.5 / 10.0 / 9.5	16.0 / 14.0 / 12.0	18.0 / 16.0 / 14.0
Sound Pressure		H / M / L	dBA	35 / 33 / 31	36 / 34 / 32	37 / 35 / 33	38 / 37 / 35	40 / 37 / 34	43 / 40 / 37
Sound Power		H / M / L	dBA	54 / 52 / 50	55 / 54 / 52	57 / 55 / 54	59 / 57 / 55	60 / 57 / 54	61 / 60 / 57
Dimensions	Body	W x H x D	mm	1,067 x 635 x 203 (A) 978 x 639 x 190 (U)	1,067 x 635 x 203 (A) 978 x 639 x 190 (U)	1,067 x 635 x 203 (A) 978 x 639 x 190 (U)	1,067 x 635 x 203 (A) 978 x 639 x 190 (U)	1,345 x 635 x 203 (A) 1,256 x 639 x 190 (U)	1,345 x 635 x 203 (A) 1,256 x 639 x 190 (U)
Net Weight 3)			kg	27.0 (A) / 20.0 (U)	27.0 (A) / 20.0 (U)	27.0 (A) / 20.0 (U)	27.0 (A) / 20.0 (U)	34.0 (A) / 27.0 (U)	34.0 (A) / 27.0 (U)
Piping Connection	Liquid		mm	6.35	6.35	6.35	6.35	6.35	9.52
	Gas		mm	12.7	12.7	12.7	12.7	12.7	15.88
	Drain	I.D	mm	12.0	12.0	12.0	12.0	12.0	12.0

* This product contains Fluorinated Greenhouse Gases. (R410A)
1) Nom. : Performance tested under EN14511
2) Rated : Max power input allowed for fan motor
Note : 1. Capacities are based on the following conditions
- Cooling : Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating : Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
2. Due to our policy of innovation some specifications may be changed without notification
3. I.D : ' Internal Diameter '

Accessories

Model		ARNU07GCE*4	ARNU09GCE*4	ARNU12GCE*4	ARNU15GCE*4	ARNU18GCF*4	ARNU24GCF*4
Dry Contact	Simple (1 Contact Point with Case)	PDRYCB000					
	2 Contact Point	PDRYCB400					
	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300					
	Modbus Communication	PDRYCB500					
EEV Kit for MULTI V Indoor		PRGK024A0					
IR Receiver		PWLRVN000				-	

Wired Remote Controller							Wireless Remote Controller
Premium	Standard III		Standard II		Simple	Simple for Hotel	
							
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

INDOOR UNIT

COMPATIBILITY

No.	New Function Name (4th generation indoor)	Function Description	Required Controller		Remarks
			Wired Remote Controller	Centralized Controller	
1	Energy Monitoring (Accumulated Electric Energy Check)	Monitoring accumulated power consumption by Wired Remote Controller	•	•	* Neccesary to install the PDI (Power Distribution Indicator) and central controller * Combined with Multi V Water S outdoor unit, this function is not available.
		Monitoring accumulated power consumption by Central Control Device / PDI	-	•	* Neccesary to install the PDI (Power Distribution Indicator) * To make a report, central controller must be installed
2	2 Set Point	1) 2 set point control by Indoor and Central controller 2) Synchronization function with remote control (Synchronization Setting and Monitoring)	•	•	* Wired remote controller and central controller must be installed * Combined with Multi V Water S outdoor unit, this function is not available.
3	Occupied / Unoccupied Scheduling Function (Sub Func. Enable)	1) Synchronization according to occupied/unoccupied by Indoor and Central control 2) Synchronization icon with remote controller (Synchronization Monitoring)	• or	•	* Centralized control is able to when you combine only 4th generation indoor units (Use together with 2nd generation and 4th generation indoors, only wired remote controller is able to set this function as existing way) * Wired remote controller or central controller must be installed (Function can be activeated using just one control device.) * Combined with Multi V Water S outdoor unit, this function is not available.
4	Group Control	Group Control can use Additional function	•	-	* Check more details in PDB (Product Data Book) (Additional functions added using together same type of indoor units)
5	Test Run (Heating)	Test run mode can be operated in cooling mode and heating mode for easy service	•	-	
6	Model Information Monitoring	Product Type / Indoor Type / Indoor capacity information can be monitored by remote controller	•	-	
7	Indoor unit address checking	Wired remote controller can check indoor unit address information	•	-	
8	Refrigerant Leakage Detection	Function error sign display when refrigerant leakage occurred	•	-	* Central controller has been installed, CH230 error code can be recognized (Old/New Same) * Without Central Controller, it is able to recognize with wired remote controller (CH230) * Combined with Multi V Water S outdoor unit, this function is not available. * Accessory PRLDNVS0 must be separately ordered
9	Thermo On / Off range Setting (Cooling)	User can set cooling thermo on/off range with wired remote controller for prevention overcooling	•	-	* Thermo On / Off temperature setting (3 step)
10	Thermo On / Off range Setting (Heating)	User can set heating thermo on/off range with wired remote controller for prevention overheating. (4 Steps)	•	-	* Thermo On / Off temperature setting (4 step)
11	Static Pressure 11 Step Control (Only for Ceiling Concealed Duct Type)	Depends on the installation environment, 4th generation Ceiling Concealed Duct can control the static pressure by 11 steps for providing comfortable environment	•	-	* Only applied in Ceiling Concealed Duct
12	1 point External Input (On / Off control)	Indoor unit can control external devices without purchasing Dry contact as an accessory (All 4th generation indoors)	•	-	* Simple On/Off control by Dry Contact at Indoor [Example of Contact port by product type] * 2 Way Cassette : CN-CC Port (Wired remote controller installation function mode 41 is required) * 1 Way / 4 Way Cassette / Ceiling Concealed Duct / Wall Mounted Unit Console / FAU / Floor Standing (with case / without case) : CN-EXT Port
13	Filter Sign (Remaining Time)	The alarm activates when the filter needs to be cleaned, and the time remaining for cleaning is displayed on the screen.	•	-	
14	Auto restart function Disable / Enable	After the power failure compensation, stand by at OFF mode Restore the operation for the status before the power off	•	-	
15	Indoor Humidity display	Monitoring indoor humidity Wired Remote Controller	•	-	* Available only with Multi V 5
16	Comfort Cooling setting	set the outdoor unit Comfort cooling operation value	•	-	* Available only with Multi V 5
17	Smart Load Control setting	Change the outdoor unit's Smart Load Control stage value.	•	-	* Available only with Multi V 5
18	ODU Refrigerant Noise Reduction setting	set the outdoor unit's refrigerant noise reduction function	•	-	* Available only with Multi V 5
19	Low noise mode time setting	set the start and end time of the outdoor unit's low noise mode operation	•	-	* Available only with Multi V 5

Note : 1) No.1, 2, 3, 8 : Functions are available to use together with 4th generation Indoor units only. If used together 2nd generation indoor unit and 4th generation indoor unit functions will not be activate. Combined with MULTI V Water S outdoor unit this function is not available
2) No. 4, 5, 6, 7, 9, 10, 11, 12, 13, 14 : If used together 2nd generation indoor unit and 4th generation indoor unit these functions will be activate only in 4th generation indoor
3) 2nd generation indoor unit : Ceiling & Floor Convertible Unit, Ceiling Suspended Unit, HYDRO KIT (Low Temp. / High Temp.), ERV DX (with Humidifier, without Humidifier), AHU Communication Kit

Wired Remote Controller					Centralized Controller				
Premium (PREMTA000 PREMTA000A PREMTA000B)	Standard III (PREMTB100) (PREMTB10)	Standard II (PREMTBB01) (PREMTB001)	Simple		AC EZ (PQCSZ250S0)	AC EZ Touch (PACEZA000)	AC Smart IV (PACS4B000)	ACP IV (PACP4B000)	AC Manager IV (PACM4B000)
			Simple for Hotel (PQRCHCA0Q / QW)	Simple (PQRCVCL0Q / QW)					
•	•	•	X	X	X	•	•	•	•
					X	•	•	•	•
•	•	X	X	X	X	•	•	•	•
•	•	X	X	X	X	•	•	•	•
•	•	•	X	X					
•	•	•	X	X					
•	•	•	X	X					
• (4 step)	• (4 step)	• (3 step)	• (3 step)	• (3 step)					
•	•	•	•	•					
X	•	•	X	X					
•	•	•	X	X					
•	•	•	X	X					
X	•	X	X	X					
X	•	X	X	X					
X	•	X	X	X					
X	•	X	X	X					
X	•	X	X	X					

X : Not included this function in the Controller

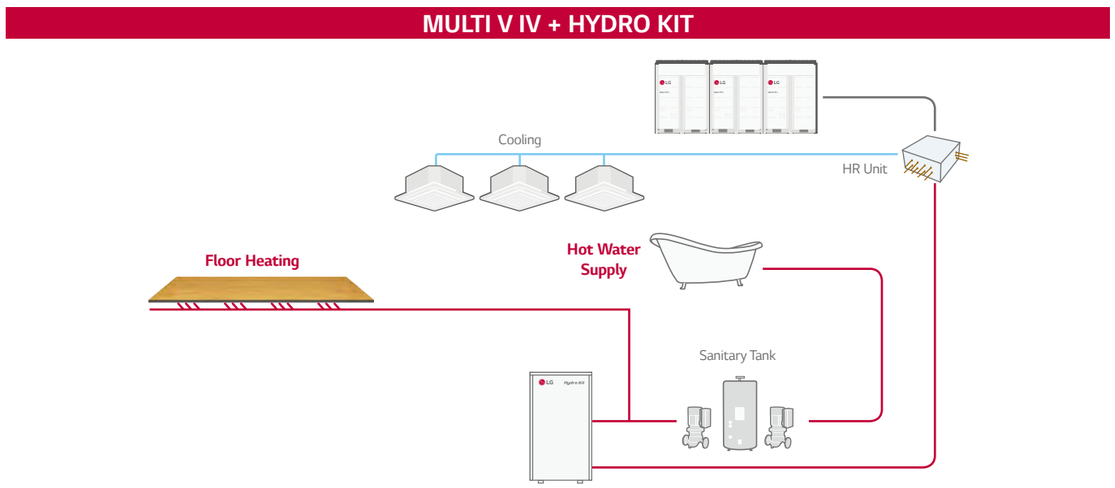
HOT WATER SOLUTION

HYDRO KIT

HYDRO KIT

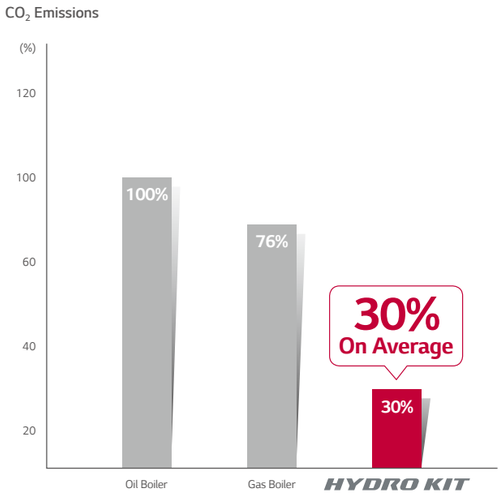
Easy Installation

Easy to install as it uses a compact and modular structure.



Eco-friendly Green Energy Solution

Green energy solution through the reduction of CO_2 emmisions.



Saving Cost through High Efficiency

Possible to install with equivalent levels of capital cost as a boiler system and minimise energy bills thanks to lower operation costs.

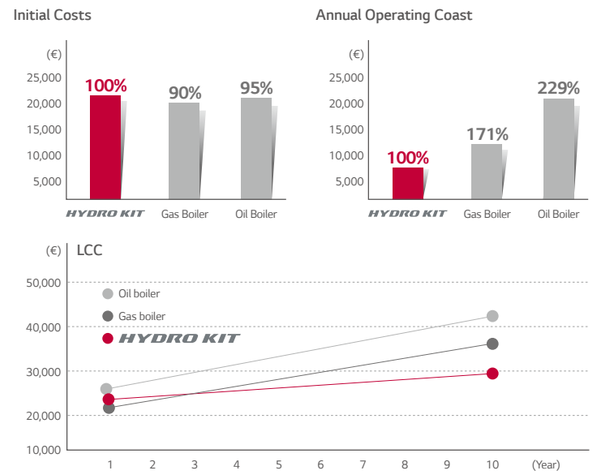
1st Proposal MULTI V IV HYDRO KIT
(Air Conditioning + Hot Water Supply + Floor Heating)

2nd Proposal MULTI V IV Air-Conditioning + Gas Boiler
(Hot Water Supply + Floor Heating)

3rd Proposal MULTI V IV Air-Conditioning + Oil Boiler
(Hot Water Supply + Floor Heating)

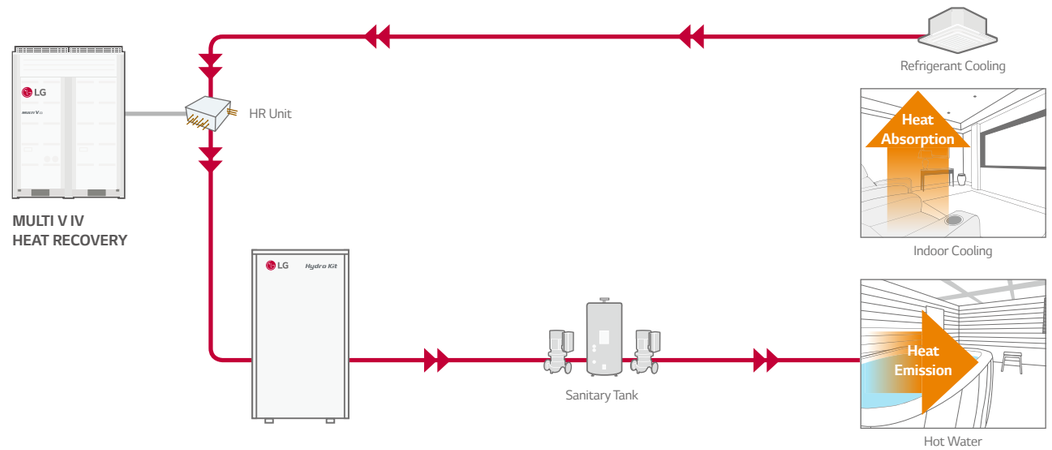
Analysis Conditions

- Building Type : Dormitory, Flats
- Cooling / Floor Heating / Sanitary Hot Water for 10 years
- Cooling : MULTI V IV Indoor Unit
- Floor Heating : Medium Temp. HYDRO KIT (1ea)
- Sanitary Hot Water : High Temp. HYDRO KIT (2ea), Sanitary Hot Water Tanks
- Electricity Cost : Average Cost in EU
- Gas Cost : Average Cost in EU
- Oil Cost : Average Cost in EU



Energy Saving through MULTI V IV Heat Recovery

Energy costs can be minimized by reusing the wasted heat from indoor units.



HOT WATER SOLUTION KEY FEATURES

HYDRO KIT

High Temperature Concept of HYDRO KIT

Provides high temperature up to 80°C with dual inverter cascade cycle, applicable for buildings that require large amount of hot water supply.

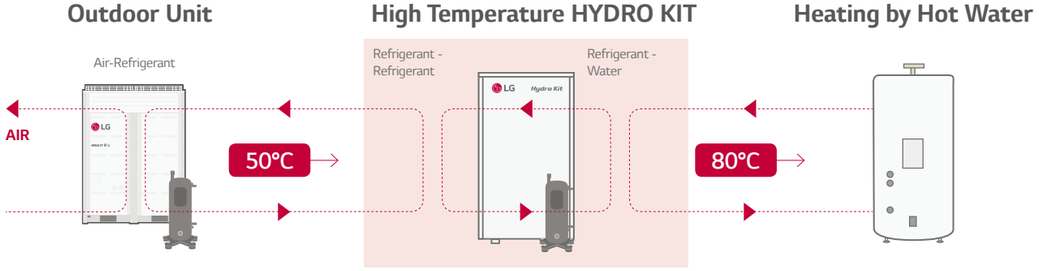
Dual Inverter Cascade Cycle Technology

- Max 55% improved capacity compared to mid-temp. of HYDRO KIT
  - Max 20% reduced heating operating cost compared to mid-temp. of HYDRO KIT
  - Cascade R410A to R134A BLDC compressor technology

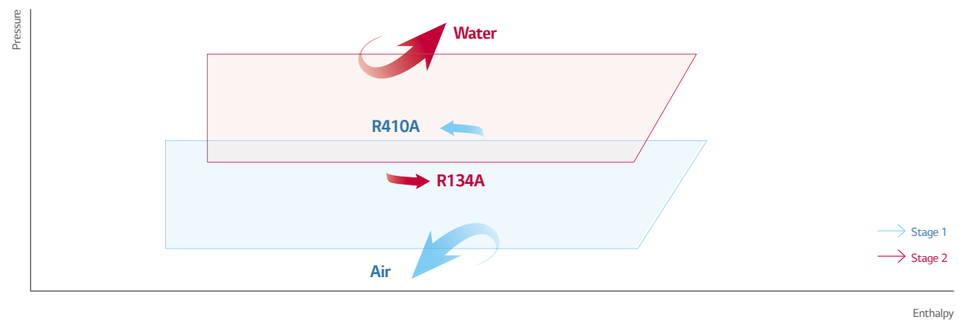
High Volume of Hot Water

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

High Temperature of HYDRO KIT Cycle Diagram



High Temperature Technology



Various Applications

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

Office

University / School

Hospital / Clinic

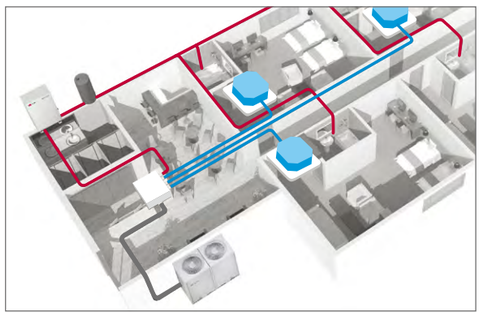
Shopping Mall / Restaurant

Hotel / Resort

Factory Facilities

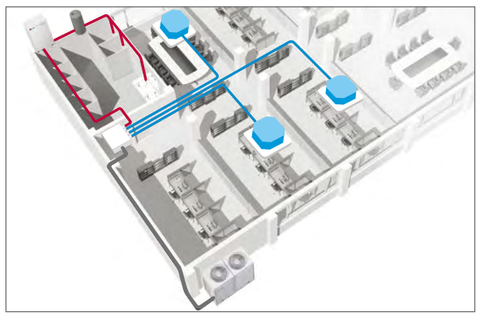
Hotel Application

It is possible to operating cooling and heating constantly at the same time during the summer, to provide hot water for bathrooms by using waste heat energy of indoor cooling from an indoor unit.



Office Application

Hot water can be supplied at all times in the office by cooling the HR unit to warm up the sanitary tank, using waste energy.



HOT WATER SOLUTION SPECIFICATION

HYDRO KIT

ARNH04GK2A4/ ARNH10GK2A4

Type				Low Temp.	Low Temp.
Model				ARNH04GK2A4	ARNH10GK2A4
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Capacity (Rated)	Cooling		kW	12.3	28.0
	Heating		kW	13.8	31.5
Power Input	Cooling	Nomal	kW	0.01	0.01
	Heating	Nomal	kW	0.01	0.01
Water Outlet Temperature	Cooling	Min	℃	5℃	5℃
	Heating	Max	℃	50℃	50℃
Casing				Painted Steel Plate	Painted Steel Plate
Dimensions	Body	W x H x D	mm	520 × 631 × 330	520 × 631 × 330
			inch	20-15 / 32 x 24-27 / 32 x13	20-15 / 32 x 24-27 / 32 x13
Net Weight			kg (lbs)	30.5 (67)	35.0 (77.2)
Heat Exchanger	Refrigerant to Water	Type		Brazed Plate HEX	Brazed Plate HEX
		Rated Water Flow	L/min	39.6	92.0
		Head Loss	kPa	41.0	69.0
	Refrigerant to Refrigerant	Type		-	-
Compressor		Type		-	-
Piping Connections	Water Side	Inlet	inch	Male PT 1	Male PT 1
		Outlet	inch	Male PT 1	Male PT 1
	Refrigerant Side	Liquid Side	mm (inch)	9.52 (3/8)	9.52 (3/8)
		Gas Side	mm (inch)	15.88 (5/8)	22.2 (7/8)
Drain Piping Connection			mm (inch)	Male PT 1	Male PT 1
Sound Pressure Level	Cooling		dB (A)	26	26
	Heating		dB (A)	26	26
Refrigerant	Refrigerant to Refrigerant	Refrigerant Type		-	-
		Control		-	-
	Refrigerant to Water	Refrigerant Type		R410A	R410A
		Precharged Amount	kg (lbs)	-	-
		Control		EEV	EEV
Operation Range	Conntected to Heat Pump	Cooling	℃ (DB)	10℃ ~ 43℃	10℃ ~ 43℃
		Heating	℃ (DB)	-20℃ ~ 35℃	-20℃ ~ 35℃
	Conntected to Heat Recovery	Cooling	℃ (DB)	10℃ ~ 43℃	10℃ ~ 43℃
		Heating	℃ (DB)	-20℃ ~ 43℃	-20℃ ~ 43℃
Combination Ratio	Only Hydrokit	Min ~ Max	%	50 ~ 100	50 ~ 100
	Hydrokit + Standard IDUs	Min ~ Max	%	50 ~ 130	50 ~ 130

*** This product contains Fluorinated Greenhouse Gases. (R410A)**

Note : 1. Capacities are based on the following conditions :

- Cooling : Indoor 27℃ (80.6℉) DB / 19° C (66.2℉) WB, Outdoor 35℃ (95℉) DB / 24℃ (75.2℉) WB, Water Inlet 23℃ (73.4℉) / Outlet 18℃ (64.4℉)

- Heating : Indoor 20℃ (68℉) DB / 15℃ (59℉) WB, Outdoor 7℃ (44.6℉) DB / 6℃ (42.8℉) WB, Water Inlet 30℃ (86℉) / Outlet 35℃ (95℉)

2. Piping Length : Interconnected Pipe Length = 7.5m

3. Difference Limit of Elevation (Outdoor ~ Indoor Unit) is Zero.

4. MULTI V S 4HP (ARUN040GSS0, ARUNN040LSS0) cannot be connected to Hydro Kit.

5. MULTI V Water S cannot be connected to Hydro Kit.

6. Anti freezing liquid should be added under 10℃ (outdoor temp.) during cooling mode.

ARNH04GK3A4/ ARNH08GK3A4

Type				High Temp.	High Temp.
Model				ARNH04GK3A4	ARNH08GK3A4
Power Supply			Ø / V / Hz	1 / 220~240 / 50 1 / 220 / 60	1 / 220~240 / 50 1 / 220 / 60
Capacity (Rated)	Cooling		kW	-	-
	Heating		kW	13.8	25.2
Power Input	Cooling	Nomal	kW	-	-
	Heating	Nomal	kW	2.3	5.0
Water Outlet Temperature	Cooling	Min	℃	-	-
	Heating	Max	℃	80℃	80℃
Casing				Painted Steel Plate	Painted Steel Plate
Dimensions	Body	W x H x D	mm	520 × 1,080 × 330	520 × 1,080 × 330
			inch	20-15 / 32 x 42-17 / 32 x13	20-15 / 32 x 42-17 / 32 x13
Net Weight			kg (lbs)	88.0 (194.0)	94.0 (207.2)
Heat Exchanger	Refrigerant to Water	Type		Brazed Plate HEX	Brazed Plate HEX
		Rated Water Flow	L/min	19.8	36.0
		Head Loss	kPa	5.0	20.0
	Refrigerant to Refrigerant	Type		Brazed Plate HEX	Brazed Plate HEX
Compressor		Type		Twin Rotary Inverter	Twin Rotary Inverter
Piping Connections	Water Side	Inlet	inch	Male PT 1	Male PT 1
		Outlet	inch	Male PT 1	Male PT 1
	Refrigerant Side	Liquid Side	mm (inch)	9.52 (3/8)	9.52 (3/8)
		Gas Side	mm (inch)	15.88 (5/8)	19.05 (3/4)
Drain Piping Connection			mm (inch)	Male PT 1	Male PT 1
Sound Pressure Level	Cooling		dB (A)	-	-
	Heating		dB (A)	43	43
Refrigerant	Refrigerant to Refrigerant	Refrigerant Type		R410A	R410A
		Control		EEV	EEV
	Refrigerant to Water	Refrigerant Type		R134A	R134A
		Precharged Amount	kg (lbs)	2.3(5.1)	3.0(6.6)
		Control		EEV	EEV
Operation Range	Conntected to Heat Pump	Cooling	℃ (DB)	-	-
		Heating	℃ (DB)	-20℃ ~ 35℃	-20℃ ~ 35℃
	Conntected to Heat Recovery	Cooling	℃ (DB)	-	-
		Heating	℃ (DB)	-20℃ ~ 43℃	-20℃ ~ 43℃
Combination Ratio	Only Hydrokit	Min ~ Max	%	50 ~ 100	50 ~ 100
	Hydrokit + Standard IDUs	Min ~ Max	%	50 ~ 130	50 ~ 130

*** This product contains Fluorinated Greenhouse Gases. (R410A, R134A)**

Note : 1. Capacities are based on the following conditions :

- Heating : Indoor 20℃ (68℉) DB / 15℃ (59℉) WB, Outdoor 7℃ (44.6℉) DB / 6℃ (42.8℉) WB, Water Inlet 55℃ (131℉) / Outlet 65℃ (149℉)

2. Piping Length : Interconnected Pipe Length = 7.5m

3. Difference Limit of Elevation (Outdoor ~ Indoor Unit) is Zero.

4. MULTI V S 4HP (ARUN040GSS0, ARUNN040LSS0) cannot be connected to Hydro Kit.

5. MULTI V Water S cannot be connected to Hydro Kit.

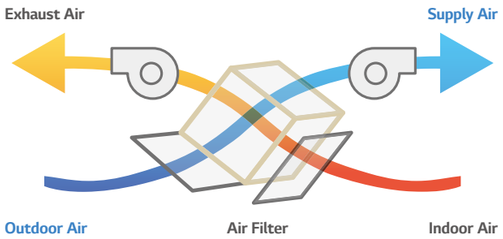
VENTILATION SOLUTION

ERV

ERV

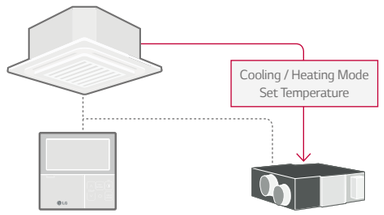
High Efficiency Heat Exchanger

Efficiency and comfort is ensured through 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.



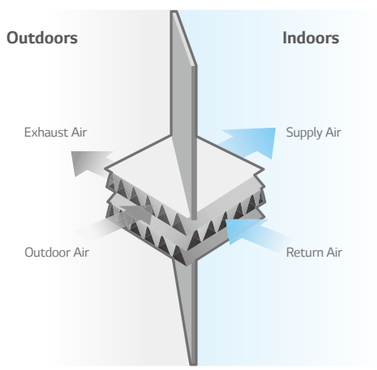
Interlocking with Air Conditioning System

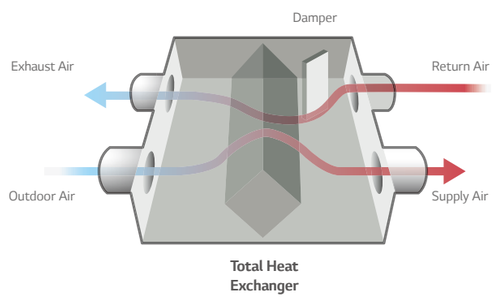
- LG ERV can be interlocked with air conditioners and controlled individually.
- This function can be operated when the system is connected with a remote control.



Compulsory Exhausting System

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

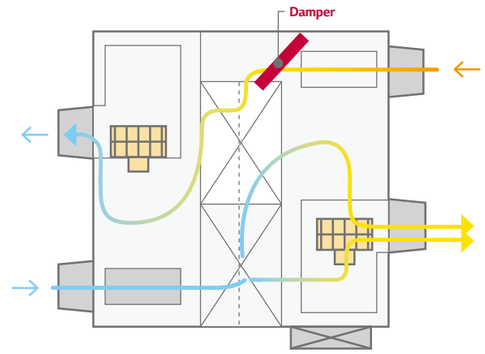




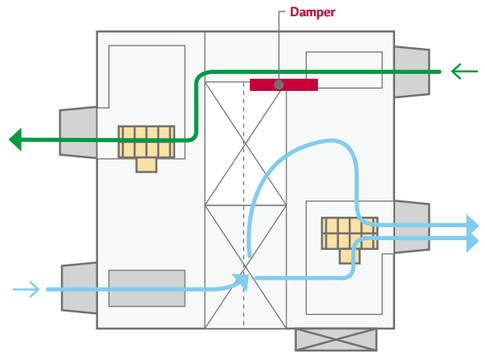
Bypass Ventilation

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

Enthalpy Heat Exchange Mode (Summer / Winter)



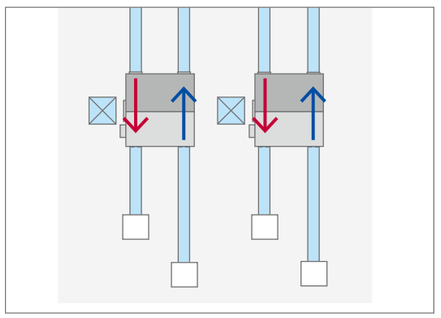
Bypass Mode (Seasonal Change)



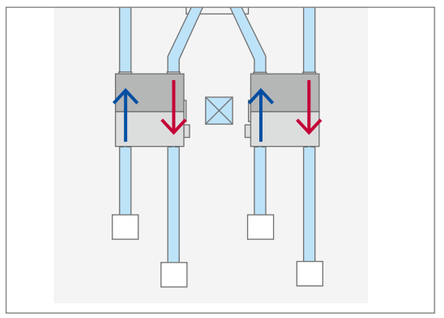
Flexibility of Installation

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

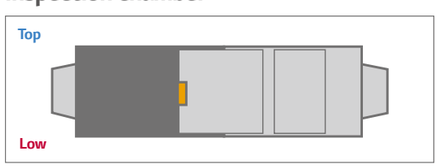
Normal installation of 2 units



Reverse installation of 1 unit (Left unit)



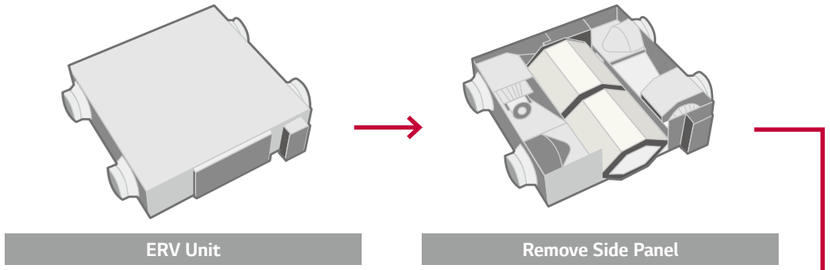
Inspection chamber



ERV

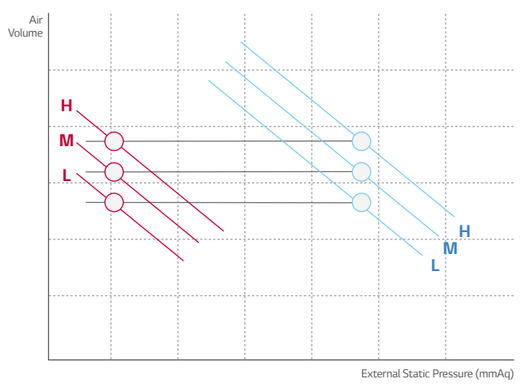
Easy Cleaning and Filter Change

It is easy and convenient to change and clean the filter.



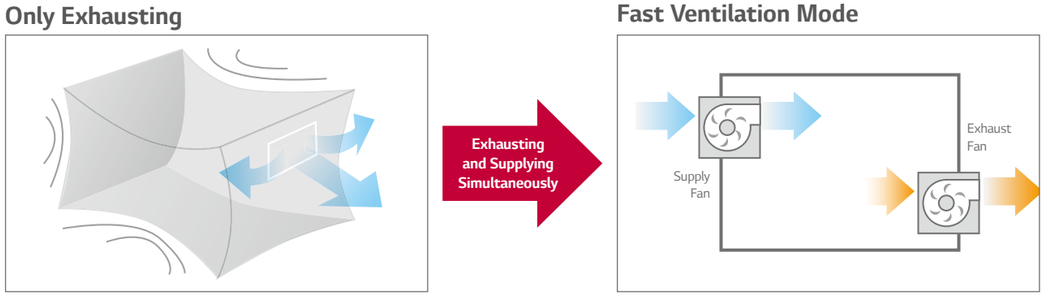
External Static Pressure Control

The high static pressure fan can control the air volume depending on the length of the duct. It is also easy to control the pressure level by using the remote controller for a more flexible duct installation and easier testing.



Fast Ventilation Mode

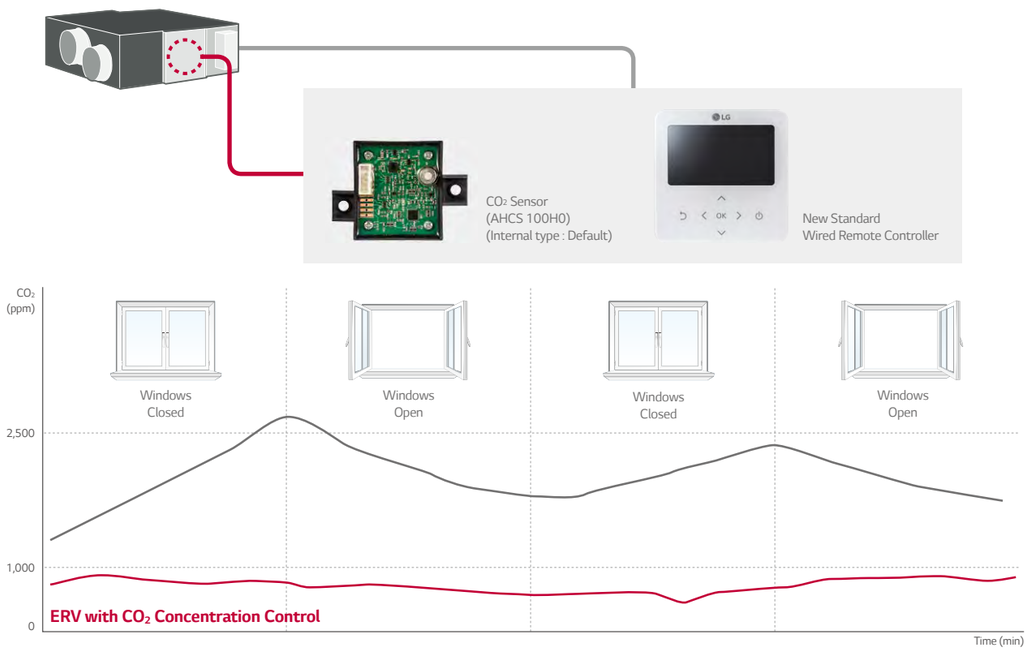
Fast ventilation mode prevents the spread of contaminants under negative indoor pressure, and makes indoor air fresh and comfortable quickly.



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

CO_2 Concentration Control

Using CO_2 sensor, LG ERV controls exhaust air flow automatically to keep indoor air fresh under settled CO_2 concentration.



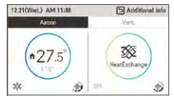
ERV

New Easy Controller

New wired remote controller is easy for usage.

Easy!

- Navigation buttons, easy to use.
- Easy installation setting



Convenient!

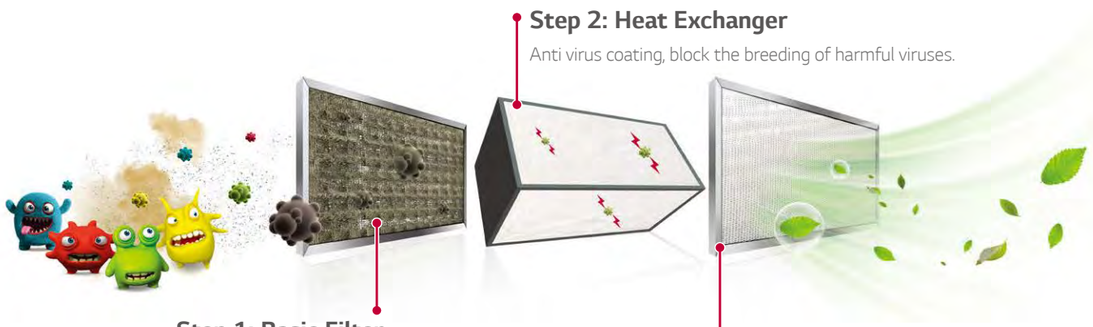
- **Flexible display**
  - Dual display with air conditioner.
  - Zoom selected directory to increase legibility.

Visible!

- Indoor CO_2 level
- Alarm for filter change / Remained time to change filters

Air Purifying System (3 Steps)

LG ERV can effectively remove the various harmful substances, such as micro dust and viruses.
Possible selection of the high efficiency filter(F7) for micro dust removed.



Step 2: Heat Exchanger

Anti virus coating, block the breeding of harmful viruses.

Step 1: Basic Filter

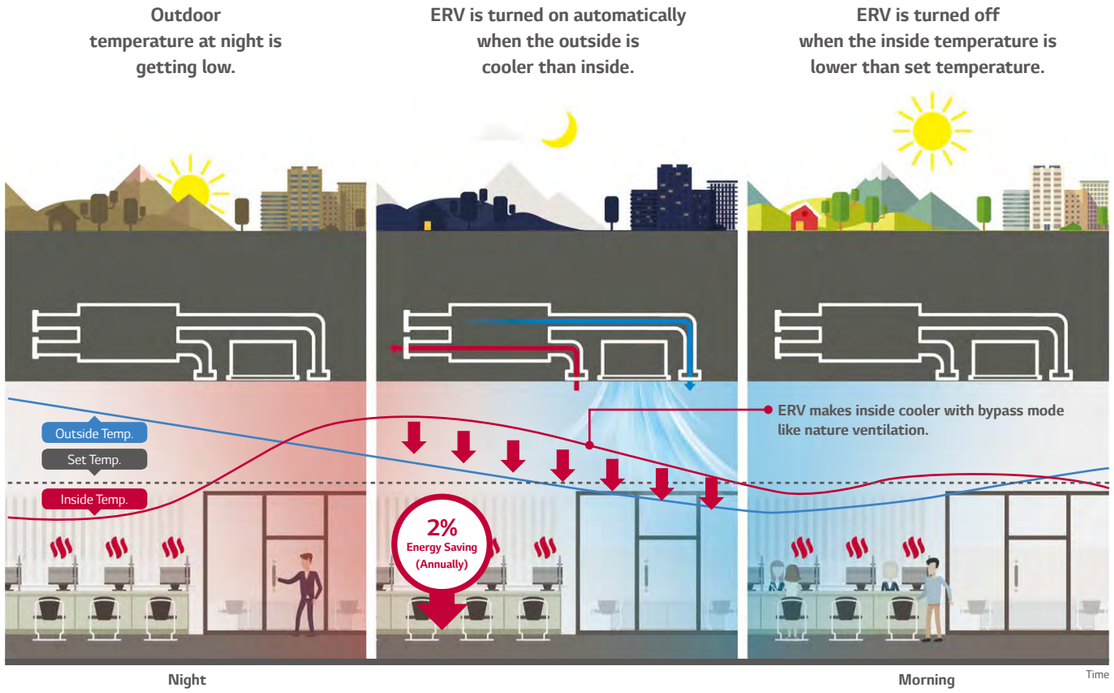
Installed front and behind of heat exchanger

Step 3: High Efficiency Filter (F7)

F7 filter blocks 80 ~ 90% of dust sized 0.4μm. (EN 779 : 2012)
Installed in front of heat exchanger. (option)

Night Time Cooling

Discharge the indoor heat in the summer night and supply cool outdoor air to indoors. so it can save energy.



* This function is operated with 'Night Time Free Cooling' on remote controller. (with MULTI V only)
** Energy saving ratio Can vary with condition.
*** Available only with Standard III

- Test Condition
  - Office (49,000 ft²) / Occupancy : 30 / Area : London, UK
  - ERV (1 000 CMH) + MULTI V 4 (12 HP) Unit Combination
  - Other conditions are subject to BREEAM.
    (Building Research Establishment's Environmental Assessment Method)

ERV

LZ-H025GBA4 / LZ-H035GBA5 / LZ-H050GBA5

Model				LZ-H025GBA4	LZ-H035GBA5	LZ-H050GBA5
Nominal Capacity			CMH (CFM)	250 (147)	350 (206)	500 (294)
Power Supply			Ø, V, Hz	1, 220 - 240, 50 - 60		
ERV mode	Step		-	SUPER-HIGH / HIGH / LOW		
	Current	SH / H / L	Amps	0.70 / 0.60 / 0.42	1.10 / 0.95 / 0.60	1.92 / 1.58 / 0.79
	Power Input	SH / H / L	W	97 / 78 / 52	180 / 163 / 88	240 / 220 / 90
	Air Flow	SH / H / L	CMH (CFM)	250 / 250 / 150 (147 / 147 / 88)	350 / 350 / 210 (206 / 206 / 123)	500 / 500 / 320 (294 / 294 / 124)
	External Static Pressure	SH / H / L	Pa (inWTR)	100 / 70 / 50 (0.40 / 0.28 / 0.20)	150 / 130 / 100 (0.60 / 0.52 / 0.40)	150 / 100 / 50 (0.60 / 0.40 / 0.20)
	Temperature Exchange Efficiency	SH / H / L	%	80 / 80 / 83	75 / 75 / 77	78 / 78 / 79
	Enthalpy Exchange Efficiency	Heating (SH / H / L)	%	70 / 70 / 72	68 / 68 / 70	73 / 73 / 75
		Cooling (SH / H / L)	%	66 / 66 / 68	63 / 63 / 65	66 / 66 / 69
	Noise Level (Sound Level, 1.5m)	SH / H / L	dB(A)	29 / 28 / 24	35 / 32 / 26	37 / 36 / 28
Bypass mode	Step		-	SUPER-HIGH / HIGH / LOW	SUPER-HIGH / HIGH / LOW	
	Current	SH / H / L	Amps	0.70 / 0.60 / 0.42	1.05 / 0.90 / 0.50	1.65 / 1.56 / 0.80
	Power Input	SH / H / L	W	97 / 78 / 52	150 / 125 / 60	247 / 230 / 95
	Air Flow	SH / H / L	CMH (CFM)	250 / 250 / 150 (147 / 147 / 88)	350 / 350 / 210 (206 / 206 / 123)	500 / 500 / 320 (294 / 294 / 124)
	External Static Pressure	SH / H / L	Pa (inWTR)	100 / 70 / 50 (0.40 / 0.28 / 0.20)	150 / 130 / 100 (0.60 / 0.52 / 0.40)	150 / 100 / 50 (0.60 / 0.40 / 0.20)
	Noise Level (Sound Level, 1.5m)	SH / H / L	dB(A)	29 / 29 / 25	35 / 32 / 26	37 / 36 / 28
Heat Exchanger		Type	-	Air to Air cross flow heat exchange	Air to Air cross flow heat exchange	
Net Weight			kg	44	44	
Dimension		W x H x D	mm	1,014 x 273 x 988	1,014 x 273 x 988	1,014 x 273 x 988
Duct work*		Qty	EA	4	4	
		Size (Ø)	mm	Ø200	Ø200	Ø200
Supply Air Fan		Qty	EA	1	1	
		Type	-	Direct-Drive (Sirocco Fan)	Direct-Drive (Sirocco Fan)	Direct-Drive (Sirocco Fan)
Exhaust Air Fan		Qty	EA	1	1	
		Type	-	Direct-Drive (Sirocco Fan)	Direct-Drive (Sirocco Fan)	Direct-Drive (Sirocco Fan)
Filters (Default)		Qty	EA	2	2	
		Type	-	Cleanable fibrous fleeces	Cleanable fibrous fleeces	Cleanable fibrous fleeces
		Size (W x H x D)	mm	855 x 10 x 160	855 x 6 x 230	
Filters (Optional)		Model	-	AHFT035H0		AHFT050H0
		Qty	EA	2		2
		Type	-	F7		F7
		Size (W x H x D)	mm	423.5 x 132 x 25		425 x 194 x 25
Dry Contact		Simple (1 Contact point with case)		PDRYCB000		PDRYCB000

Note : 1. ERV mode : Total Heat Recovery Ventilation mode
2. * : Refer to dimensional drawings.
3. 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.
- The sound level at the air discharge port is about 8 dB(A) higher than the unit's operating sound.
4. Temperature and Enthalpy Exchange Efficiency at cooling Indoor Temperature : 26.5°C DB, 64.5% RH, Outdoor Temperature : 34.5°C DB, 75% RH
5. Temperature and Enthalpy Exchange Efficiency at heating Indoor Temperature : 20.5°C DB, 59.5% RH, Outdoor Temperature : 5°C DB, 65% RH
6. Temperature Exchange efficiency is tested at heating condition.
7. F7 Filter is 2 pieces in 1 filter package

Premium	Standard III		Standard II		CO_2 Sensor
					
PREMTA000 PREMTA000A PREMTA000B	PREMTB100	PREMTB10	PREMTBB01	PREMTB001	AHCS100H0 (Internal Type : Default)

LZ-H080GBA5 / LZ-H100GBA5 LZ-H150GBA5 / LZ-H200GBA5

Model				LZ-H080GBA5	LZ-H100GBA5	LZ-H150GBA5	LZ-H200GBA5
Nominal Capacity			CMH (CFM)	800 (471)	1,000 (589)	1,500 (883)	2,000 (1,177)
Power Supply			Ø, V, Hz	1, 220 - 240, 50 - 60			
ERV mode	Step		-	SUPER-HIGH / HIGH / LOW			
	Current	SH / H / L	Amps	2.13 / 1.75 / 1.00	2.92 / 2.38 / 1.40	4.26 / 3.50 / 2.00	5.92 / 4.76 / 2.80
	Power Input	SH / H / L	W	328 / 266 / 144	463 / 370 / 208	660 / 530 / 290	926 / 740 / 420
	Air Flow	SH / H / L	CMH (CFM)	800 / 800/ 660 (471 / 471 / 388)	1,000 / 1,000 / 800 (589 / 589 / 471)	1,500 / 1,500 / 1,200 (883 / 883 / 706)	2,000 / 2,000 / 1,600 (1,177 / 1,177 / 942)
	External Static Pressure	SH / H / L	Pa (inWTR)	160 / 100 / 50 (0.64 / 0.40 / 0.20)	160 / 100 / 50 (0.64 / 0.40 / 0.20)	160 / 100 / 50 (0.64 / 0.40 / 0.20)	160 / 100 / 50 (0.64 / 0.40 / 0.20)
	Temperature Exchange Efficiency	SH / H / L	%	82 / 82 / 83	80 / 80 / 81	82 / 82 / 83	80 / 80 / 81
	Enthalpy Exchange Efficiency	Heating (SH / H / L)	%	73 / 73 / 76	71 / 71/ 73	73 / 73 / 76	71 / 71/ 73
		Cooling (SH / H / L)	%	66 / 66 / 70	64 / 64 / 67	66 / 66 / 70	64 / 64 / 67
	Noise Level (Sound Level, 1.5m)	SH / H / L	dB(A)	40 / 36 / 32	40 / 37 / 33	43 / 39 / 35	43 / 40 / 36
Bypass mode	Step		-	SUPER-HIGH / HIGH / LOW		SUPER-HIGH / HIGH / LOW	
	Current	SH / H / L	Amps	2.13 / 1.75 / 1.00	2.92 / 2.38 / 1.40	4.26 / 3.50 / 2.00	5.92 / 4.76 / 2.80
	Power Input	SH / H / L	W	328 / 266 / 144	463 / 370 / 208	660 / 530 / 290	926 / 740 / 420
	Air Flow	SH / H / L	CMH (CFM)	800 / 800/ 660 (471 / 471 / 388)	1,000 / 1,000 / 800 (589 / 589 / 471)	1,500 / 1,500 / 1,200 (883 / 883 / 706)	2,000 / 2,000 / 1,600 (1,177 / 1,177 / 942)
	External Static Pressure	SH / H / L	Pa (inWTR)	160 / 100 / 50 (0.64 / 0.40 / 0.20)	160 / 100 / 50 (0.64 / 0.40 / 0.20)	160 / 100 / 50 (0.64 / 0.40 / 0.20)	160 / 100 / 50 (0.64 / 0.40 / 0.20)
	Noise Level (Sound Level, 1.5m)	SH / H / L	dB(A)	41 / 37 / 33	41 / 38 / 34	44 / 40 / 36	44 / 41 / 37
Heat Exchanger		Type	-	Air to Air cross flow heat exchange		Air to Air cross flow heat exchange	
Net Weight			kg	70		158	
Dimension		W x H x D	mm	1,101 x 405 x 1,230		1,353 x 815 x 1,230	
Duct work*		Qty	EA	4		4 + 2	
		Size (Ø)	mm	Ø250		Ø250 + Ø350	
Supply Air Fan		Qty	EA	1		2	
		Type	-	Direct-Drive Sirocco		Direct-Drive Sirocco	
Exhaust Air Fan		Qty	EA	1		2	
		Type	-	Direct-Drive Sirocco		Direct-Drive Sirocco	
Filters (Default)		Qty	EA	2		4	
		Type	-	Cleanable fibrous fleeces		Cleanable fibrous fleeces	
		Size (W x H x D)	mm	1,148 x 6 x 245		1,148 x 6 x 245	
Filters (Optional)		Model	-	AHFT100H1		AHFT100H1	
		Qty	EA	2		4	
		Type	-	F7		F7	
		Size (W x H x D)	mm	520 x 192 x 25		520 x 192 x 25	
Dry Contact		Simple (1 Contact point with case)		PDRYCB000		PDRYCB000	

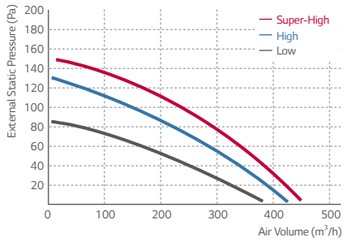
Note : 1. ERV mode : Total Heat Recovery Ventilation mode
2. * : Refer to dimensional drawings.
3. Noise level : - The operating conditions are assumed to be standard
- Sound measured at 1.5m below the center the body.
- Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed.
- The sound level at the air discharge port is about 8 dB(A) higher than the unit's operating sound.
4. Temperature and Enthalpy Exchange Efficiency at cooling Indoor Temperature : 26.5°C DB, 64.5% RH, Outdoor Temperature : 34.5°C DB, 75% RH
5. Temperature and Enthalpy Exchange Efficiency at heating Indoor Temperature : 20.5°C DB, 59.5% RH, Outdoor Temperature : 5°C DB, 65% RH
6. Temperature Exchange efficiency is tested at heating condition.
7. F7 Filter is 2 pieces in 1 filter package

Premium	Standard III		Standard II		CO_2 Sensor
					
PREMTA000 PREMTA000A PREMTA000B	PREMTB100	PREMTB10	PREMTBB01	PREMTB001	AHCS100H0 (Internal Type : Default)

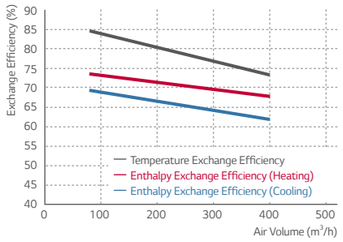
ERV

LZ-H025GBA4

Ventilation

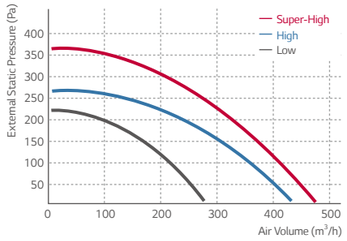


Efficiency

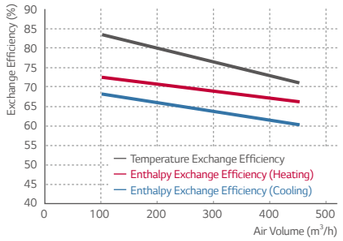


LZ-H035GBA5

Ventilation

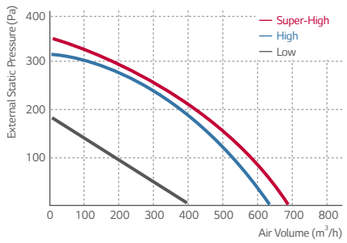


Efficiency

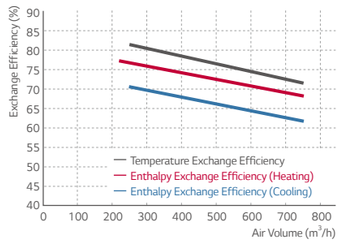


LZ-H050GBA5

Ventilation

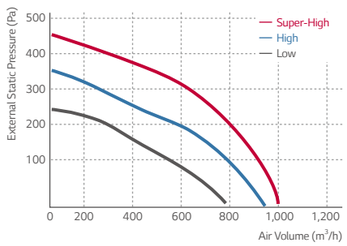


Efficiency

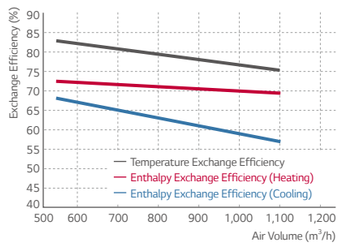


LZ-H080GBA5

Ventilation

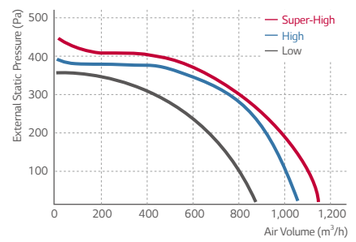


Efficiency

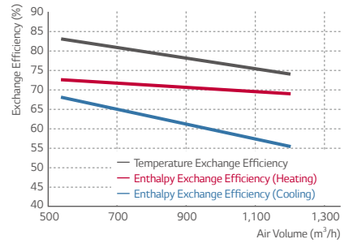


LZ-H100GBA5

Ventilation

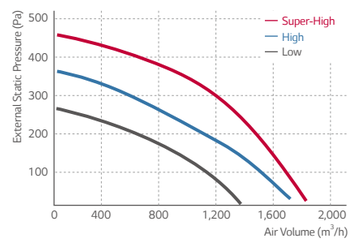


Efficiency

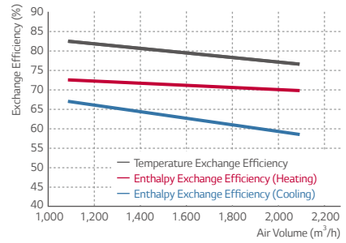


LZ-H150GBA5

Ventilation

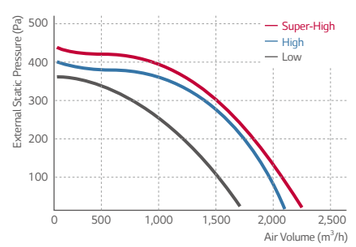


Efficiency

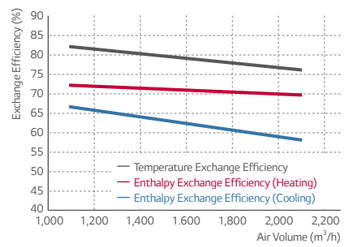


LZ-H200GBA5

Ventilation



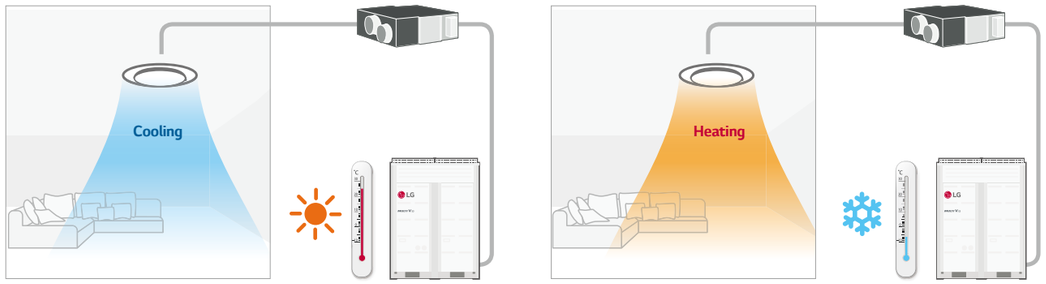
Efficiency



ERV WITH DX COIL

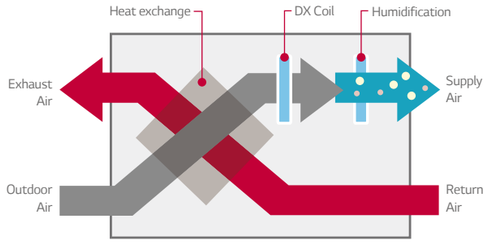
Providing Cool & Warm Fresh Air

During the summer, ERV DX can transform outdoor warm air into cool air for indoors, and it can prevent cold drafts during the winter by supplying warm air.



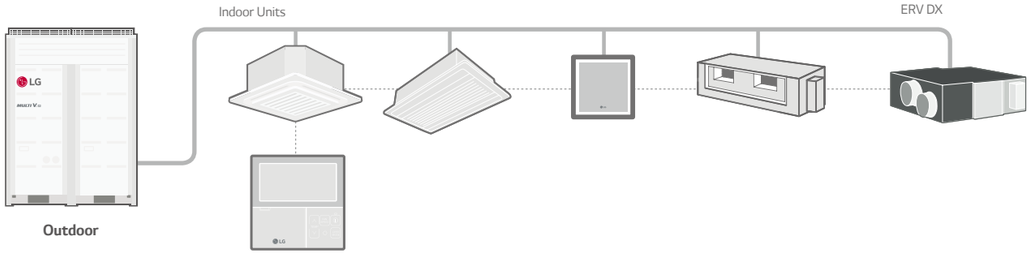
Total Air Conditioning Solution

LG ERV DX can be used as a Total Air Conditioning Solution. It can control condition of incoming air with the DX coil and humidifier for making comfortable indoor air. In the summer, LG ERV DX controls the air indoors by cooling and dehumidifying incoming air. In winter, it can provide warm air by heating and humidifying the incoming air.



Interlocking with MULTI V

LG ERV DX can be interlocked with MULTI V.
It can be controlled individually by a wired remote controller connected to MULTI V indoor units.



ERV WITH DX COIL

LZ-H050GXH4 / LZ-H080GXH4 / LZ-H100GXH4
LZ-H050GXN4 / LZ-H080GXN4 / LZ-H100GXN4

Model			LZ-H050GXH4	LZ-H080GXH4	LZ-H100GXH4	LZ-H050GXN4	LZ-H080GXN4	LZ-H100GXN4
Fresh Air Conditioning Load	Cooling [1]	kW	4.93	7.46	9.12	4.93	7.46	9.12
	Heating [2]	kW	6.73	9.80	11.72	6.73	9.80	11.72
Temperature Exchange Efficiency	SH / H / L	%	86 / 86 / 87	80 / 80 / 81	76 / 76 / 78	86 / 86 / 87	80 / 80 / 81	76 / 76 / 78
Enthalpy Exchange Efficiency	Cooling (SH / H / L)	%	61 / 61 / 63	50 / 50 / 53	45 / 45 / 50	61 / 61 / 63	50 / 50 / 53	45 / 45 / 50
	Heating (SH / H / L)	%	76 / 76 / 77	67 / 67 / 69	64 / 64 / 66	76 / 76 / 77	67 / 67 / 69	64 / 64 / 66
Air Flow Rate	Heat Exchange Mode (SH / H / L)	CMH	500 / 500 / 440	800 / 800 / 640	1,000 / 1,000 / 820	500 / 500 / 440	800 / 800 / 640	1,000 / 1,000 / 820
	Bypass Mode (SH / H / L)	CMH	500 / 500 / 440	800 / 800 / 640	1,000 / 1,000 / 820	500 / 500 / 440	800 / 800 / 640	1,000 / 1,000 / 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 [3]	kg/h	2.70	4.00	5.40	-		
	Pressure Feed Water	Mpa	0.02 ~ 0.49			-		
Sound Pressure	Heat Exchange Mode (SH / H / L)	dB (A)	38 / 36 / 33	39 / 37 / 34	40 / 38 / 35	39 / 37 / 35	41 / 38 / 36	41 / 39 / 36
	Bypass Mode (SH / H / L)	dB (A)	39 / 37 / 34	40 / 38 / 35	40 / 38 / 35	39 / 37 / 35	41 / 38 / 36	41 / 39 / 36
Refrigerant			R410A					
Power Supply		Ø / V / Hz	1 / 220~240 / 50, 60					
Power Input (Nominal)	Heat Exchange Mode (SH / H / L)	kW	0.25 / 0.20 / 0.15	0.42 / 0.35 / 0.25	0.48 / 0.42 / 0.27	0.25 / 0.20 / 0.15	0.42 / 0.35 / 0.25	0.48 / 0.42 / 0.27
	Bypass Mode (SH / H / L)	kW	0.25 / 0.20 / 0.15	0.42 / 0.35 / 0.25	0.48 / 0.42 / 0.27	0.25 / 0.20 / 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 / 1.0	2.5 / 2.0 / 1.5	3.6 / 3.2 / 2.3	1.5 / 1.3 / 1.0	2.5 / 2.0 / 1.5	3.6 / 3.2 / 2.3
	Bypass Mode (SH / H / L)	A	1.5 / 1.3 / 1.0	2.5 / 2.0 / 1.5	3.6 / 3.2 / 2.3	1.5 / 1.3 / 1.0	2.5 / 2.0 / 1.5	3.6 / 3.2 / 2.3
Dimensions	W x H x D	mm	1,667 x 365 x 1,140			1,667 x 365 x 1,140		
Net Weight		kg	105			98		
Piping Connection	Liquid	mm	Ø6.35			Ø6.35		
	Gas	mm	Ø12.7			Ø12.7		
	Water	mm	Ø6.35			-		
	Drain (Outer Diameter)	mm	Ø25.4			Ø25.4		
Connection Duct Diameter		mm	Ø250			Ø250		
Remote Controller			Refer to the below Wired Remote Controller table					
Dry Contact	Simple (1 Contact Point with Case)		PDRYCB000					
	2 Contact Point		PDRYCB400					
	For Thermostat (On-Off / Mode / Fan Speed)		PDRYCB300					
	Modbus Communication		PDRYCB500					
Filters (Optional)	Mode	-	AHFT100H0					
	Qty	EA	2					
	Type	-	F7					
	Size (W x H x D)	mm	520 x 192 x 25					

Note :
1) Cooling Capacity Test condition - Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB
2) Heating Capacity Test condition - Indoor temperature : 20°C DB / Outdoor temperature : 7°C DB, 6°C WB
3) Humidifying capacity is based on the following conditions - Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB
* Cooling and heating capacities are based on the following conditions. - Fan is based on High and Super-high. The figures in the parenthesis indicate the heat reclaimed from the heat recovery ventilator.
* The operating sound measured at the point 1.5 m below the center of the unit is converted to that measured at an anechoic chamber built in accordance with the KS B 6879 conditions.
* The actual operating sound varies depending on the surrounding conditions (near running unit's sound, reflected sound and so on) and is normally higher than this value.
* Air flow rate can be changed over to low mode or high mode.
* The specifications, designs and information here are subject to change without notice.
* This product contains Fluorinated Greenhouse Gases. (R410A)
4) F7 Filter is 2 pieces in 1 filter package

Premium	Standard III		Standard II		CO_2 Sensor
					
PREMTA000 PREMTA000A PREMTA000B	PREMTB100	PREMTBB10	PREMTBB01	PREMTB001	AHCS100H0 (Internal Type : Default)

CO_2 SENSOR

CO_2 sensor in ventilation system.

PES-C0RV0

Features

• Specification

- Applied Model : ERV, ERV DX
- Function
  - Supply Vottage : DV 12V ± 5%
  - Output : 0 ~ 5V
    (Linear output, 1 ~ 2,000ppm CO_2)
  - Accuracy : 30ppm ± 5% of reading

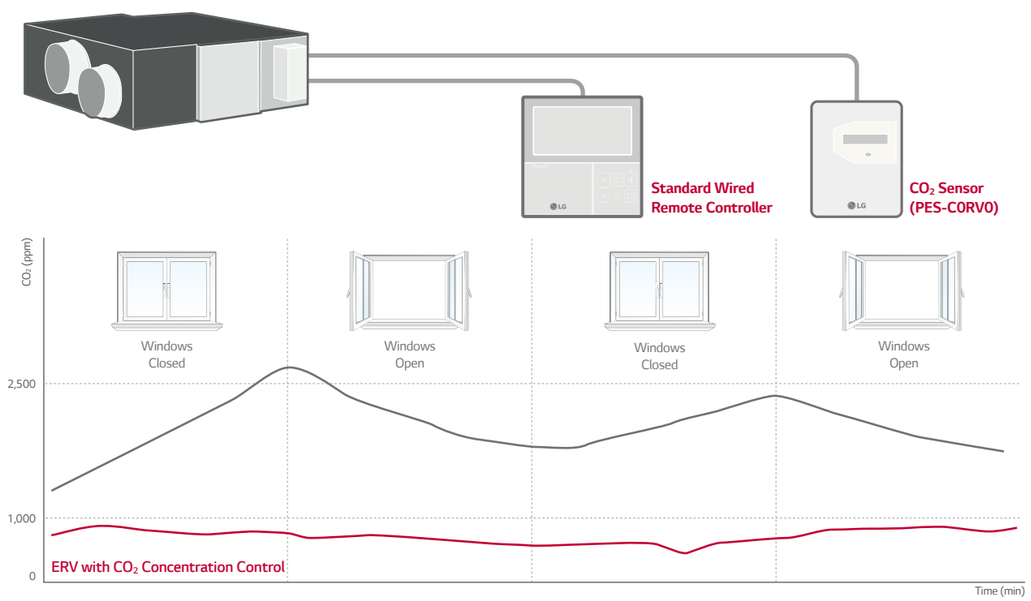
• Description

The product is especially designed to detect CO_2 concentration in ERV system.

• Operation Table

CO_2 Sensor Reading	ERV Fan Operation
<500ppm	Off
500 ~ 700ppm	Low Speed
700 ~ 900ppm	High Speed
>900ppm	Super High Speed

Installation Scene



AHCS100H0

Features

• Specification

- Applied Model : ERV (Default), ERV DX (Optional)
- Supply voltage : DV12V ± 5%
- Output : 0.6 ~ 4.4V (Linear output, 240 ~ 1,760 ppm CO_2)
- Accuracy : ± 10% (2 days after installation)

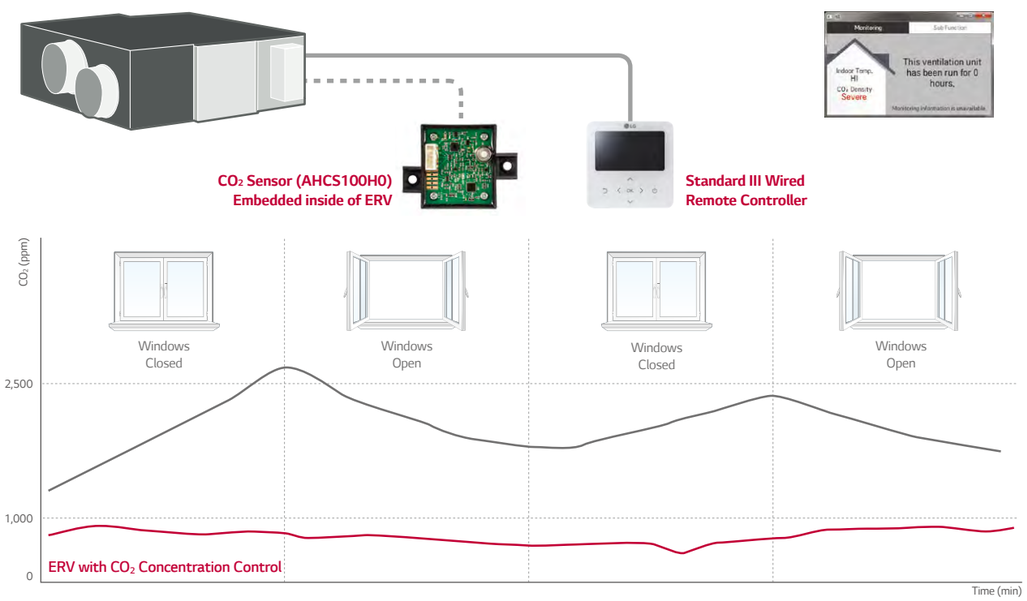
• Description

- The product is especially designed to detect CO
- This model requires Standard III Wired Remote Controller for display

• Operation Table

CO_2 Sensor Reading	ERV Fan Operation
<500ppm	Off
500 ~ 700ppm	Low Speed
700 ~ 900ppm	High Speed
>900ppm	Super High Speed

Installation Scene



F7 FILTER

F7 filter for ventilation system

AHFT035H0
AHFT050H0
AHFT100H0

Specification

For ERV

Filter Model			AHFT035H0		AHFT050H0	AHFT100H0		AHFT100H0	
Product Model			LZ-H025GBA4	LZ-H035GBA5	LZ-H050GBA5	LZ-H080GBA5	LZ-H100GBA5	LZ-H150GBA5	LZ-H200GBA5
Dimension	W	mm	423.5	423.5	425	520	520	520	520
	H		132	132	194	192	192	192	192
	D		25	25	25	25	25	25	25
Quantity		EA	2	2	2	2	2	4	4

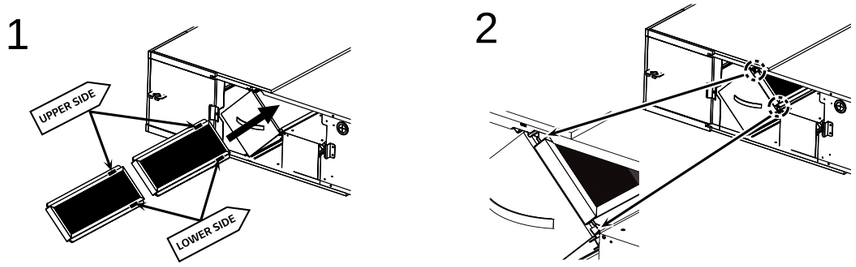
* 2 pieces in 1 filter package

For ERV DX

Filter Model			AHFT100H0					
Product Model			LZ-H050GXH4	LZ-H080GXH4	LZ-H100GXH4	LZ-H050GXN4	LZ-H080GXN4	LZ-H100GXN4
Dimension	W	mm	520					
	H		192					
	D		25					
Quantity		EA	2					

* 2 pieces in 1 filter package

Installation



1. Please check the direction of the filter's label.
2. Insert the filters on the right upper side of the total heat exchanger.
* Maintain once every 6 months.
* The part and standard of installation is designed for LG product, it is not allowed them to adapt non - LG product.

COMPATIBILITY TABLE

• : Compatible ▲ : Need wired remote controller / IR receiver X : Not compatible

Product \ Controller			Premium	Standard III		Standard II		Simple		Simple for Hotel		Wireless	Dry Contact				Wi-Fi
			PREMTA000 PREMTA000A PREMTA000B	PREMTBB10	PREMTB100	PREMTBB01	PREMTB001	PQRCVCLQQ	PQRCVC0QW	PQRCHCA0Q	PQRCHCA0QW	PQWRHQ0FDB	Simple Dry Contact PDRYCB000	2 points Dry Contact PDRYCB400	Dry Contact for Thermostat PDRYCB300	For Modbus PDRYCB500	LG-IR-WF-1
MULTI V	Ceiling Mounted Cassette	4 Way ARNU-C4	•	•		•		•		•		•	•	•	•	•	•
		2 Way / 1 Way ARNU-C4	•	•		•		•		•		•	•	•	•	•	•
	Ceiling Concealed Duct	High Sensible ARNU-A4	•	•		•		•		•		▲	•	•	•	•	•
		High Statics Mid Statics ARNU-A4	•	•		•		•		•		▲	•	•	•	•	•
		Low Statics ARNU-G4	•	•		•		•		•		▲	•	•	•	•	•
		Built-in ARNU-G4	•	•		•		•		•		▲	•	•	•	•	•
	FAU (Fresh Air intake Unit) ARNU-Z4		•	•		•		•		•		▲	•	•	•	•	•
	Convertible & Ceiling Suspended Unit ARNU-A4		•	•		•		•		•		•	•	•	•	•	•
	Console ARNU-A4		•	•		•		•		•		•	•	•	•	•	•
	Floor Standing Unit	ARNU-A4 / ARNU-U4	•	•		•		•		•		•	•	•	•	•	•
	Wall Mounted Unit	ARNU-A4	•	•		•		•		•		•	•	•	•	•	•
		ARNU-*4 [1]	•	•		•		•		•		•	•	•	•	•	•
		ARNU-L4 / ARNU-A4	•	•		•		•		•		•	•	•	•	•	•
	HYDRO KIT [2]		x	x		x		x		x		x	•	x	x	x	x
	Ventilation	Energy Recovery Ventilator	•	•		•		•		•		▲	•	x	x	x	•
		Energy Recovery Ventilator with DX coil	•	•		•		•		•		▲	•	•	•	•	•
	AHU Communication Kit		•	•		•		•		•		▲	•	•	•	•	x

1) Artcool Mirror : Mirror (R) / Silver (V) / White (W)
2) It has a separate remote controller

• : Compatible ▲ : Need wired remote controller / IR receiver X : Not compatible

Product \ Model			Controller: Premium	Standard III		Standard II		Simple		Simple for Hotel		Wireless	Dry Contact				Wi-Fi
			PREMTA000 PREMTA000A PREMTA000B	PREMTBB10	PREMTB100	PREMTBB01	PREMTB001	PQRCVCLQQ	PQRCVC0QW	PQRCHCA0Q	PQRCHCA0QW	PQWRHQ0FDB	Simple Dry Contact PDRYCB000	2 points Dry Contact PDRYCB400	Dry Contact for Thermostat PDRYCB300	For Modbus PDRYCB500	LG-IR-WF-1
SINGLE SPLIT	H-Inverter	Ceiling Mounted Cassette	•	•		•		•		•		•	•	•	•	•	•
		Ceiling Concealed Duct	•	•		•		•		•		•	•	•	•	•	•
		Ceiling Suspended Unit	•	•		•		•		•		•	•	•	•	•	•
	Standard Inverter	Ceiling Mounted Cassette	•	•		•		•		•		•	•	•	•	•	•
		Ceiling Concealed Duct High	•	•		•		•		•		•	•	•	•	•	•
		Ceiling Concealed Duct Mid	•	•		•		•		•		•	•	•	•	•	•
		Ceiling Concealed Duct Low	•	•		•		•		•		•	•	•	•	•	•
		Ceiling Suspended Unit	•	•		•		•		•		•	•	•	•	•	•
		Console	•	•		•		•		•		•	•	•	•	•	•
		Wall Mounted Unit	•	•		•		•		•		•	•	•	•	•	•
		Floor Standing Unit	•	•		•		•		•		x	•	•	•	•	•
MULTI SPLIT	Ceiling Mounted Cassette	4 Way	•	•		•		•		•		•	•	•	•	•	•
		1 Way	•	•		•		•		•		•	•	•	•	•	•
	Ceiling Concealed Duct	Mid	•	•		•		•		•		▲	•	•	•	•	•
		Low	•	•		•		•		•		▲	•	•	•	•	•
	Convertible & Ceiling Suspended Unit		•	•		•		•		•		•	•	•	•	•	•
	Console		•	•		•		•		•		•	•	•	•	•	•
	Wall Mounted Unit		•	•		•		•		•		•	•	•	•	•	•
			•	•		•		•		•		•	•	•	•	•	•
THERMA V	Split	Mid Temp.	x	x		x		x		x		x	•	x	x	x	x
		High Temp.	x	x		x		x		x		x	•	x	x	x	x
	Monobloc		x	x		x		x		x		x	•	x	x	x	x

CONTROL SOLUTION

INDIVIDUAL CONTROL / CENTRALIZED CONTROL
SYSTEM INTEGRATION DEVICE / OTHER INTEGRATION CONTROL SOLUTION

CONTROL SOLUTION

LG HVAC CONTROL LINE-UP

Individual Control

Wired Remote Controller

Premium

PREMTA000
PREMTA000A
PREMTA000B

Standard

Standard III (White)

PREMTB100

Standard III (Black)

PREMTBB10

Standard II (White)

PREMTB001

Standard II (Black)

PREMTBB01

Simple

PQRCVCL0QW

PQRCVCL0Q

PQRCHCA0QW
(Simple for Hotel)

PQRCHCA0Q
(Simple for Hotel)

Wireless Remote Controller

PQWRHQ0FDB

Wi-Fi controller

NEW! LG Wi-Fi Modem

For Indoor Unit
PWFMDD200

NEW!

For Indoor Unit
LG-RC-WF-1

For Indoor Unit
LG-IR-WF-1

Centralized Control

Indoor Unit ~ 32

AC Ez

PQCSZ250S0

AC Ez Touch

PACEZA000

Indoor Unit ~ 128

AC Smart IV

PACS4B000

NEW! AC Smart 5

PACS5A000

Indoor Unit ~ 256

ACP IV

PACP4B000

NEW! ACP 5

PACP5A000

Indoor Unit ~ 8,192

AC Manager 5

PACM5A000

*AC Smart IV & AC Smart BACnet will be replaced by AC Smart 5
*ACP IV & ACP BACnet will be replaced by ACP 5
*KNX Gateway is provided by INTESIS

Centralized Control

System Integration Device

Facility Integrator

PDI
(Power Distribution Indicator)

Premium (8port)
PQNUD1S40
Standard (2port)
PPWRDB000

ACS I/O Module
(Input / Output Module)

PEXPMB000

Chiller Option Kit

PCHILLN000

Gateway for Protocol

AC Smart BACnet

PBACNA000

ACP BACnet

PQNFB17C0

ACP Lonworks

PLNWKB000

NEW! Modbus RTU Gateway

PMBUSB00A

KNX Gateway

LG-AC-KNX4
LG-AC-KNX8
LG-AC-KNX16
LG-AC-KNX64

PI-485

PI-485

For SINGLE /
MULTI / THERMA V
PMNFP14A1

For Indoor Unit
(Air-Conditioner, ERV)
PHNFP14A0

Other Integration Device

Indoor Unit

Dry Contact

Simple Dry Contact
PDRYCB000

2 Points Dry Contact
(For Setback)
PDRYCB400

Dry Contact for
Thermostat
PDRYCB300

For Modbus
PDRYCB500

Control Accessory

Group Control Wire

PZCWRCG3

Remote
Temperature Sensor

PQRSTA0

Zone Controller

4 Zones by
thermostat ABZCA

Outdoor Unit

IO Module
(Input / Output Module)

Demand Controller
For MULTI V IV/S
PVDSMN000

Dry Contact for
Demand Control

Demand Controller for
MULTI V III
PQDSBCDVM0

Variable Water Flow
Control kit

For MULTI V WATER IV
PWFCKN000

For MULTI V WATER II
PRVCO

Low Ambient Kit

For MULTI V IV
PRVC2

Cool / Heat Selector

PRDSBM

AHU Kit

NEW! Communication Kit

Return/Room Air control
PAHCMR000

NEW!

Discharge Air control
PAHCMS000

Control kit

PRCKD21E (~ 4 ODUs)
PRCKD41E (~ 8 ODUs)

EEV Kit
(Electronic Expansion Valve)

PRLK048A0 (~ 10HP)
PRLK096A0 (~ 20HP)

TXV Kit
(Thermal Expansion Valve)

PATX13A0E (8 ~ 16HP)
PATX20A0E (18 ~ 26HP)
PATX25A0E (28 ~ 36 HP)
PATX35A0E (38 ~ 46 HP)
PATX50A0E (48~56 HP)

INDIVIDUAL CONTROL SOLUTION

LINE-UP

Standard III Wired Remote controller

Simple Wired Remote Controller

Premium Wired Remote Controller

Wireless Remote Controller

Standard II Wired Remote Controller

Wi-Fi Controller

Remote Controller Line Up

Model Name	PREMTA000 PREMTA000A PREMTA000B	PREMTB100 PREMTBB10	PREMTB001 PREMTBB01	PQRCVCL0QW PQRCVCL0Q PQRCHCA0QW PQRCHCA0Q	PQWRHQ0FDB	PWFMDD200
						
On / Off	•	•	•	•	•	•
Mode Change	•	•	•	•*	•	•
Temperature Setting	•	•	•	•	•	•
Fan Speed Control	•	•	•	•	•	•
Auto Swing	•	•	•	•*	•	•
Vane Control (Louver Direction)	•	•	•	•*	•	•
Additional Mode Setting	•	•	•	•	•	-
E.S.P (External Static Pressure)	•	•	•	•	-	-
Reservation	Weekly / Yearly	Weekly / Yearly	Weekly	-	Sleep, On / Off	Weekly On / Off
Child lock / Total Lock	•	•	•	•	-	-
Advanced Lock (on/off, mode, set point range)	•	•	Mode only	-	-	-
Electric Failure Compensation	•	•	•	•*	-	•
Time Display	•	•	•	-	-	-
Filter Sign	•	•	•	-	-	•
Energy Monitoring**	•	•	•	-	-	•
2 Set Points Control	•	•	-	-	-	-
External Ports	-	DO 1	-	-	-	-

• Indoor unit needs to have functions requested by the controller
* PQRCHCA0QW / PQRCHCA0Q doesn't offer this function
** LG centralized controller(available from AC Ez Touch or higher model) with PDI (PQNUD1S40 / PPWRDB000) installation is required for this function

STANDARD III WIRED REMOTE CONTROLLER

4.3 inch Color screen with a modern design

PREMTB100 (White) / PREMTBB10 (Black)

Features [1)]

The Optimized Controller in MULTI V 5

- Humidity sensor embedded
- Comfort cooling setting
- Smart Load Control setting
- Outdoor unit low noise setting
- Defrost mode setting

New Modern Design & Easy interface

- Seamless design / Touch button
- 4.3 inch Color LCD / Intuitive GUI

External Device On/Off

- Customized Interlocking control with indoor status

2 Set Points control [2)]

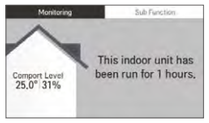
Multi Language support

English, French, German, Spanish, Italian, Portuguese, Polish, Czech, Russian, Chinese

Model Name	PREMTB100 / PREMTBB10
On / Off	•
Fan Speed Control	•
Temperature Setting	•
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Additional Mode Setting*	Plasma Purification / Energy-Saving Cooling / Robot Cleaning / Heater / Humidification / Comfort Cooling
Auto Swing	•
Vane Control (Louver direction)	•
E.S.P (External Static Pressure)**	•
Reservation	Simple / Sleep / On & Off timer / Weekly / Yearly / Holiday
Time Display	•
Electric Failure Compensation	•
Lock	All / On & Off / Mode / Set temperature range
Filter Sign	• (Remain time + Alarm)
Energy Management	Check Energy Usage*** / Check Operation Time / Target Setting (Energy, Operation Time) / Time Limit Operation / Alarm Popup / Initialization Usage Data
Operation Status LED	•
Indoor Temperature Display	•
Indoor Humidity Display	•
Display	4.3 inch TFT color LCD (480 x 272)
Size (W x H x D, mm)	120 x 120 x 16
Black light for Screen saver	•
Home Leave	2 set points control

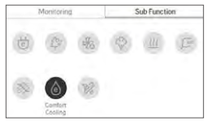
*It might not be indicated or operated at the partial product
** This function is available for certain indoor unit type
*** LG centralized controller(available from AC Ez Touch or higher model) with PDI (PQNUD1S40 / PPWRDB000) installation is required for this function
1) Indoor unit needs to have functions requested by the controller
2) 2 set points control works normally with MULT V Heat Recovery and Single Split Heat Pump. But in case of MULTI V Heat Pump, It may not work properly

Fully Support MULTI V 5 functions



Inside Dual Sensing

Standard III remote controller can do sensing both Temperature and Relative Humidity.



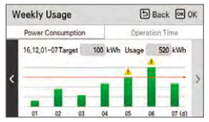
Comfort Cooling

Without cooling operation stopping, this function allows MULTI V 5 IDU to maintain operation at mild cooling mode.

Modern Design & Intuitive Interface

Colorful Icon

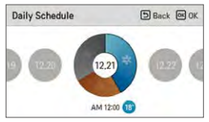
Standard III remote controller is possible to express various colors.



Weekly / Monthly / Yearly Trend & Target Setting control

Standard III remote controller provides convenient trend & target graph for different period.

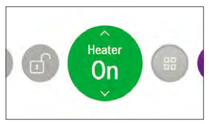
Cool Heat Dry Fan Auto



Easy Checking Schedule

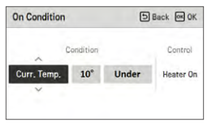
Standard III remote controller provides clock type daily schedule.

External Device On/Off



External Equipment Control

User can turn on or off the external equipment through contact point output.



Customized Interlocking Control

User can make control scenario.
example) When temperature is under 10 degree, turn on the external heater.

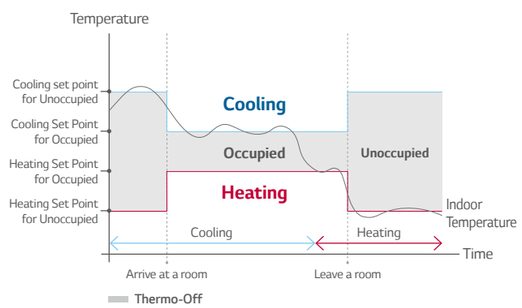
2 Set Points Control

2 Set Points Control

Ambient indoor temperature is guaranteed by setting two-point temperature for cooling and heating. Standard III remote controller automatically changes from heating to cooling (and vice versa) depending on temperature.

Home Leave

Changeable setting for occupied / unoccupied status



PREMIUM WIRED REMOTE CONTROLLER

5 inch full touch screen with a premium design

PREMTA000 [1] / PREMTA000A [2] / PREMTA000B [3]

1) English / Portuguese / Spanish / French
2) English / Italian / Russian / Chinese
3) English / German / Polish / Czech

Features [4]

Self-Management for Energy Saving

- Time limit operation / Power consumption monitoring
- Weekly / Monthly / Yearly trend tracking
- Target alert alarm
- Temperature range setting

Improved Scheduling

- Timer / Daily / Weekly / Yearly / Holiday

2 Set Points Control [5]

Design with User's Convenience

- Full touch / Intuitive GUI (Graphic User Interface)
- Main display simple mode / Touch buzzer

Model Name	PREMTA000 / PREMTA000A / PREMTA000B
On / Off	•
Fan Speed Control	•
Temperature Setting	•
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Additional Mode Setting*	Plasma Purification / Energy-Saving Cooling / Robot Cleaning / Heater / Humidification
Auto Swing	•
Vane Control (Louver direction)	•
E.S.P (External Static Pressure)**	•
Reservation	Simple / Sleep / On / Off / Weekly / Yearly / Holiday
Time Display	•
Electric Failure Compensation	•
Child Lock	•
Filter Sign	• (Remain time + Alarm)
Energy Management	Check Energy Usage*** / Check Operation Time / Target Setting (Energy, Operation Time) / Time Limit Operation / Alarm Popup / Initialization Usage Data
Operation Status LED	•
Indoor Temperature Display	•
Wireless Remote Controller Receiver	•****
Display	5 Inch TFT color LCD (480 x 272)
Size (W x H x D, mm)	137 x 121 x 16.5
Black Light for Screen Saver	•
Home Leave	2 Set Points Control

*It might not be indicated or operated at the partial product
** This function is available for certain indoor unit type
*** LG centralized controller(available from AC Ez Touch or higher model) with PDI (PQNUD1S40 / PPWRDB000) installation is required for this function
**** For ceiling type duct
4) Indoor unit needs to have functions requested by the controller
5) 2 set points control works normally with MULT V Heat Recovery and Single Split Heat Pump. But in case of MULTI V Heat Pump, It may not work properly

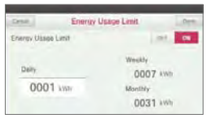
Energy Management

Self Energy Management

After it gathers information about usage time or electricity usage*, offer periodical history data to users as visual information. By using various setting mode (operation hour / electricity usage etc.), you can manage on your own.

Weekly / Monthly / Yearly Trend & Target Setting Control

Premium remote controller provides convenient trend & target graph for different period.



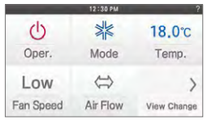
*** Centralized control (PACS4B000 / PACP4B000 / PQNFB17C0 / PLNWKB000) and PDI (PQNUD1S40 / PPWRDB000) should be installed for this function**

User Friendly Design

Standard Mode

Intuitive UI & GUI Design

It is more easy to use and control various functions.



Simple Mode

Display Configuration

Users can use of five buttons as shortcuts for frequently used features.

Enhanced Schedule Function

Yearly Schedule

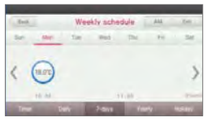
Yearly / Weekly Schedule Function

If you set the schedule all at once, you will be able to effectively manage for various lengths of time. It provides 5 kinds of reservation functions. (Timer, Daily, Weekly, Yearly, Holiday)

Weekly Schedule Pattern

Easy Pattern Schedule

It is possible to embody various schedules as pattern setting.



Weekly Schedule

*** Available to save up to a maximum of 20 error histories, 20 holiday reservations and 5 daily event on week**

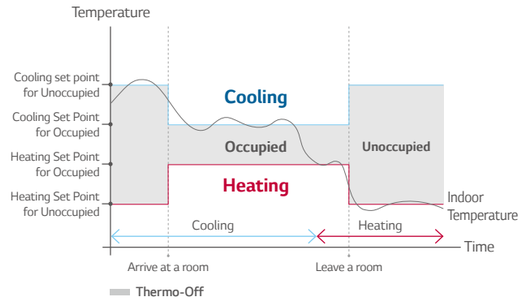
2 Set Points Control

2 Set Points Control

Ambient indoor temperature is guaranteed by setting two-point temperature for cooling and heating. New Standard III remote automatically changes from heating to cooling (and vice versa) depending on temperature.

Home Leave

Changeable setting for occupied / unoccupied status



INDIVIDUAL CONTROL SOLUTION

STANDARD II WIRED REMOTE CONTROLLER

Providing easy control of one or a group of indoor units with various functions

Standard II
PREMTB001 (White) / PREMTBB01 (Black)

Features[1)]

Model Name	PREMTB001 / PREMTBB01
On / Off	•
Fan Speed Control	•
Temperature Setting	•
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Additional Mode Setting	Plasma Purification / Energy-Saving Cooling / Robot Cleaning / Heater / Humidification
Auto Swing	•
Vane Control (Louver direction)	•
E.S.P (External Static Pressure)	•
Reservation	Simple / Sleep / On / Off / Weekly / Holiday
Time Display	•
Electric Failure Compensation	•
Child Lock	•
Filter Sign	• (Remain time + Alarm)
Operation Status LED	•
Indoor Temperature Display	•
Wireless Remote Controller Receiver	•*
Size (W x H x D, mm)	120 x 121 x 16
Blacklight	•
Power Consumption Monitoring	•**
Check Model Information	•

* For ceiling type duct
** LG centralized controller(available from AC Ez Touch or higher model) with PDI (PQNUD1S40 / PPWRDB000) installation is required for this function
1) Indoor unit needs to have functions requested by the controller

INDIVIDUAL CONTROL SOLUTION

SIMPLE WIRED REMOTE CONTROLLER

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

Simple

Simple for Hotel

Simple
PQRCVCL0QW (White) / PQRCVCL0Q (Black)

Simple for Hotel
PQRCHCA0QW (White) / PQRCHCA0Q (Black)

Features[1)]

Model Name	PQRCVCL0QW / PQRCVCL0Q	PQRCHCA0QW / PQRCHCA0Q
On / Off	•	•
Fan Speed Control	•	•
Temperature Setting	•	•
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan	Only Changeable by Central Controller
Auto Swing	•	-
Vane Control (Louver direction)	•	-
E.S.P (External Static Pressure)	•	•
Electric Failure Compensation	•	-
Child Lock	•	•
Indoor Temperature Display	•	•
Wireless Remote Controller Receiver	•*	•*
Size (W x H x D, mm)	70 x 121 x 16	70 x 121 x 16
Blacklight	•	•

* For ceiling type duct
1) Indoor unit needs to have functions requested by the controller

INDIVIDUAL CONTROL SOLUTION

WIRELESS REMOTE CONTROLLER

PQWRHQ0FDB

Features

Model Name	PQWRHQ0FDB
On / Off	•
Fan Speed Control	•
Temperature Setting	•
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Additional Mode Setting	Plasma Purification / Energy-Saving Cooling / Robot Cleaning / Auto Dry
Auto Swing	•
Vane Control (Louver direction)	•
Reservation	Sleep / On / Off
Indoor Temperature Display	•
Sleep Mode Auto	Max. 7 hours
Size (W x H x D, mm)	51.4 x 153 x 26

INDIVIDUAL CONTROL SOLUTION

LG Wi-Fi MODEM

Control LG air conditioners via using the internet devices as Android or iOS bases smartphones

PWFMDD200

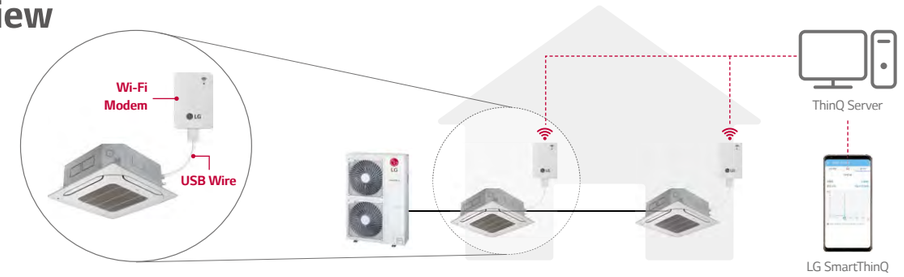
Features

- **Access LG air conditioner anytime and from anywhere with Wi-Fi equipped device**
- **LG's exclusive Home Appliances control app(SmartThinQ) is available**
- **Simple operation for various functions**
  - On/Off
  - Fan Speed
  - Energy Monitoring [1)]
  - Operation Mode
  - Vane Control [2)]
  - Filter Management
  - Current/Set Temperature
  - Reservation (Sleep, Weekly On/Off)
  - Error check

Model Name	PWFMDD200
Size (W x H x D, mm)	48 x 68 x 14
Interfaceable Products	Multi V Indoor unit [3)]
Connection Type	Indoor unit 1:1
Communication Frequency	2.4 GHz
Wireless Standards	IEEE 802.11b/g/n
Mobile Application	LG SmartThinQ (Android v4.1(Jellybean) or higher, iPhone iOS 9.0 or higher)
Optional Extension Cable	PWYREW000 (10m extension)

* Functionality may be different according to each IDU model
* User interface of application shall be revised for its design and contents improvement
* Application is optimized for smartphone use, so it may not be well functioning with tablet devices
1) LG Centralized controller and PDI installation is required for this function
2) Vane Control may not be possible according to the type of Indoor unit
3) For the compatibility with Indoor unit, please contact regional office

Overview



* Search "LG SmartThinQ" on Google market or Appstore then download the app.
* Internet service with Wi-Fi connection has to be available

INDIVIDUAL CONTROL SOLUTION

Wi-Fi CONTROLLER [1)]

LG-RC-WF-1

Features

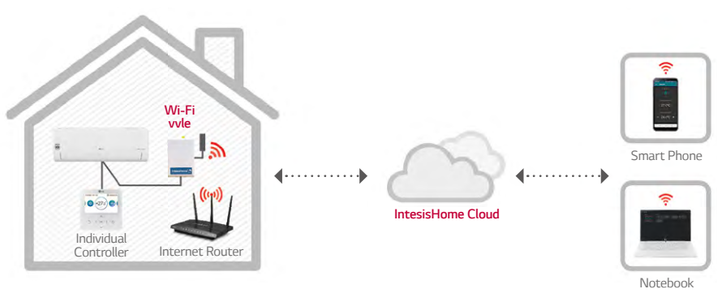
- No need external power
- CAC system unit capacity (SCAC, Multi and MULTI V)
- Control and monitor by mobile device
- Additional internet service has to be available and registration user account in IntesisHome cloud to use Wi-Fi controller is mandatory
- IntesisHome cloud application is available for smart devices such as smart phone(Android, iOS), laptop, tablet.

Model Name	LG-RC-WF-1
Start / Stop Operation	•
Operation Mode	Cool / Heat / Auto / Fan / Dry
Set Point	•
Ambient Temperature	•
Fan Speed	•

Specifications

Model Name	LG-RC-WF-1
Enclosure	ABS (UL 94 HB), 2.5 mm thickness
Dimensions (mm)	70 x 108 x 28 mm
Weight (g)	80g
Color	White
Power Supply	12V, 60mA typical Doesn't require external power supply (supplied by the Indoor Unit)
Mounting	Wall
Operating Temperature	From 0°C to 40°C
Operating Humidity	<93% HR, no condensation
Stock Humidity	<93% HR, no condensation
RoHS Conformity	Compliant with RoHS directive (2002/95/CE)
Certifications	CE conformity to EMC directive (2004/108/EC) ,Low-voltage directive (2006/95/EC) EN 60950-1 / EN301489-1 v1.8.1 / EN 301489-17 v2.1.1

Overview



1) This product is provided by Intesis.

INDIVIDUAL CONTROL SOLUTION

Wi-Fi CONTROLLER [1)]

LG-IR-WF-1

Models Applied

- Connectable with the indoor unit having IR receiver
- Power supply includes EU-UK-US-AU heads
- On / Off status and mode indicated by LED light
- Control and monitor
- Easy to install : Wall or desktop mounted
- Automatic firmware Updates*
- Additional internet service has to be available and registration user account in IntesisHome cloud to use Wi-fi controller is mandatory
- IntesisHome cloud app is available for android phone or iOS phone

* Internet access is necessary

Model Name	LG-IR-WF-1
Start / Stop Operation	•
Operation Mode	Cool / Heat / Auto / Fan / Dry
Set Point	•
Ambient Temperature	•
Fan Speed	•

Specifications

Model Name	LG-IR-WF-1
Enclosure	ABS (V-0, 5VB) 2,1 mm thickness PC (V-2) 1mm thickness
Dimensions (mm)	81 × 78 × 28
Weight (g)	76
Color	White
Power Supply	5VDC 0,2 A NEC Class 2 or Limited Power Source (LPS) and SELV Rated Power supply
Mounting	Wall
LED Indicators	1 × Device Status
Operating Temperature	From 0°C to 40°C
Operating Humidity	<93% HR, no Condensation
Stock Humidity	<93% HR, no Condensation
RoHS Conformity	Compliant with RoHS Directive (2002 / 95 / CE)
Certifications	Compliant with RoHS Directive (2002 / 95 / CE) CE Conformity to EMC Directive (2004 /108 / EC) and Low-voltage Directive (2006 / 95 / EC) EN 60950-1 / EN 301489-1 v1.8.1 / EN 300328

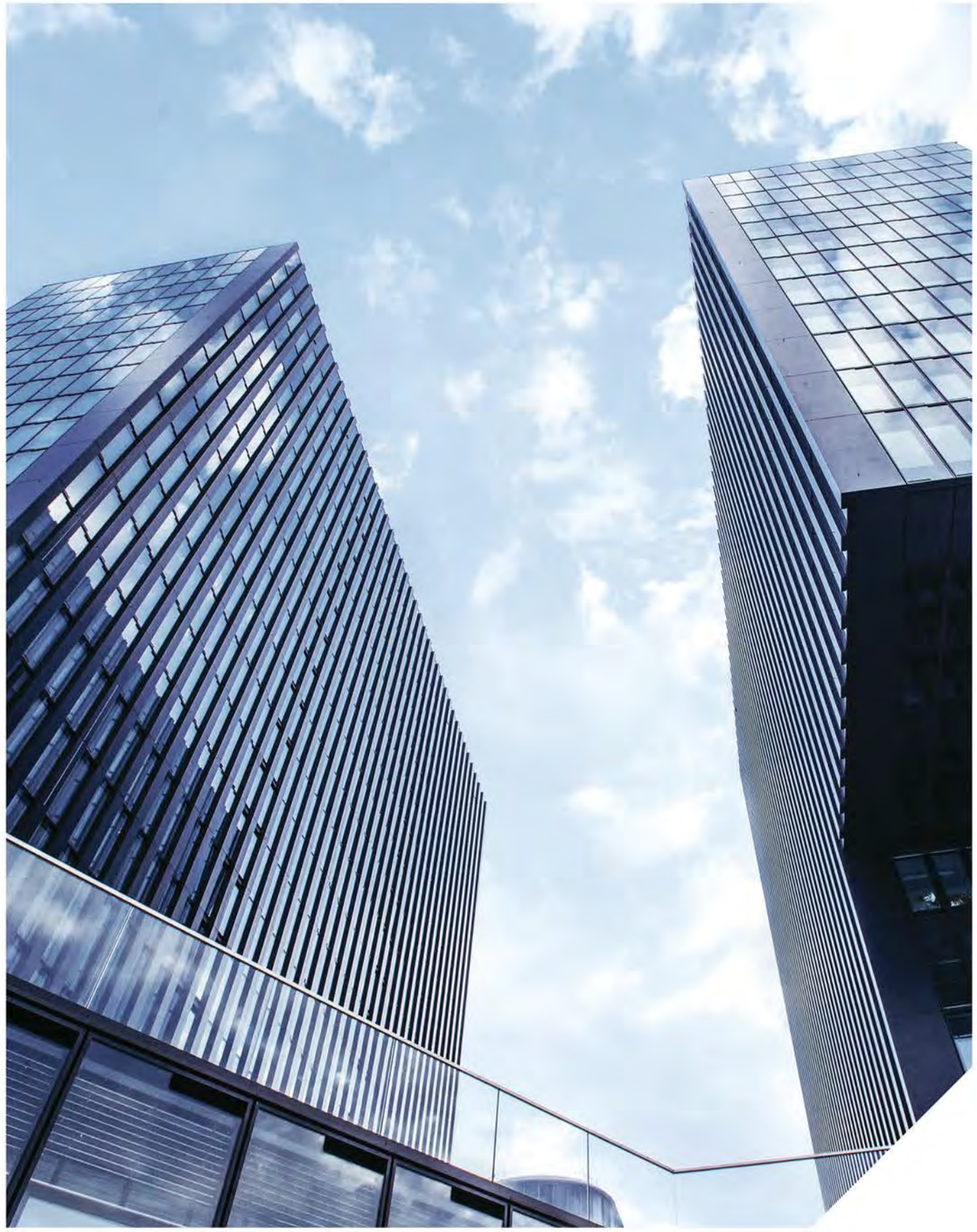
Overview

Case 1. Connection with Indoor Units with IR Receiver

Case 2. Connection with Duct Type Indoor Units

1) This product is provided by Intesis.

CENTRALIZED CONTROL SOLUTION



CENTRALIZED CONTROL SOLUTION

LINE-UP

AC Ez Touch

NEW!
ACP 5
ACP IV

NEW!
AC Smart 5
AC Smart IV

AC Manager 5

AC Ez

Central Controller Line Up

Model Name	PQCSZ250S0	PACEZA000	PACS5A000 PACS4B000	PACP5A000 PACP4B000	PACM5A000
					
Maximum number of units	32	64	128	256	8,192
Individual / Group Control	•	•	•	•	•
Individual Controller Lock	•	•	•	•	•
Error Check	•	•	•	•	•
Slave Mode (Interlocking with higher level controller)	•	•	•	-	-
Schedule	Weekly	Yearly	Yearly	Yearly	Yearly
Remote Access	-	By client S/W	Web	Web	Web
Emergency Stop & Alarm Display	-	•	•	•	•
Power Consumption Monitoring (with PDI)	-	•	•	•	•
Auto Changeover / Setback	-	•	•	•	•
Temperature Limit	-	•	•	•	•
Operation Time Limit	-	-	•	•	•
Visual Navigation	-	-	•	•	•
Operation Trend	-	-	•	•	•
Interlock Control	-	-	•	•	•
Virtual Group Control	-	-	•	•	•
ODU Capacity Control*	-	-	•	•	•
Energy Navigation (with PDI)	-	-	•	•	•
ACS IO Module Interlocking	-	-	•	•	•
NEW! BMS Integration (BACnet, Modbus protocol)	-	-	• (PACS5A000 only)	• (PACP5A000 only)	-
NEW! IPv6 Support	-	•	• (PACS5A000 only)	• (PACP5A000 only)	-

* This function is available for certain product

CENTRALIZED CONTROL SOLUTION

AC SMART 5

AVAILABLE FROM
MID 2018 ONWARDS

All-in-One solution for BMS integration up to 128 units via BACnet and Modbus protocol as well as its own smart management function with touch screen interface

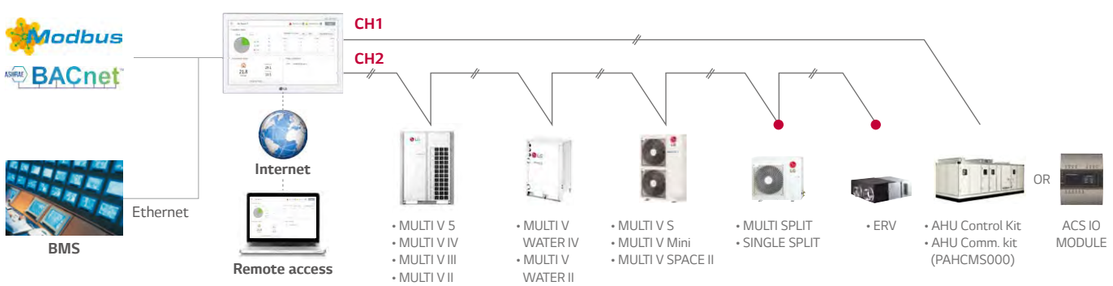
PACS5A000

Features

Model Name	PACS5A000
Size (W x H x D, mm)	253.2 x 167.7 x 28.9
Interfaceable Products	MULTI V / ERV / ERV DX / Hydro kit / THERMA V / AHU kit / LG Chiller[1)]
Maximum number of units	128
Individual / Group Control	On & Off / Mode / Temperature / Fan speed
Individual Controller Lock	Temperature / Mode / Fan speed / All
Advanced Function Setting and Display[2)]	Comfort Cooling / ODU Low Noise / ODU Defrost Mode / Comfort Level display / CO_2 Level display (for ERV/ERV DX) / Night Time Free Cooling (for ERV/ERV DX)
Error Check	•
Slave Mode (Interlocking with higher level controller)	•
Schedule	Weekly / Monthly / Yearly / Exception day
Web Access	•
Emergency Stop & Alarm Display	•
Power Consumption Monitoring (with PDI)	•
Auto Changeover / Setback	•
Temperature Limit	•
Operation Time Limit	•
Visual Navigation	•
Operation Trend	•
Interlock Control	•
Virtual Group Control	•
ODU Capacity Control	•
Energy Navigation (with PDI)	•
Daylight Saving Time	•
ACS IO Module Interlocking	Max. 9
External IO Port	DI 2 / DO 2
BMS Integration[3)]	BACnet IP / Modbus TCP
IPv6 Support	•

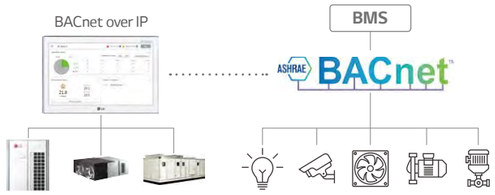
1) Chiller Option Kit(PCHLLN000) is required 2) It is only available in some products 3) For the detail point list, please refer to the installation manual

Installation Scene



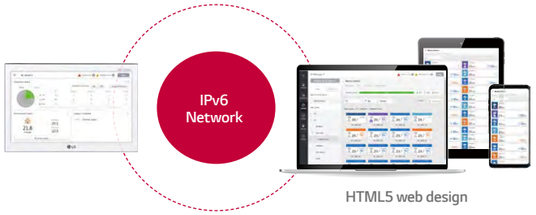
• Appropriate PI485GW installation according to PDB is necessary

Features



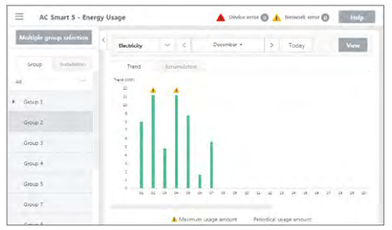
BMS Integration

Without additional device, AC Smart 5 provides BACnet/IP and Modbus TCP/IP interface for BMS(Building Management System) integration as well as its own management function.



Advanced Network Accessibility

AC Smart 5 reflects the state of the art of network technology trend. IPv6(Internet Protocol version 6), which is the most recent version of the Internet Protocol, provides accessibility to the IPv6 compatible network environment. HTML5 makes the web access to AC Smart 5 easier and look good on all devices, especially for mobile.

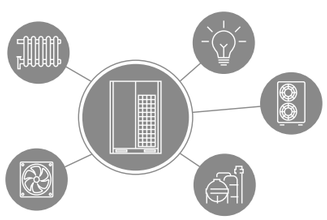


Energy Management

Energy navigation function allows air conditioners operation to be managed under the monthly plan of energy usage. By analyzing present energy consumption and comparing with the plan, overuse of system operational costs can be prevented.

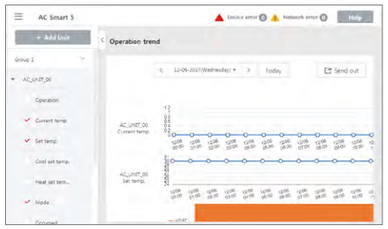
Visualized Control

Visual navigation enables controlling and monitoring the unit on floor plan view for the intuitive management.



Device Interlock

Building Facility can be interlocked with LG HVAC system on the automated control logic.



Operation Trend

Unit's operation status change in the past can be traced to help establishing reasonable operation plan of the site.

CONTROL SOLUTION

CENTRALIZED CONTROL SOLUTION

AC EZ TOUCH

Smart management with 5 inch touch screen for small site

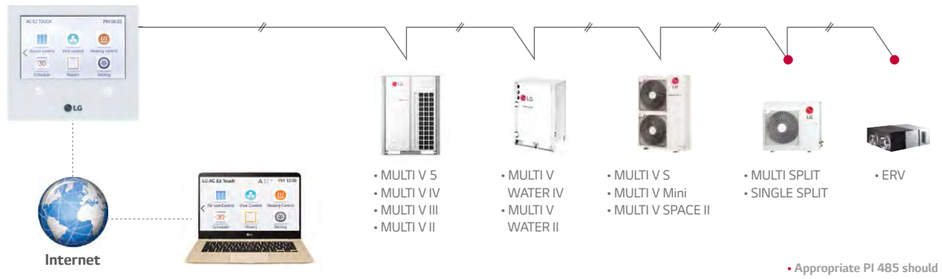
PACEZA000

Features

Model Name	PACEZA000
Size (W x H x D, mm)	137 x 121 x 25
Interfaceable Products	MULTI V / ERV / ERV DX / Hydro kit / THERMA V
Maximum number of units	64
Individual / Group Control	On & Off / Mode / Temperature / Fan speed
Individual Controller Lock	Temperature / Mode / Fan speed / All
Error Check	•
Slave Mode (Interlocking with higher level controller)	•
Schedule	Weekly / Monthly / Yearly / Exception day
Remote Access	By client S/W
Emergency Stop & Alarm Display	•
Power Consumption Monitoring (with PDI)	•
Auto Changeover / Setback	•
Temperature Limit	•
Operation History	Error
ODU Low Noise[1)]	•
Daylight Saving Time	•
External IO Port	DI 1
IPv6 Support	•

1) It is only available in some products

Installation Scene

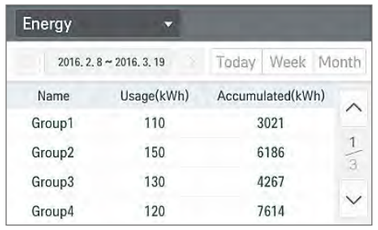


• Appropriate PI 485 should be used according to PDB

Features

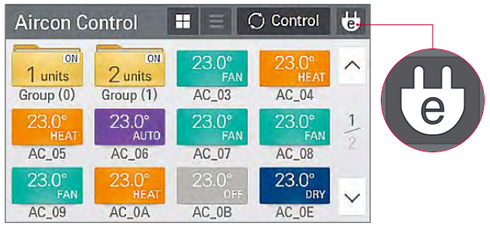
PC Access

Users can control each space efficiently through PC access.



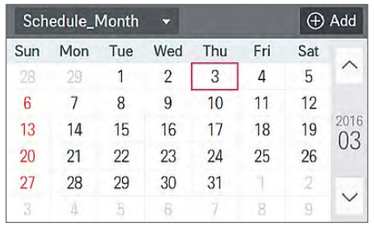
Energy Statistics (with PDI)

Statistics of operational status (time, power consumption) are provided to help make intelligent system operation decisions.



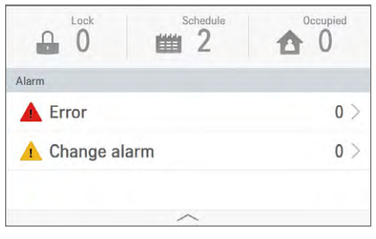
Energy Mode

When using energy mode function, operation mode changes from cooling to fan or heating to off mode by force.
(It is available only air conditioner and 'on' mode indoor unit)



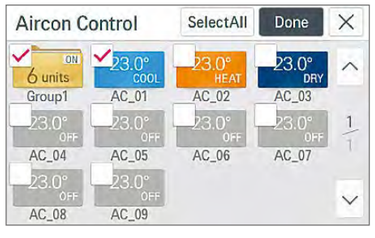
Schedule

Schedule control allows user to set the events in advance to maximize system performance. Also, by blocking unnecessary operation, it prevents a waste of energy.



Alarm Indicator

It works when there are some errors or it's time to change the filter. Users can respond immediately according to alarm indicator therefore HVAC system is monitored consistently.



Group / Individual Control

According to the situation, it can be controlled by group or each indoor unit. It is useful to monitor or control for the best fit of request.

CENTRALIZED CONTROL SOLUTION

AC SMART IV

Large 10.2 inch touch screen with intuitive GUI (Graphic User Interface) allows easy control

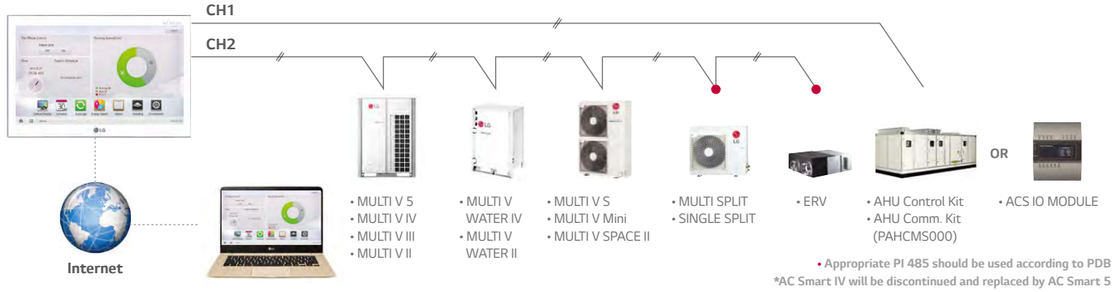
PACS4B000

Features

Model Name	PACS4B000
Size (W x H x D, mm)	253.2 x 167.7 x 28.9
Interfaceable Products	MULTI V / ERV / ERV DX / Hydro Kit / THERMA V / AHU Kit / LG Chiller 1)
Maximum number of units	128
Individual / Group Control	On & Off / Mode / Temperature / Fan Speed
Individual Controller Lock	Temperature / Mode / Fan speed / All
Error Check	•
Slave Mode (Interlocking with Higher Level Controller)	•
Schedule	Weekly / Monthly / Yearly / Exception day
Web Access 2)	•
Emergency Stop & Alarm Display	•
Power Consumption Monitoring (with PDI)	•
Auto Changeover / Setback	•
Temperature Limit	•
Operation Time Limit	•
Visual Navigation	•
Interlock Control	•
Virtual Group Control	•
ODU Capacity Control	•
Energy Navigation (with PDI)	•
Daylight Saving Time	•
ACS IO Module Interlocking	Max. 9
External IO Port	DI 2 / DO 2

1) Chiller Option Kit (PCHLLN000) is required
2) Assignment of public IP address is required to access central controller through internet please contact regional office to have detailed Internet connection configuration

Installation Scene



• Appropriate PI 485 should be used according to PDB
*AC Smart IV will be discontinued and replaced by AC Smart 5

CENTRALIZED CONTROL SOLUTION

AC EZ

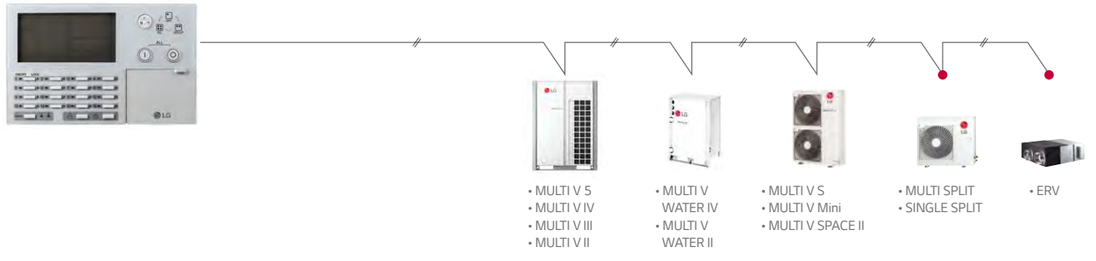
Easy to manage up to 32 indoor unit, including ERV with simple interface

PQCSZ250S0

Features

Model Name	PQCSZ250S0
Size (W x H x D, mm)	190 x 120 x 20
Interfaceable Products	MULTI V / ERV / ERV DX
Display	LED / LCD Display
Power	DC 12V
Maximum number of units	32
Individual / Group Control	On & Off / Mode / Temperature / Fan speed
Individual Controller Lock	All
Error Check	•
Slave Mode (Interlocking with higher level controller)	•
Schedule	Weekly

Installation Scene



• Appropriate PI 485 should be used according to PDB

CENTRALIZED CONTROL SOLUTION

ACP 5

AVAILABLE FROM MID 2018 ONWARDS

Advanced solution for BMS integration up to 256 units via BACnet and Modbus protocol as well as its own smart management function with web server interface

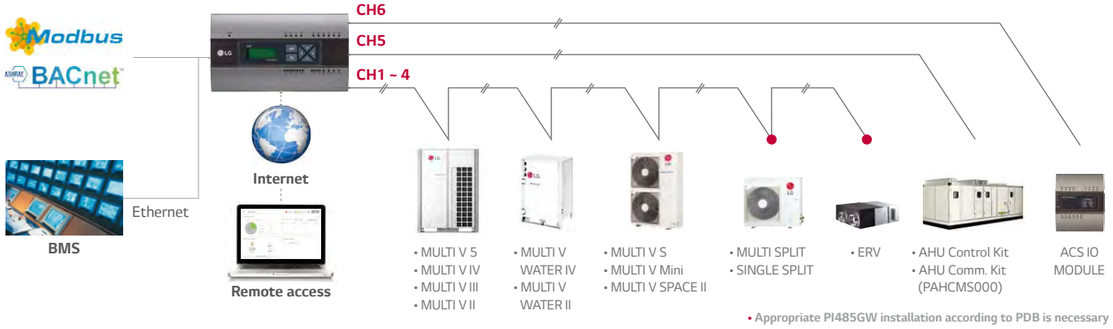
PACP5A000

Features

Model Name	PACP5A000
Size (W x H x D, mm)	270 x 155 x 65
Interfaceable Products	MULTI V / ERV / ERV DX / Hydro kit / THERMA V / AHU kit / LG Chiller[1)]
Maximum number of units	256
Individual / Group Control	On & Off / Mode / Temperature / Fan speed
Individual Controller Lock	Temperature / Mode / Fan speed / All
Advanced Function Setting and Display[2)]	Comfort Cooling / ODU Low Noise / ODU Defrost Mode / Comfort Level display / CO_2 Level display (for ERV/ERV DX) / Night Time Free Cooling (for ERV/ERV DX)
Error Check	•
Schedule	Weekly / Monthly / Yearly / Exception day
Web Access	•
Emergency Stop & Alarm Display	•
Power Consumption Monitoring (with PDI)	•
Auto Changeover / Setback	•
Temperature Limit	•
Operation Time Limit	•
Visual Navigation	•
Operation Trend	•
Interlock Control	•
Virtual Group Control	•
ODU Capacity Control	•
Energy Navigation (with PDI)	•
Daylight Saving Time	•
ACS IO Module Interlocking	Max. 16
External IO Port	DI 10 / DO 4
BMS Integration[3)]	BACnet IP / Modbus TCP
IPv6 Support	•

1) Chiller Option Kit (PCHLLN000) is required 2) It is only available in some products 3) For the detail point list, please refer to the installation manual

Installation Scene



• Appropriate PI485GW installation according to PDB is necessary

CENTRALIZED CONTROL SOLUTION

ACP IV

ACP IV can be integrated to the web system that allows user can access the control system online anytime, anywhere without access to PC or specific application

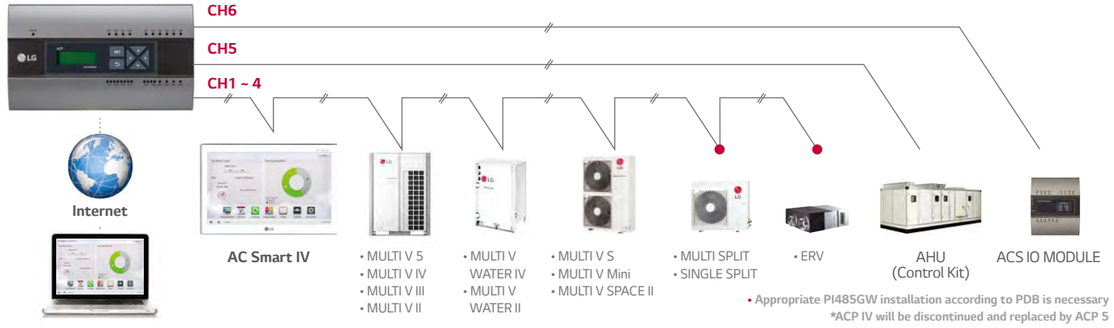
PACP4B000

Features

Model Name	PACP4B000
Size (W x H x D, mm)	270 x 155 x 65
Interfaceable Products	MULTI V / ERV / ERV DX / Hydro Kit / THERMA V / AHU Kit / LG Chiller[1)]
Maximum number of units	256
Individual / Group Control	On & Off / Mode / Temperature / Fan Speed
Individual Controller Lock	Temperature / Mode / Fan Speed / All
Error Check	•
Schedule	Weekly / Monthly / Yearly / Exception day
Web Access[2)]	•
Emergency Stop & Alarm Display	•
Power Consumption Monitoring (with PDI)	•
Auto Changeover / Setback	•
Temperature Limit	•
Operation Time Limit	•
Visual Navigation	•
Interlock Control	•
Virtual Group Control	•
ODU Capacity Control	•
Energy Navigation (with PDI)	•
Daylight Saving Time	•
ACS IO Module Interlocking	Max. 16
External IO Port	DI 10 / DO 4

1) Chiller Option Kit(PCHLLN000) is required
2) Assignment of public IP address is required to access central controller through internet please contact regional office to have detailed Internet connection configuration

Installation Scene



• Appropriate PI485GW installation according to PDB is necessary
*ACP IV will be discontinued and replaced by ACP 5

CENTRALIZED CONTROL SOLUTION

AC MANAGER 5

Multiple ACP and AC Smart integration solution to manage multi sites up to 8,192 units as a single system

PACM5A000

reddot award
User Interface Design

Features

Model Name	PACM5A000*
Size (W x H x D, mm)	270 x 155 x 65
Interfaceable Products	MULTI V / ERV / ERV DX / Hydro kit / THERMA V / AHU kit / LG Chiller[1)]
Maximum number of units	8,192 (supports 32 ACP IV/5 or AC Smart IV/5)**
Individual / Group Control	On & Off / Mode / Temperature / Fan speed
Individual Controller Lock	Temperature / Mode / Fan speed / All
Error Check	•
Schedule	Weekly / Monthly / Yearly / Exception day
Web Access	•
Emergency Alarm Display	•
Power Consumption Monitoring (with PDI)	•
Auto Changeover / Setback	•
Temperature Limit	•
Operation Time Limit	•
Visual Navigation	•
Operation Trend	•
Interlock Control	•
Virtual Group Control	•
ODU Capacity Control[1)]	•
Energy Navigation (with PDI)	•
ACS IO Module Interlocking	•

*AC Manager 5 requires ACP IV/5 or AC Smart IV/5
1) Chiller Option Kit (PCHLLN000) is required



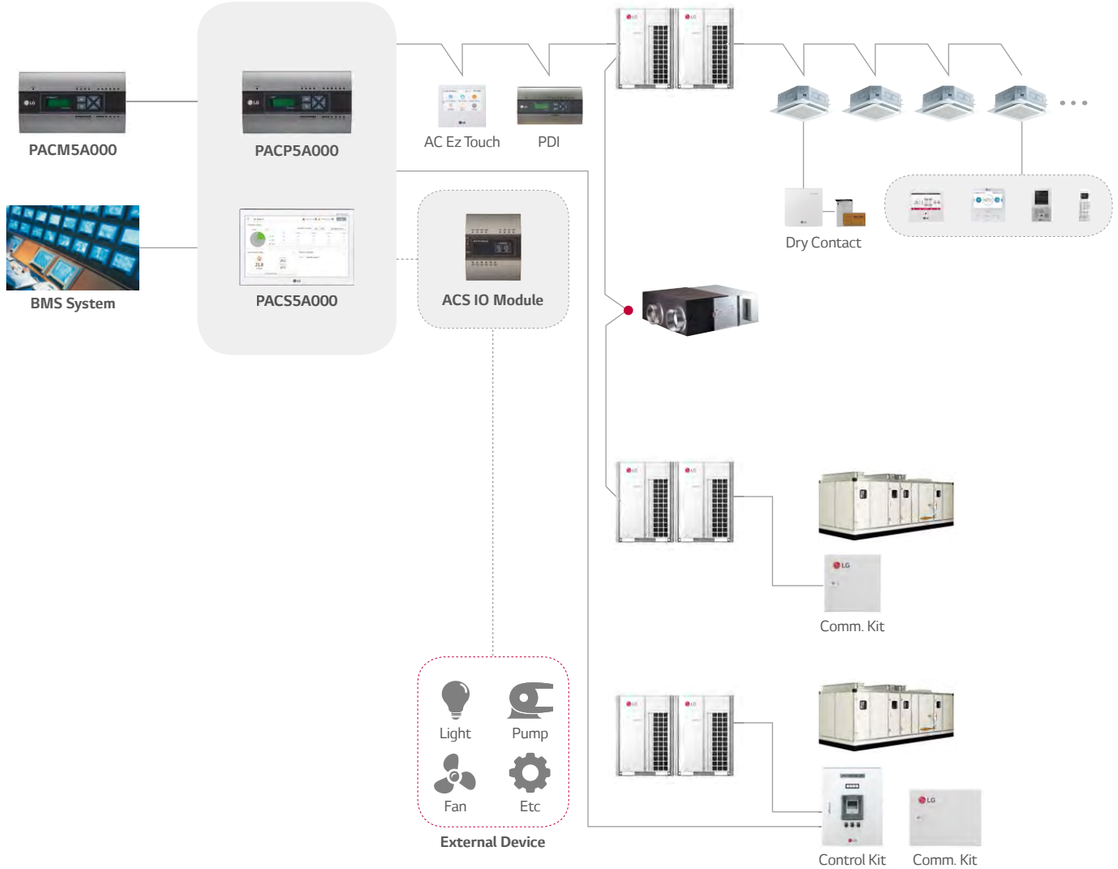

Schedule Function

Energy Management

Operation Trending Report

Automatic E-mail Sending

Solution Overview



• Appropriate PI 485 should be used according to PDB

CONTROL SOLUTION

SYSTEM INTEGRATION DEVICE

LINE-UP

Facility Integrator	Gateway for Protocol	PI-485
PDI (Power Distribution Indicator)  Premium (8 port) PQNUD1S40 Standard (2 port) PPWRDB000	**AC Smart BACnet(Modbus)**  PBACNA000	 For Outdoor Unit (SINGLE / MULTI / THERMA V) PMNFP14A1
ACS I/O Module  PEXPMB000	**ACP BACnet (Modbus)**  PQNFB17C0	 For Indoor Unit (Air-Conditioner, ERV) PHNFP14A0
Chiller Option Kit  PCHLLN000	**ACP Lonworks**  PLNWKB000	
	Modbus RTU Gateway  PMBUSB00A	
	KNX Gateway  LG-AC-KNX4 LG-AC-KNX8 LG-AC-KNX16 LG-AC-KNX64	

SYSTEM INTEGRATION DEVICE

PDI (POWER DISTRIBUTION INDICATOR)

PDI shows distributed power consumption of up to 128 indoor units

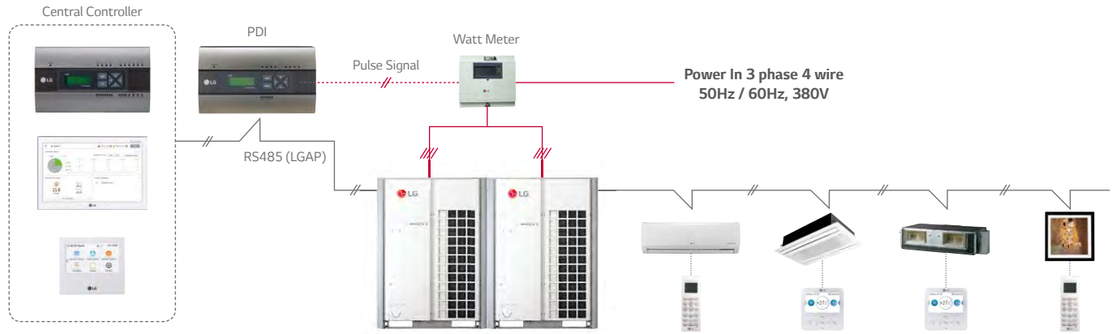
Premium
PQNUD1S40 (8 port)

Standard
PPWRDB000 (2 port)

Features

Model Name	PQNUD1S40	PPWRDB000
Size (W x H x D, mm)	270 x 155 x 65	
Interfaceable Products	Air conditioner, ERV DX	
Maximum Number of Power Meters	8	2
Maximum Number of Units	128	
Data Backup When Power Outage	•	
Power Input	PDI : AC 24V, Transformer : AC 220V	

Installation Scene



Power Cable for 3 Phase 4 Wire
Communication Cable (2 Wire Shielded Cable)
Pulse Signal Wire

* Power cable and type could be different from this scene depending on the Outdoor unit's specification
* Measured power consumption could be different between PDI and Watt meter
* Applicable Central Controller : ACP series (IV/5/BACnet/Lonworks), AC Smart series(IV/5/BACnet), AC Ez Touch Combination : we recommend you to connect separated watt meter for Outdoor units to have correct power distribution value

SYSTEM INTEGRATION DEVICE

ACS I/O MODULE

This module can be connected with ACP IV/5 or AC Smart IV/5 controller if additional I/O points such as DI/DO and AI/AO for 3rd party devices control and monitoring are needed.

PEXPMB000

Features

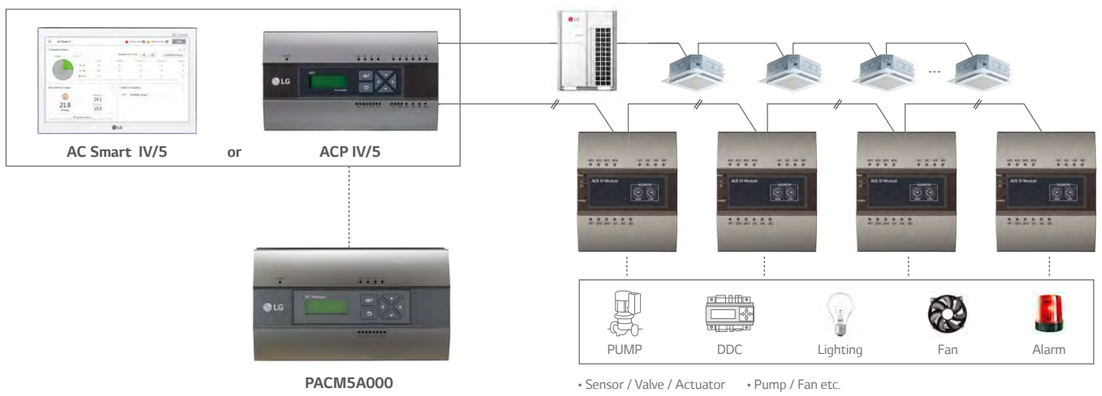
Model Name		PEXPMB000
Linkable Products		PACS4B000 PACS5A000 PACP4B000 PACP5A000
Communication	RS-485	1
I/O	Digital Input	3
	Digital Output	3
	Universal Input [1]	4
	Analog Output	4

Model Name		Min.	Max.
Analog Input	NTC 10k	0.68k Ω	177k Ω
	PT 1000	803 Ω	1,573 Ω
	Ni 1000	871.7 Ω	1,675.2 Ω
	DC (Voltage)	0V	10V
	DC (Current)	0mA	20mA
Analog Output	-	0V	10V
Digital Input	Binary Input (Non Voltage)	-	-
Digital Output	Normal open	-	30VAC / 30VDC, 2A

	PACS4B000	PACP4B000	PACM5A000
Number of Indoor Units	64 ~ 128	128 ~ 256	8,192
Max. I/O Points	130	238	1,260
Maximum Number of Node	9	16	-

*** Maximum number of Indoor units may be reduced by increasing the number of I/O points.**
1) The type of UI (Universal Input) is selectable among Digital Input and Analog Input

Installation Scene



*** D I : Digital Input, DO : Digital Output, UI : Universal Input, AO : Analog Output / Please contact our regional office to have connectable relay specification for analog output**
*** The type of UI (Universal Input) is selectable among Digital Input and Analog Input**

SYSTEM INTEGRATION DEVICE

CHILLER OPTION KIT

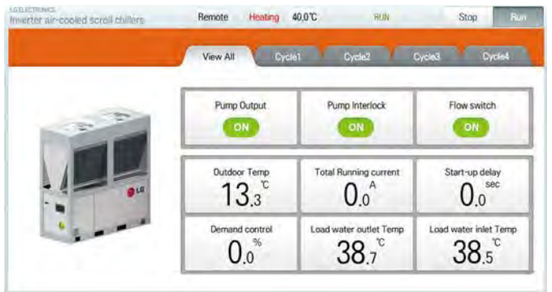
LG central controller IV and 5 series with Chiller Option Kit can provide LG chiller remote control and cycle monitoring

PCHLLN000

Features

Model Name	PCHLLN000
Monitoring Points	Evaporator status / Compressor status (Scroll, Screw, Centrifugal chiller only) Condensor status / Generator status (Abs. chiller only)
On/Off	•
Target Temp. setting	•
Mode Change	Scroll chiller only
Schedule	•
Interfaceable Products	Scroll, Screw, Centrifugal, Absorption (LG Only)

Cycle Display Example



SYSTEM INTEGRATION DEVICE

AC SMART BACNET

PBACNA000

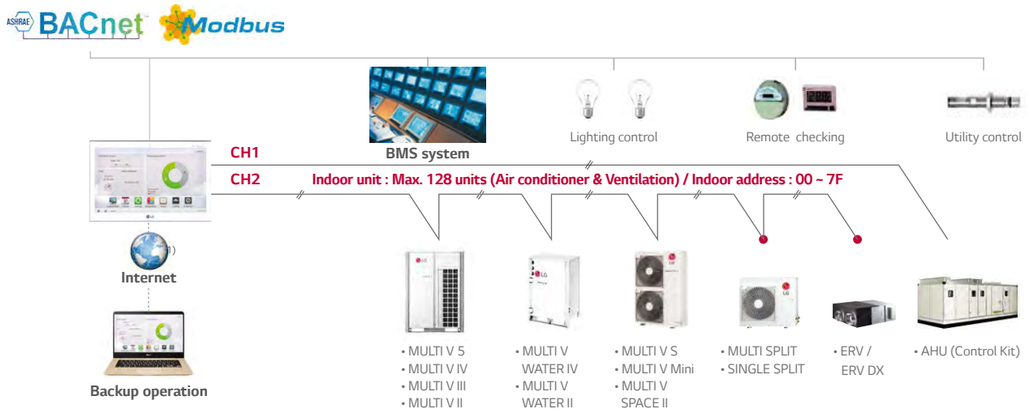
Features

- **Process Ability**
  - EHP Type : 128 units (Indoor / ERV / ERV DX / Hydro Kit / THERMA V)
  - AHU Control kit : Maximum 16 units
- **Self installation verification function on touch screen or using Internet (Web Server Included)**
  - Setting gateway
  - Diagnosis of communication status on LG Air-conditioner network
- **Modbus TCP Protocol Support**
- **BTL Certified (B-ASC)**
- **It offers a variety of functions as ACP which allows the customer to efficiently control various types of equipment from the customer's own Integration.**

* In case of using Modbus, the compatibility is different from BACnet. Refer to manual in detail.

Controlling	Monitoring Items
On / Off Command	On / Off Status
Operation Mode Setting	Operation Mode Status
Fan Speed Setting	Fan Speed Status
Lock Setting	Lock Status
Air Flow Setting	Air Flow Setting
Set Temperature Setting	Set Temperature Status
-	Current Space Temperature Status
-	Error Status
User Mode Setting (for only ERV)	User Mode Status (for only ERV)
-	Accumulator Power Distribution Status
Upper Limit Temp. Setting	Upper Limit Temperature Status
Low Limit Temp. Setting	Low Limit Temperature Status
Mode Lock Setting	Mode Lock Status
AC Operation Mode Setting (ERV DX only)	Air Conditioner Operation Mode Status (ERV DX only)
AC On / Off Command (ERV DX only)	Air Conditioner On / Off Status (ERV DX only)

Installation Scene



1) Assignment of public IP address is required to access central controller through internet.
*AC Smart BACnet will be discontinued and replaced by AC Smart 5

• Appropriate PI 485 should be used according to PDB

SYSTEM INTEGRATION DEVICE

ACP BACNET GATEWAY

PQNFB17C0

* Please refer PDRYCB500 for Modbus RTU

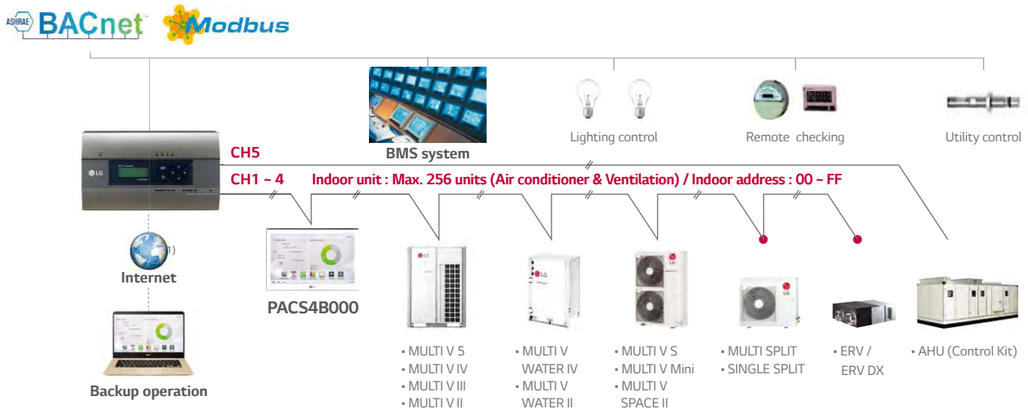
Features

- **Process Ability**
  - EHP Type : 256 units (Indoor / ERV / ERV DX / Hydro Kit / THERMA V)
  - AHU Control kit : Maximum 16 units
- **Self installation verification function using internet (Web Server Included)**
  - Setting gateway
  - Diagnosis of communication status on LG Air-conditioner network
- **Modbus TCP Protocol Support**
- **BTL Certified (B-ASC)**
- **It offers a variety of functions as ACP which allows the customer to efficiently control various types of equipment from the customer's own Integration.**

* In case of using Modbus, the compatibility is different from BACnet. Refer to manual in detail.

Controlling	Monitoring Items
On / Off Command	On / Off Status
Operation Mode Setting	Operation Mode Status
Fan Speed Setting	Fan Speed Status
Lock Setting	Lock Status
Air Flow Setting	Air Flow Setting
Set Temperature Setting	Set Temperature Status
-	Current Space Temperature Status
-	Error Status
User Mode Setting (for only ERV)	User Mode Status (for only ERV)
-	Accumulator Power Distribution Status
Upper Limit Temp. Setting	Upper Limit Temperature Status
Low Limit Temp. Setting	Low Limit Temperature Status
Mode Lock Setting	Mode Lock Status
AC Operation Mode Setting (ERV DX only)	Air Conditioner Operation Mode Status (ERV DX only)
AC On / Off Command (ERV DX only)	Air Conditioner On / Off Status (ERV DX only)

Installation Scene



1) Assignment of public IP address is required to access central controller through internet.
*ACP BACnet will be discontinued and replaced by ACP 5

• Appropriate PI 485 should be used according to PDB

SYSTEM INTEGRATION DEVICE

ACP LONWORKS GATEWAY

PLNWKB000

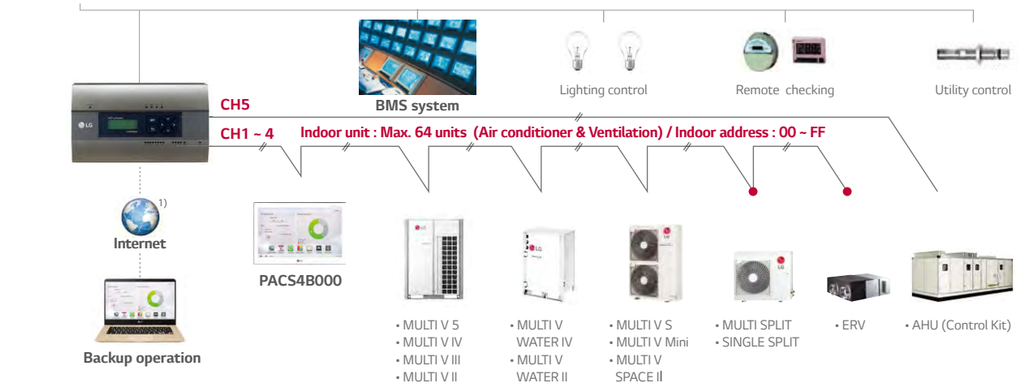
Features

- **Process Ability**
  - EHP Type : 64 units (Indoor / ERV / Hydro Kit / THERMA V)
  - AHU Control kit : Maximum 16 units
- **Connect to use Lonworks® protocol and LG air conditioner protocol.**
- **Self installation verification function using internet (Web Server Included)**
  - Setting gateway
  - Diagnosis of communication status on LG Air-conditioner network
- **It offers a variety of functions as ACP which allows the customer to efficiently control various types of equipment from the customer's own Integration.**

Controlling	Monitoring Items
On / Off Command	On / Off Status
Operation Mode Setting	Operation Mode Status
Fan Speed Setting	Fan Speed Status
Lock Setting	Lock Status
Air Flow Setting	Air Flow Setting
Set Temperature Setting	Set Temperature Status
-	Current Space Temperature Status
-	Error Status
-	Accumulator Power Distribution Status
Upper Limit Temperature Setting	Accumulator Power Distribution Status
Low Limit Temperature Setting	Low Limit Temperature Setting
Mode Lock Setting	Mode Lock Status
Peak Operation Ratio Setting	Peak Operation Ratio Setting
All On / Off Setting	-
-	Total Accumulate Power Status

Installation Scene

LONWORKS®



1) Assignment of public IP address is required to access central controller through internet.

• Appropriate PI 485 should be used according to PDB

SYSTEM INTEGRATION DEVICE

MODBUS RTU GATEWAY

AVAILABLE FROM MID 2018 ONWARDS

Providing Modbus RTU connection between LG Air conditioners and BMS

PMBUSB00A

Features

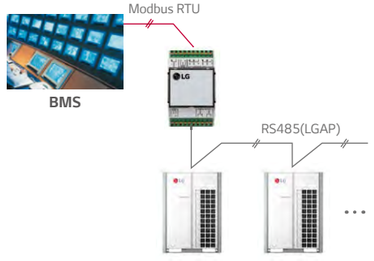
- **Function**
  - MODBUS RTU communication with MODBUS master controller
  - Applicable for MULTI V
  - Max. 16 IDUs with single module / Max. 64 IDUs with 4 modules
  - MODBUS RTU slave (RS485) / 9,600 bps
  - Size (W*H*D) : 53.6 x 89.7 x 60.7
  - Power : DC 12V
- **Modbus Memory Map***

Register	Read	Write	Description	Notes
00001	•	•	Operation	0 : Off / 1 : On
00002	•	•	Total Lock	0 : Unlock / 1 : Lock
00005	•	•	Auto Swing	0 : Manual / 1 : Auto
00006	•	•	Operation Mode Lock	0 : Unlock / 1 : Lock
00007	•	•	Fan Speed Lock	0 : Unlock / 1 : Lock
00008	•	•	Set Temperature Lock	0 : Unlock / 1 : Lock
10001	•	-	Error Alarm	0 : Normal / 1 : Error
10002	•	-	Thermo On / Off	0 : Thermo Off / 1 : Thermo On
30001	•	-	Error Code	0 ~ 255
30002	•	-	Pipe In Temperature	Degrees C x 10
30003	•	-	Pipe Out Temperature	Degrees C x 10
30004	•	-	Room Temperature	Degrees C x 10
40001	•	•	Operation Mode	0 : Cooling / 1 : Dry / 2 : Fan / 3 : Auto / 4 : Heating
40002	•	•	Set Temperature	Degrees C x 10
40003	•	•	Fan Speed	1 : Low / 2 : Medium / 3 : High / 4 : Auto

Installation Scene

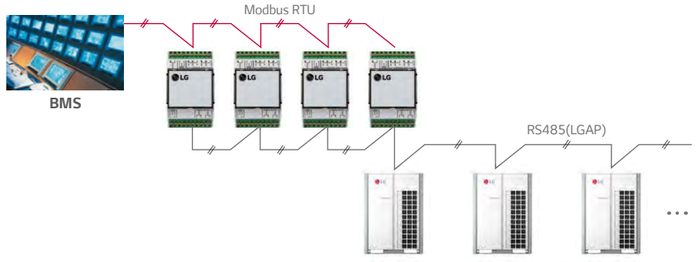
- **Single module**

Max. 16 indoor units with a single module



- **Multiple module**

Max. 64 indoor units with 4 modules in one Modbus communication line



Max. 16 outdoor units in one RS485(LGAP) line

SYSTEM INTEGRATION DEVICE

KNX GATEWAY [1)]

Specially designed to allow monitoring and bidirectional control of all the parameters and functionality of LG air conditioners from KNX installations

LG-AC-KNX4 / LG-AC-KNX8
LG-AC-KNX16 / LG-AC-KNX64

Features

- Easy installation, direct connection to all outdoor units (communication interface PMNFP14A1, when needed) and Heat recovering units (communication interface PHNFP14A0, when needed) through the RS485 Bus.
- Great integration flexibility. Using the supplied software LinkBoxEIB, a complete set of communication objects can be accessed.
- Direct connection to KNX bus
- Independent management of communications
- Power supply : 9 to 24V DC or 24V AC
- Standard DIN-Rail 6 modules enclosure
- Maximum connection unit
- LG Slave Central controller (for example, AC Smart) and PDI can be operated with KNX gateway.

Model Name	Max. Connection Units
LG-AC-KNX4	4
LG-AC-KNX8	8
LG-AC-KNX16	16
LG-AC-KNX64	64

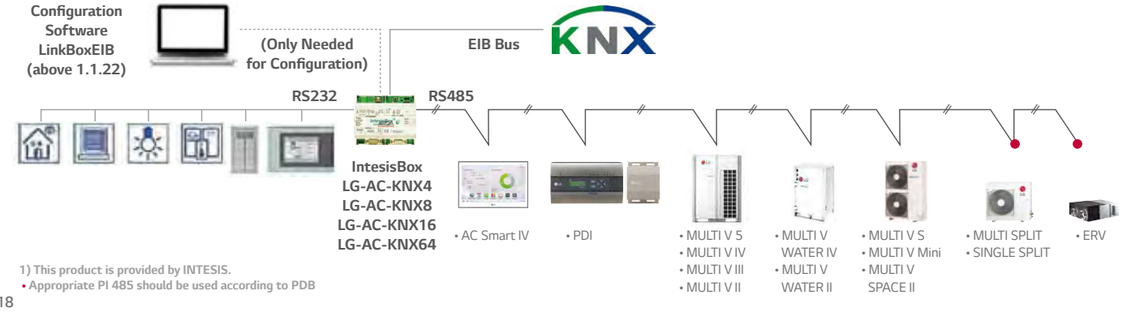
Link BoxEIB Configuration Software for IntesisBox® KNX serious

Easy to use tool for the configuration of intesisBox, in a fast and effective way.
It offers the maximum integration possibilities with a minimal knowledge required on the system to be integrated.

LinkBoxEIB
Configuration software

- Only needed during configuration.
- One single tool for the configuration of the whole range of IntesisBox KNX series gateways.
- Supplied with IntesisBox with no additional cost.
- Configuration examples for all systems that can be integrated.
- Mapping table editable using excel, allowing a simple and fast association of KNX Group Addresses, exported from ETS, to IntesisBox's datapoints.
- Includes powerful and useful features for configuration, setup and troubleshooting.

Installation Scene



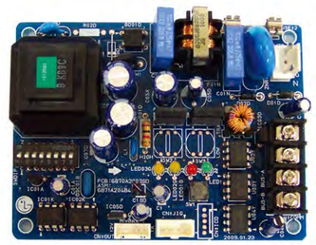
1) This product is provided by INTESIS.
• Appropriate PI 485 should be used according to PDB

SYSTEM INTEGRATION DEVICE

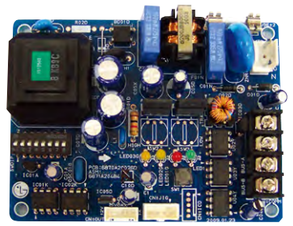
PI 485

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

PMMFP14A1 / PHNFP14A0



Features



- **Model Name : PMNFP14A1**
- **Power : Single Phase AC 220V 50/60Hz**
- **1 for Each Outdoor Unit**

- MULTI V MINI (ARUN40GS2A / ARUV40GS2A Only needs PI485)
- SINGLE SPILIT - MULTI SPLIT - THERMA V

- **Model Name : PHNFP14A0**
- **Power : Connected with the Indoor Units**
- **1 for Each Indoor Unit**

- Indoor Unit (Air-Conditioner, ERV)

*** MULTI V PLUS II & MULTI V III & MULTI V IV series do not require any other PI 485 since these series have PI 485 in its outdoor unit PCB.**

OTHER INTEGRATION CONTROL SOLUTION

OTHER INTEGRATION CONTROL SOLUTION

LINE-UP

Indoor Unit		Outdoor Unit	AHU Kit
Dry Contact	**Control Accessory**		
Simple Dry Contact PDRYCB000	Group Control Wire PZCWRCG3	IO Module (Input / Output Module) PVDSMN000	Communication Kit PAHCMR000
2 Points Dry Contact PDRYCB400	Remote Temperature Sensor PQRSTA0	Dry Contact for Demand Control PQDSBCDVM0	PAHCMS000
Dry Contact for Thermostat PDRYCB300	Zone Controller ABZCA	Variable Water Flow Control Kit PWFCKN000	Control Kit PRCKD21E PRCKD41E
For Modbus PDRYCB500		PRVC0	EEV Kit (Electronic Expansion Valve) PRLK048A0 / PRLK096A0
		Low Ambient Kit PRVC2	TXV Kit (Thermal Expansion Valve) PATX13A0E / PATX20A0E PATX25A0E / PATX35A0E PATX50A0E
		Cool / Heat Selector PRDSBM	

DRY CONTACT

Connection between an indoor unit and external devices to control various functions

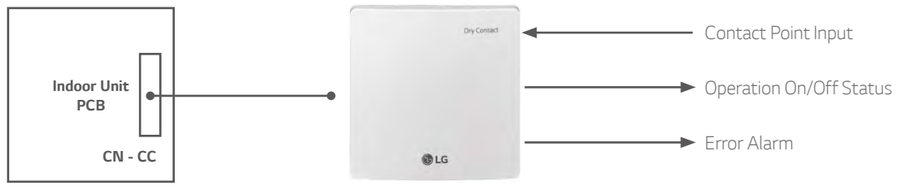
PDRYCB000

Features

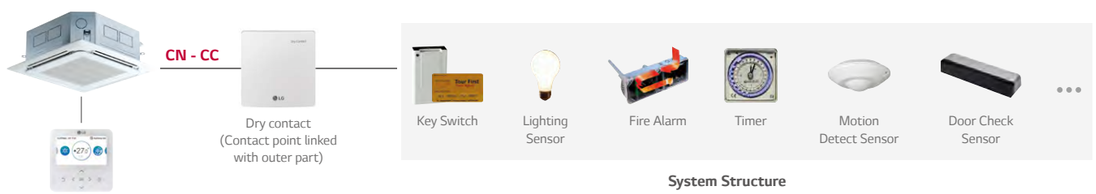
Model Name	PDRYCB000
Contact Point	1 Contact Point
Contact Voltage Rating	AC 220V
On / Off Control	•
Error Alarm Output	•
Operation On / Off Output	•
Rotary Switch 1 (Set Temperature selection)	-
Rotary Switch 2 (Operation Logic selection)	-
Size (W x H, mm)	120 x 120

* Refer to each models PDB for applicable models. * Maximum operation AC : 3A
* 4th generation indoor unit has 1 contact point function for On / Off control. But in case of using more function of Dry Contact besides On / Off control, Dry Contact is needed.

Signal Point



Installation Scene



System Structure

PDRYCB400

Features

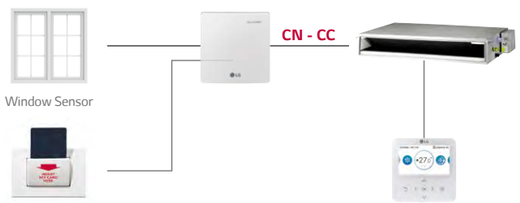
Model Name	PDRYCB400
Contact Point	2 Contact Point
Contact Voltage Rating	DC 5 ~ 12V / Non Voltage
On / Off Control	•
Error Alarm Output	•
Operation On / Off Output	•
Rotary Switch 1 (Set Temperature selection)	•
Rotary Switch 2 (Operation Logic selection)	•
Size (W x H, mm)	120 x 120

* Refer to each models PDB for applicable models. * Maximum operation AC : 3A
* 4th generation indoor unit has 1 contact point function for On / Off control. But in case of using more function of Dry Contact besides On / Off control, Dry Contact is needed.

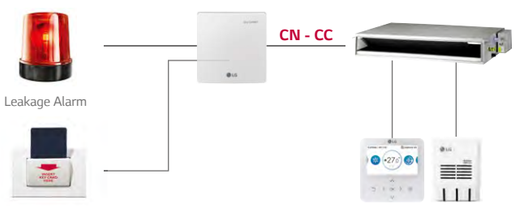
Signal Point

Installation Scene

2 inputs interworking



Refrigerant leakage detection alarm



OTHER INTEGRATION CONTROL SOLUTION

DRY CONTACT

Connection between an indoor unit and external devices to control various functions

PDRYCB300

Features

Model Name	PDRYCB300
Contact Voltage Rating	DC 5 ~ 12V / Non Voltage
On / Off Control	•
Mode Control	•
Fan Speed Setting	•
Thermo Off	•
Error Alarm Output	•
Operation On / Off Output	•
Rotary Switch 1 (Set Temperature Selection)	•
Rotary Switch 2 (Operation Logic Selection)	•
Size (W x H, mm)	120 x 120

Signal Point

Installation Scene

* Please contact our regional office to have full compatible room controller list

PDRYCB500

Features

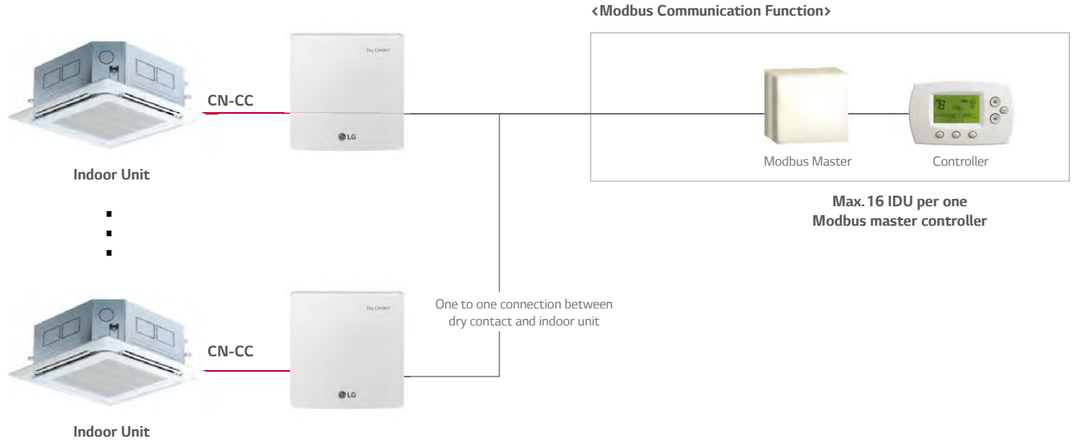
Function

- MODBUS communicate with MODBUS master controller
- Max. 16 IDUs can be connected with one MODBUS master controller
- MODBUS RTU slave / 2 wire RS485 / 9,600bps
- Size (W x H x D) : 120mm x 120mm x 36.5mm

Memory map

Register	Name	Range	Notes
00001	Operation	0 ··· 1	0 : Stop, 1 : Run
30003	Indoor temperature	100 ··· 400	Degrees C x 10
30100	Error alarm	0 ··· 1	0 : No Error, 1 : Error
40001	Set run mode	0 ··· 4	0 : Cooling, 1 : Dry, 2 : Fan, 3 : AI, 4 : Heating
40002	Set temperature	180 ··· 300	Degrees C x 10
40015	Set fan speed	1 ··· 3	1 : Low, 2 : Middle, 3 : High

Installation Scene



* Please contact out regional office to check the compatibility with 3rd party room controller

CONTROL SOLUTION

OTHER INTEGRATION CONTROL SOLUTION

GROUP CONTROL WIRE

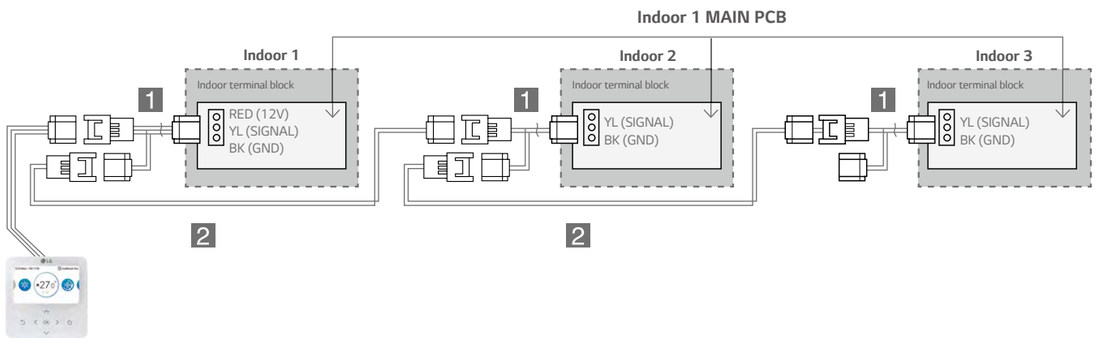
Cables used to connect a wired remote controller up to 16 indoor units

PZCWRCG3

Features

Model Name	PZCWRCG3
Y-type Cable	0.25m Length
Long Cable	9.6m Length

Installation Scene



Note : 1 Y type Cable assembly for connecting indoor unit and low cable.
2 Long Cable assembly for connecting indoor to indoor.
- Please connect cable assembly Y type Cable with already connected indoor unit.

OTHER INTEGRATION CONTROL SOLUTION

REMOTE TEMPERATURE SENSOR

Sensor for detecting the room temperature

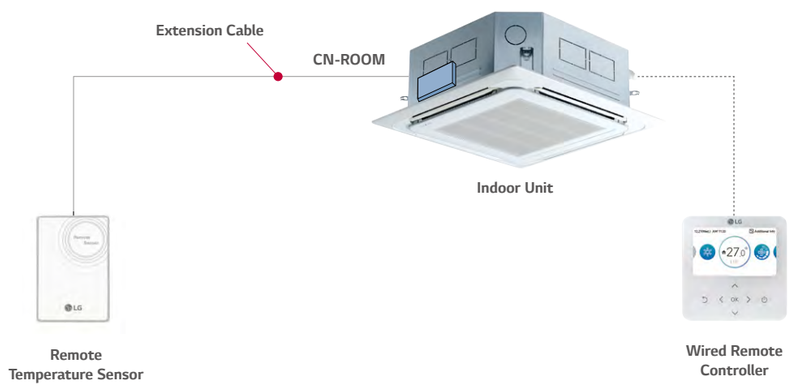
PQRSTA0

Features

- It detects the exact room temperature instead of indoor unit's air temperature sensor
- Applied to Ceiling Mounted Cassette, Ceiling Concealed Duct, THERMA V and Hydro Kit
- Extension cable (15m) is included

Installation Scene

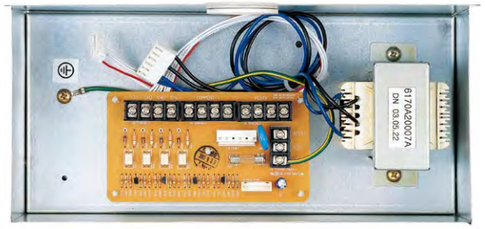
1. Wire to the control box in the indoor unit by removing the existing thermistor and connect the extension cable its place.
2. Cut the extension cable to the appropriate length and connect the screw terminal of the remote sensor.



ZONE CONTROLLER

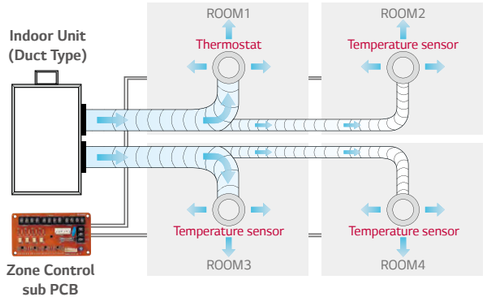
Controls air conditioning in up to 4 zones by external thermostat

ABZCA



Features

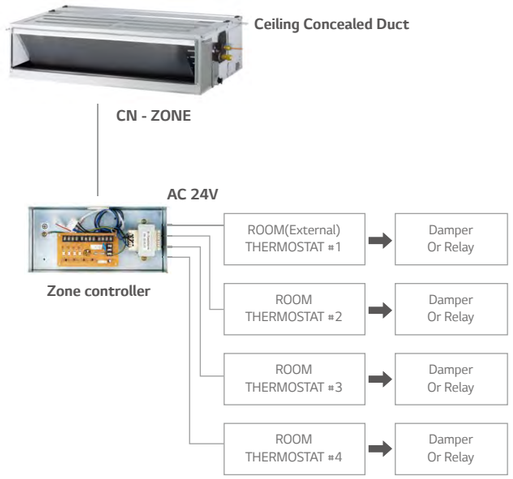
- Controls different zones (up to 4 zones) by external thermostat (AC a24V)
- Maintain proper air volume of each zone
- Auto variation of dampers
- Auto control of fan speed and On / Off operation

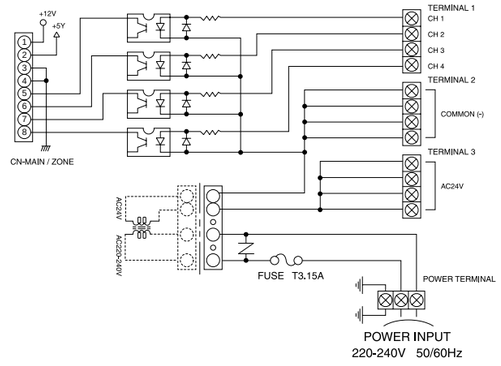


Models Applied

- Ceiling Concealed Duct (refer to PDB for applicable models)

Wiring Diagram





IO MODULE

Interface module between system air conditioner's outdoor unit and external device

PVDSMN000

Features

Function

- Demand control
- Output outdoor or indoor unit operation status
- Low noise operation
- Output error status

Description

- IO Module is communication interface module for connection between MULTI V 5 and external IO (Input / Output Module) devices.

Note : IO Module is not compatible for MULTI V III

Models Applied

- MULTI V 5
- MULTI V WATER IV
- MULTI V IV
- MULTI V S

Part Description

1) Digital Input Part (DI : Dry Contact Input)

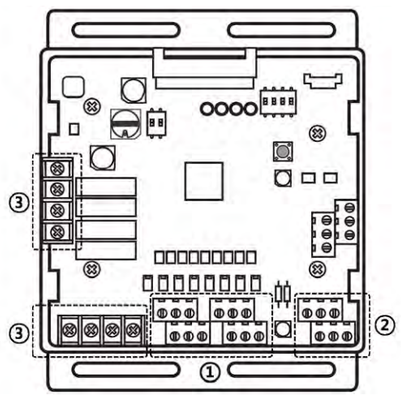
- Demand control by contact input (3 Step)
- Low Noise Operation input
- Priority Setting input :
  Setting the priority of demand control command
  (Capacity control for external signal from DDC vs Peak control by LG Central controller)
  - Open : External signal has priority to central controller (Default)
  - Close : Central controller has priority to external signal

2) Analog Input Part (AI : DC 0 ~ 10V)

- Demand control by analog input (10 Step)

3) Digital Output Part (DO : 250VAC, Max 1A)

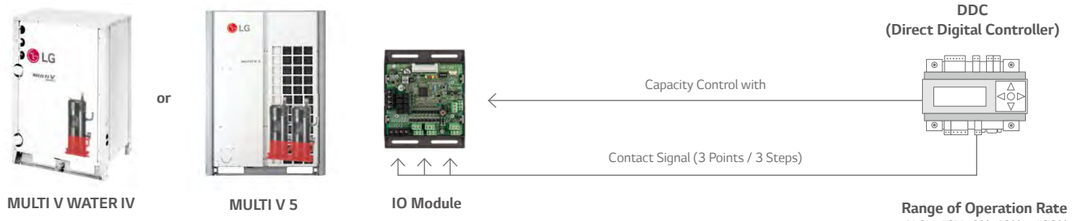
- Error status relay output
- Operation status relay output
- Valve control



Installation Scene

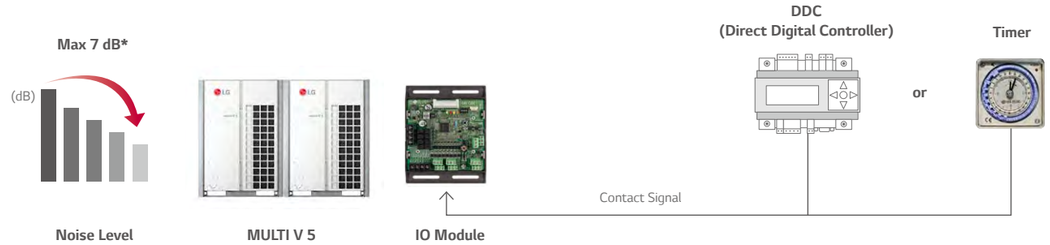
Demand Control

Provides variable setting for demand control according to input method to reduce power consumption.
This function supports 2 types of input signal : AI (0 ~ 10V, 10 Step) and contact signal (3 Step).



Low Noise Operation

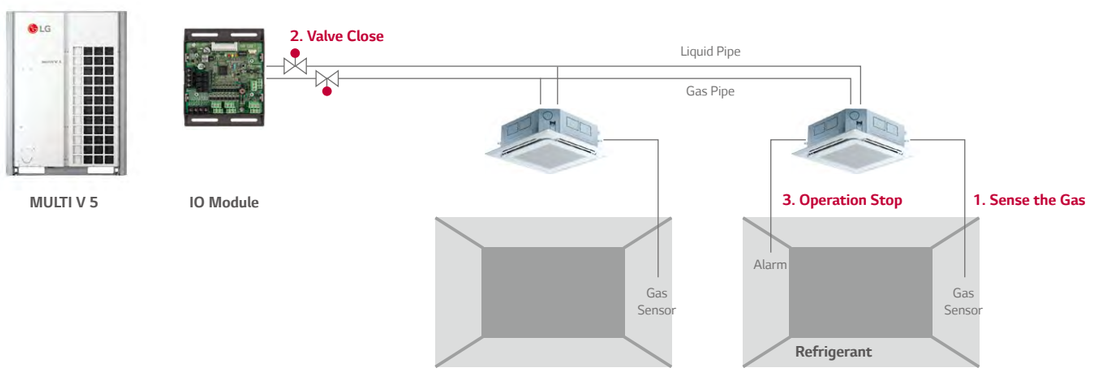
To reduce noise level , control outdoor unit's fan speed by dry contact input.



*** 8 HP model, Sound power level can be changed by outdoor unit operation status and low noise operation input signal.**

Refrigerant Leakage detection with Pump-down

For safety, IO module close refrigerant valve with Pump-down



OTHER INTEGRATION CONTROL SOLUTION

VARIABLE WATER FLOW CONTROL KIT

Accessory developed for controlling the water flow

PWFCKN000 (MULTI V WATER IV)
PRVC0 (MULTI V WATER II)

Features

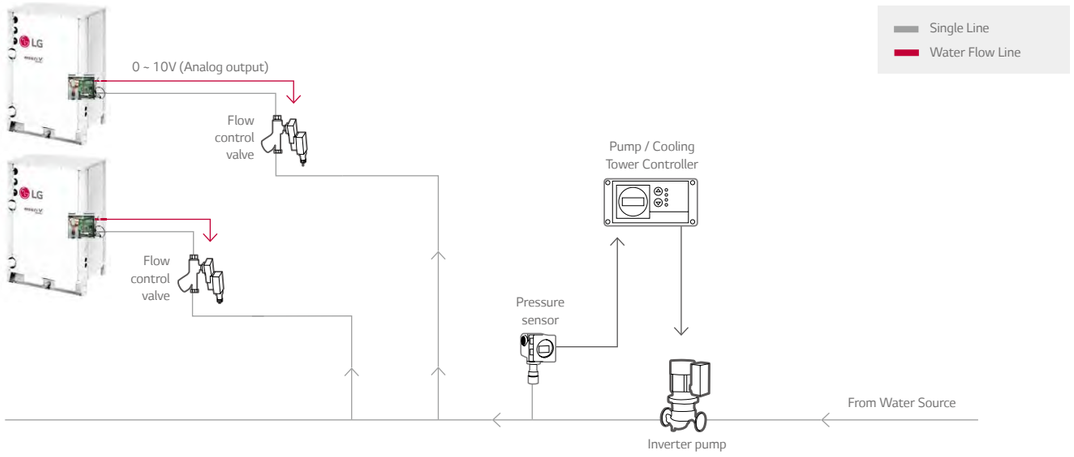
Function

- Water pump or valve control (0 ~ 10V)
- Minimum output voltage setting available
- Operation, error output (250VAC, Max 1A)
- Dry contact input and analog output for demand control
- Digital output for operation, error status (250VAC, Max 1A)

Advantage

- Water flow consumption reduction
- Pump electricity consumption reduction
- Including IO Module (Dry contact input, Analog input / output, Digital output)
  : Using Dry contact and variable water flow control function simultaneously

Wiring Diagram



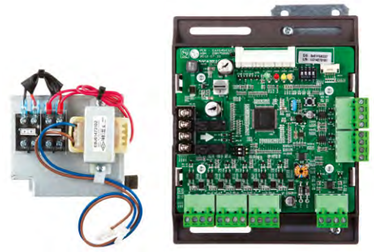
• Flow control valve : Regulates the flow or pressure of a fluid, normally responding to signals generated by independent devices.
• Flow Meter : Measures mass flow rate of a fluid traveling through a tube. (The mass flow rate is the mass of the fluid traveling past a fixed point per unit time.)
• Pressure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

OTHER INTEGRATION CONTROL SOLUTION

LOW AMBIENT KIT

External integration module for cooling operation with -25°C low ambient temperature.

PRVC2



Features

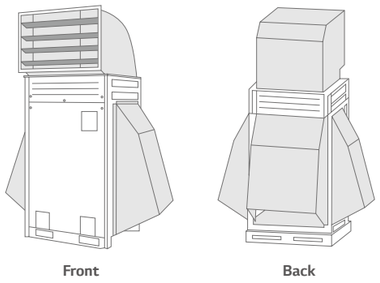
Function

- 25°C Low ambient cooling operation by Low ambient kit and hood with damper (Analog output 0 ~ 10V)
- Demand control
- Low noise operation
- Output outdoor or indoor unit operation status (250VAC, Max 1A)
- Output error status (250VAC, Max 1A)

Description

- Low ambient kit supports -25° C cooling operation by making stable condensing pressure with reducing air flow rate from hood and damper control given 0 ~ 10V proportional to condensing pressure.
- Low ambient kit provides IO Module function.
- External snow hood and air damper are required for this item.*
- Transformer and terminal block are included.

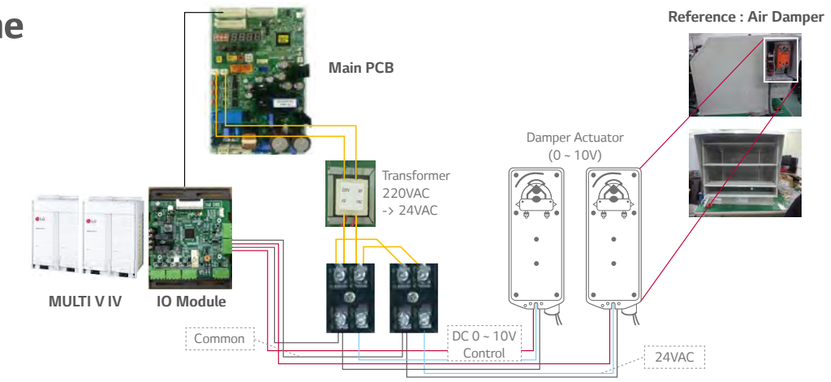
*** Before apply this accessory, please contact regional sales office.**



Models Applied

• MULTI V IV

Installation Scene



Note : The IO Module can control maximum three actuators. Please, review damper actuator's installation manual.

OTHER INTEGRATION CONTROL SOLUTION

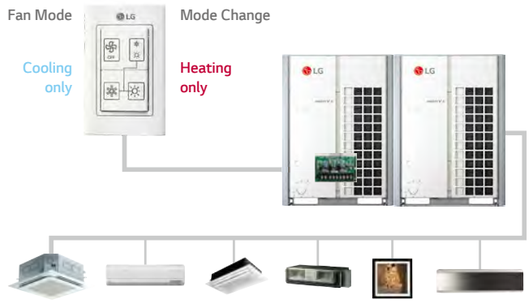
COOL / HEAT SELECTOR

Cooling, heating, or fan mode can be selected to prevent cooling and heating mixing errors during seasonal changes

PRDSBM

Features

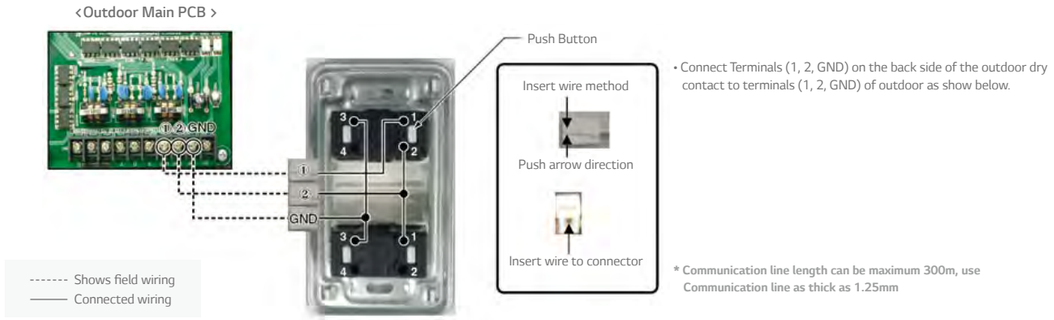
- Indoor unit mode control without central controller
- Select operation mode : Cooling, Heating, Fan mode
- Mode lock for cooling & heating mixing error-proof during the change of season



Models Applied

- MULTI V 5
- MULTI V WATER II
- MULTI V SPACE II
- MULTI V IV
- MULTI V S
- MULTI V WATER IV
- MULTI V WATER S
- MUL TI V PLUS II, MULTI V PLUS
- MULTI V MINI

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 1.25mm**

OTHER INTEGRATION CONTROL SOLUTION

AHU KITS

A solution to connect LG's high efficiency system to the DX coil of an air handling unit for the maximum energy savings

COMMUNICATION KIT

NEW! PAHCMR000 NEW! PAHCMS000

CONTROL KIT

PRCKD21E / PRCKD41E

EEV KIT

PRLK048A0
PRLK096A0

TXV Kit (Thermal Expansion Valve)

PATX13A0E / PATX20A0E
PATX25A0E / PATX35A0E
PATX50A0E

Specifications

Communication & Control Kit

Type	Model	Combination				Description	Dimensions (mm)		
		Outdoor Unit	EEV Kit	TXV Kit	Centralized Controller		W	H	D
Communication kit	PAHCMR000	Multi V	•	•	•	Return / room air temperature control by DDC or LG individual / centralized controller	300	300	155
		Single Split	-	-	•				
	PAHCMS000	Multi V	•	•	•	Discharge air temperature control by DDC or LG individual / centralized controller	380	300	155
		Single Split	-	-	•				
Control kit	PRCKD21E	Multi V	-	•	•	Max capacity 1~4 master outdoor unit	600	750	285
	PRCKD41E	Multi V	-	•	•	Max capacity 5~8 master outdoor unit	600	750	285

Expansion Valves

Type	Model	Capacity Range	Pipe Diameter (mm)				Dimensions (mm)		
			Liquid (ODU)	Liquid (AHU)	Gas (ODU)	Gas (AHU)	W	H	D
EEV Kit (Electronic Expansion Valve)	PRLK048A0	1.3 ~ 10 HP	12.7	12.7	-	-	217	404	83
	PRLK096A0	12 ~ 20HP	12.7	12.7	-	-	217	404	83
TXV Kit (Thermal Expansion Valve)	PATX13A0E	8 ~ 16HP	15.88	15.88	22.22	22.22	491	238	174
	PATX20A0E	18 ~ 26HP	15.88	22.22	28.58	28.58	491	238	174
	PATX25A0E	28 ~ 36HP	22.22	28.58	34.92	34.92	491	238	174
	PATX35A0E	38 ~ 46HP	28.58	34.92	41.3	41.3	491	238	174
	PATX50A0E	48 ~ 56HP	28.58	34.92	41.3	41.3	561	291	192

Communication Kit

HIGH ENERGY EFFICIENCY

LG's DX AHU solutions are capable of performing all indoor air conditioning tasks with success under all operating conditions thanks to their superior performance with high efficiency heat source system.

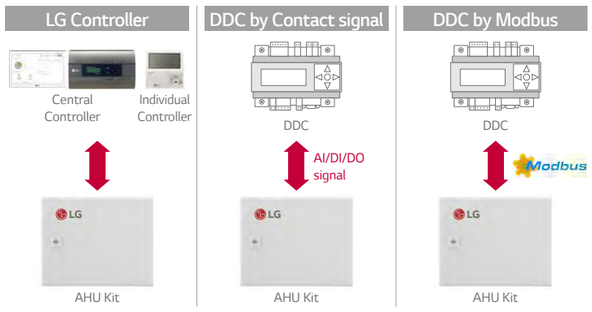
Solution benefits offer the following advantages:
- High energy efficiency inverter system
- Large range of expansion valves
  : 1.3 ~ 20 HP EEV Kit, 8 ~ 56 HP TXV Kit
- Connected to various heat sources
  : MULTI V, MULTI V WATER, MULTI V S, SINGLE SPLIT

DIVERSE OPTIONS FOR CONTROL

AHU communication kit can be connected to various control system such as LG individual/central controller and DDC*.
It can be directly connected to DDC without separated controller, so DDC can receive product control and monitor information through contact signal or Modbus protocol.

- Direct wiring between DDC and AHU communication kit
  - Embedded Digital I/O and Analog Input
  - Modbus RTU protocol supported
- LG Individual/Central controller supported
  - LG controller stand alone or combination with DDC

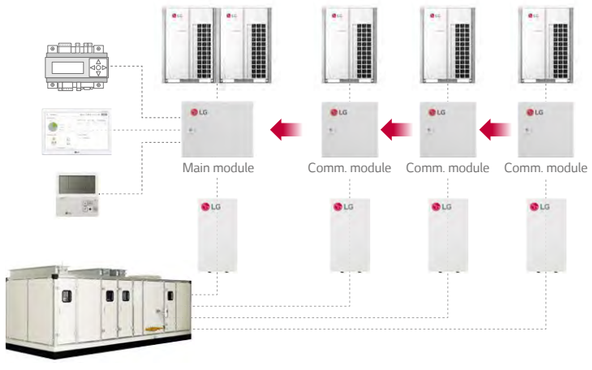
*DDC : Direct Digital Controller



EXPANDABLE SYSTEM DESIGN

LG AHU system can be a suitable solution for various sites due to its application flexibility and wide range of line up with large capacity models. According to the required capacity, a single or multiple module combination is possible thanks to AHU communication kit's modular design.

- Multiple module combination for large capacity AHU



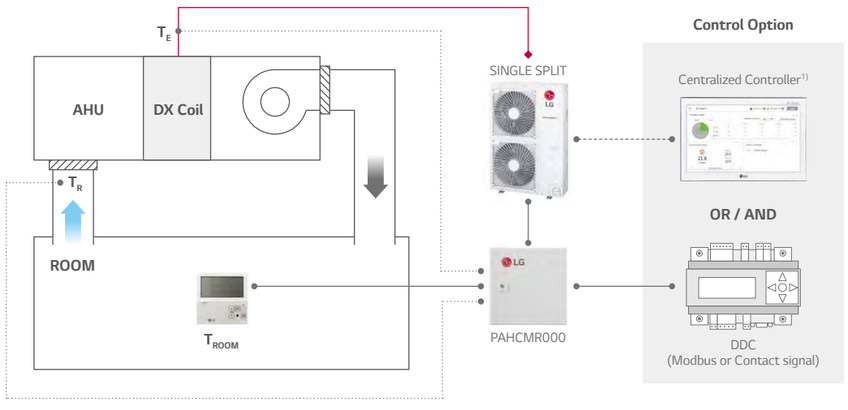
AHU KITS

Communication Kit Application

Small Capacity with Single Split + Return / Room Air Temperature Control

- Temp. Sensors
- Comm. Line
- Central Comm. Line to ODU
- Ref. Pipe

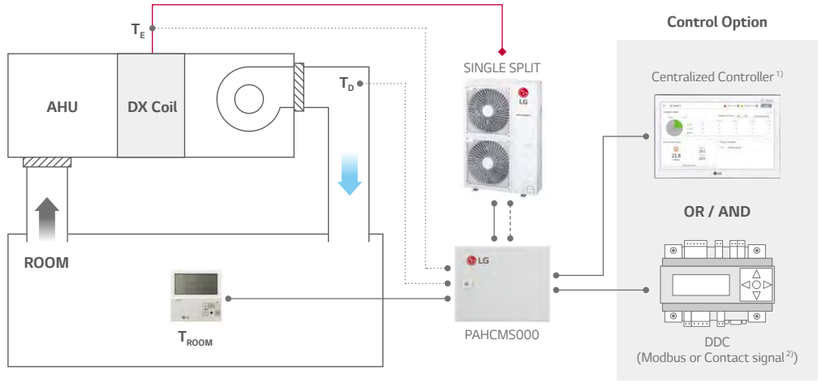
T_E = Evaporator Temperature (Liquid Pipe / Gas Pipe)
T_R = Return Air Temperature
T_{ROOM} = Room Air Temperature



Small Capacity with Single Split + Discharge Air Temperature Control

- Temp. Sensors
- Comm. Line
- Central Comm. Line to ODU
- Ref. Pipe

T_E = Evaporator Temperature (Liquid Pipe / Gas Pipe)
T_D = Discharge Air Temperature
T_{ROOM} = Room Air Temperature



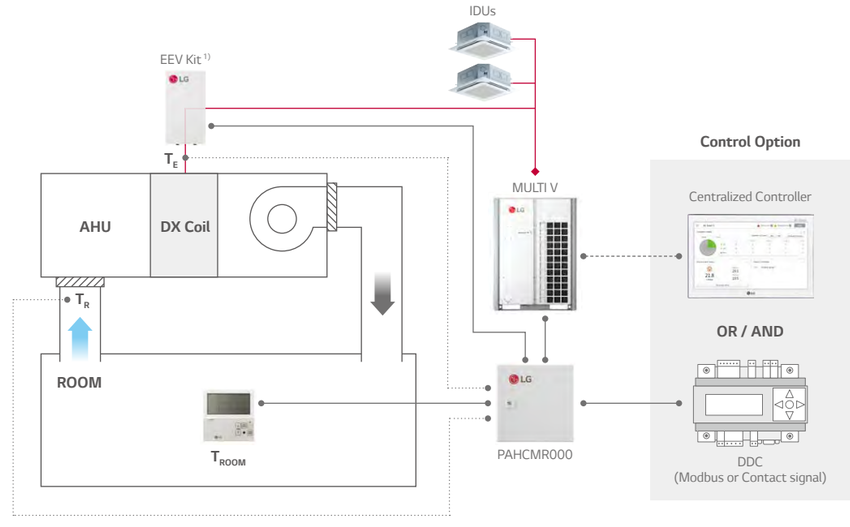
Note
1) PI485(PMNFP14A1) is required for centralized controller
2) In case of applying DDC with contact signal, discharge air temperature should be measured and controlled by DDC
3) For more detail, please refer to the PDB

Communication Kit Application

Small-Medium Capacity with MULTI V + EEV Kit + IDU + Return / Room Air Temperature Control

- Temp. Sensors
- Comm. Line
- Central Comm. Line to ODU
- Ref. Pipe

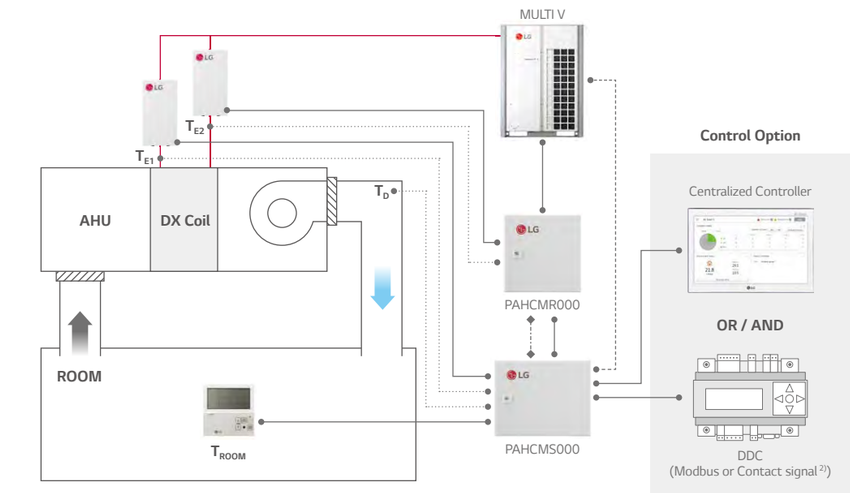
T_E = Evaporator Temperature (Liquid Pipe / Gas Pipe)
T_R = Return Air Temperature
T_{ROOM} = Room Air Temperature



Small-Medium Capacity with MULTI V + EEV Kit + Discharge Air Temperature Control

- Temp. Sensors
- Comm. Line
- Central Comm. Line to ODU
- Ref. Pipe
- Comm. Line between modules

T_E = Evaporator Temperature (Liquid Pipe / Gas Pipe)
T_D = Discharge Air Temperature
T_{ROOM} = Room Air Temperature

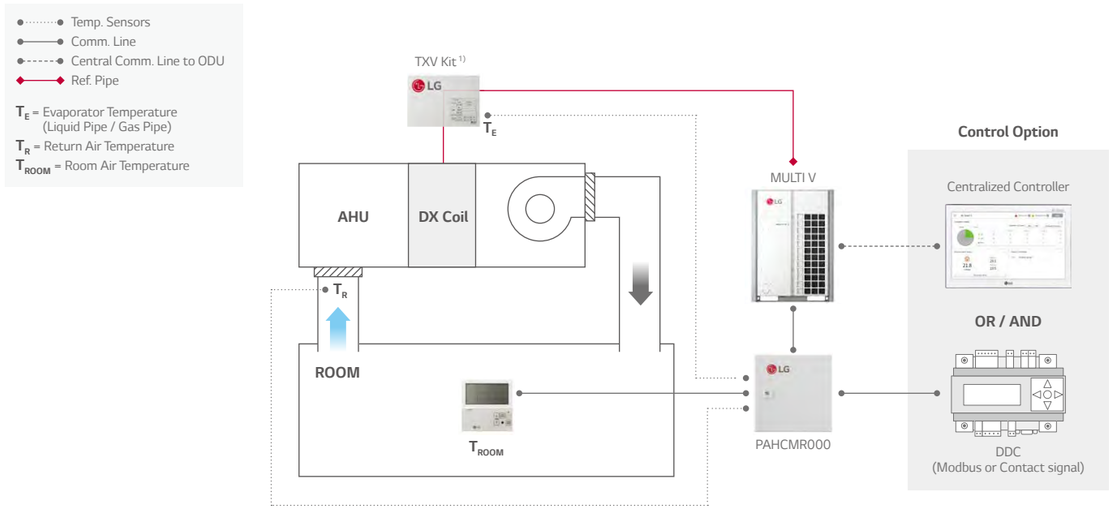


Note
1) Multiple EEV kits can be applicable with multiple DX Coils and PAHCMR000s
2) In case of applying DDC with contact signal, discharge air temperature should be measured and controlled by DDC
3) For more detail, please refer to the PDB

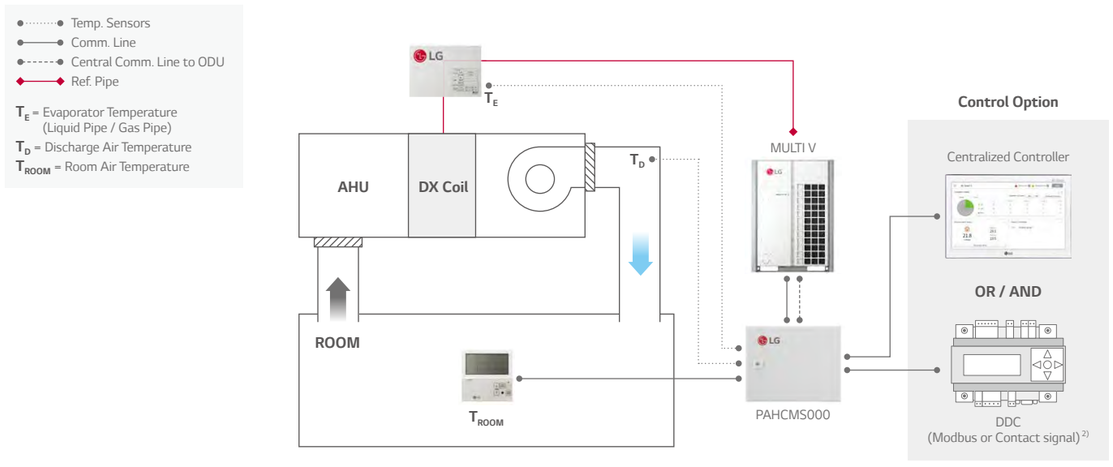
AHU KITS

Communication Kit Application

Large Capacity with MULTI V + TXV Kit + Return / Room Air Temperature Control



Large Capacity with MULTI V + TXV Kit + Discharge Air Temperature Control



Note
1) TXV Kit should be connected with outdoor unit 1:1
2) In case of applying DDC with contact signal, discharge air temperature should be measured and controlled by DDC
3) For more detail, please refer to the PDB

Communication Kit Function

Communication with DDC via Contact Signal

Function List		PAHCMR000	PAHCMS000	Type	Electric Spec.
Control	Comm. Kit Operation	On / Off		Digital Input	Non voltage
	Operation Mode 1)	Cooling / Heating		Digital Input	Non voltage
	Return (room) Air Temperature 2)	16~30°C	-	Analog Input	DC 0~10 V / 20 mA
	Discharge Air Temperature 3)	-	-		
	Fan Speed 4)	-	-		
	Forced Thermal On / Off	On / Off	-	Digital Input	Non voltage
	Capacity Control	-	•	Analog Input	DC 0~10 V / 20 mA
Monitor	Comm. Kit Operation 2)	On / Off		Digital Output	Max : DC 12 V / 1A, AC 250 V / 3A
	Operation Mode	-	-		
	Return (room) Air Temperature	-	-		
	Discharge Air Temperature	-	-		
	Fan Speed 2)	Low / Middle / High	-	Digital Output	Max : DC 12 V / 1A, AC 250 V / 3A
	Defrost Operation 2)	Defrost / Normal		Digital Output	Max : DC 12 V / 1A, AC 250 V / 3A
	Error Alarm 2)	Error / Normal		Digital Output	Relay C contact (Max : DC 30 V / 5A, AC 250 V / 5A)
	Compressor On / Off	-	On / Off	Digital Output	Max : DC 12 V / 1A, AC 250 V / 3A

1) Available operation mode can be varied depending on the setting of Communication Kit
2) This function may not be possible depending on the setting of Communication Kit. For more details, please refer to the product data book
3) In case of applying DDC control via contact signal, discharge air temperature should be controlled directly by DDC
4) In case of applying DDC control via contact signal, the fan should be controlled directly by DDC

Communication with DDC via Modbus protocol

Function List		PAHCMR000	PAHCMS000	Note
Control	Comm. Kit Operation	On / Off		
	Operation Mode 1)	Cooling / Heating		
	Return (room) Air Temperature	16~30°C	-	
	Discharge Air Temperature	-	16~30°C	
	Fan Speed 2)	Low / Middle / High	-	
	Forced Thermal On / Off	-	-	
	Capacity Control	-	•	
Monitor	Comm. Kit Operation	On / Off		
	Operation Mode 1)	Cooling / Heating		
	Return (room) Air Temperature	-50~100°C	-	Corresponding air temperature sensor connected to AHU comm. kit is required
	Discharge Air Temperature	-	-50~100°C	
	Fan Speed	Low / Middle / High	-	
	Defrost Operation	On / Off		
	Error Alarm	Error Alarm & Code		
	Compressor On / Off	On / Off		

1) Available operation mode can be varied depending on the setting of Communication Kit
2) To control the fan speed using Modbus, DO ports for fan speed monitor needs to be connected with the fan unit
* For the Modbus memory map, pleases refer to the product data book

AHU KITS

Communication Kit Function

With LG Control system

Function List		PAHCMR000	PAHCMS000	Note
Control*	Comm. Kit Operation	On / Off	On / Off	
	Operation Mode [1]	Cooling / Heating	Cooling / Heating	
	Return (room) Air Temperature	16~30°C	-	
	Discharge Air Temperature [2]	-	16~30°C	
	Fan Speed [3]	Low / Middle / High	-	
	Forced Thermal On / Off	-	-	
	Capacity Control	-	-	
Monitor	Comm. Kit Operation	On / Off	On / Off	
	Operation Mode [1]	Cooling / Heating	Cooling / Heating	
	Return (room) Air Temperature	11~39.5°C / -50.0~100.0°C	-	By Individual controller : 11~39.5°C By Centralized controller : -50.0~100.0°C
	Discharge Air Temperature	-	-50.0~100.0°C	Only with Centralized Controller
	Fan Speed [3]	Low / Middle / High	-	
	Defrost Operation	On / Off	On / Off	Only with Individual Controller
	Error Alarm	Error Code	Error Code	
	Compressor On / Off	On / Off	On / Off	Only with Individual Controller

1) Available operation mode can be varied depending on the setting of Communication Kit. For more details, please refer to the product data book
2) This range may differ depending on the type of controller
3) To control and monitor the fan speed using LG control system, DO ports for fan speed status have to be connected with the fan unit
* Control function is unavailable in case of using together with DDC via contact signal

Compatibility with LG HVAC Controllers

Controller	Individual Controller			Centralized Controller					BMS Gateway		PDI
	Premium	Standard III	Standard II	AC Ez	AC Ez Touch	AC Smart	ACP	AC Manager [1]	ACP BACnet ACP Lonworks	AC Smart BACnet	Premium Standard
											
Model no.	PREMTA000 PREMTA000A PREMTA000B	PREMTB100 PREMTBB10	PREMTB001	PQCSZ250S0	PACEZA000	PACS5A000 PACS4B000	PACP5A000 PACP4B000	PACM5A000	PQNFB17C0 PLNWKB000	PBACNA000	PQNUD1S40 PPWRDB000
PAHCMR000	•	•	•	•	•	•	•	•	•	•	•
PAHCMS000	X	X	• [2]	X	X	•	•	•	X	X	X

1) AC Manager is an integrator, so the installation with AC Smart or ACP is required
2) Set temperature range of this model shall be extended in the future
* Dry contact for indoor unit(PDRYCB000/400/300/500) is not applied
* For more details, please refer to the product data book

Communication Kit Function

Outdoor Unit Compatibility

Multi V

Model		MULTI V				MULTI V WATER		
		5	IV	III	S	IV	II	S
AHU Controller	PAHCMR000	•	•	•	•	•	•	•
	PAHCMS000	•	•	•	•	•	•	X

Single Split

Standard Inverter (1-phase)								
Capacity	Cooling kW	4.7	7.7	8.0	10.0	12.5	13.9	14.6
	Heating kW	5.5	8.0	9.0	11.0	14.0	15.4	16.9
AHU Kit	PAHCMR000	•	•	•	•	•	•	•
	PAHCMS000	•	•	•	-	-	-	-

Standard Inverter (3-phase)						
Capacity	Cooling kW	10.0	12.5	13.9	14.6	19.0	23.0
	Heating kW	11.0	14.0	15.4	16.9	22.4	27.0
AHU Kit	PAHCMR000	•	•	•	•	•	•
	PAHCMS000	-	-	-	-	•	•

* Table of the outdoor unit compatibility is based on European regional model.
When connecting outdoor units in other areas, please check whether they are compatible or not.

Expansion valves for MULTI V system

EEV Kit																
													PRLK096A0			
	PRLK048A0															
HP	1.3	1.6	2	2.5	3	3.5	4	5	6	8	10	12	14	16	18	20
Cooling (kW)	3.6	4.5	5.6	7.1	8.2	10.6	12.3	14.1	15.8	22.4	28	33.6	39.2	44.8	50.4	56
Heating (kW)	4	5	6.3	8	9.2	11.9	13.8	15.9	18	25.2	31.5	37.8	44.1	50.4	56.7	63

TXV Kit					
					PATX50A0E
				PATX35A0E	
			PATX25A0E		
		PATX20A0E			
	PATX13A0E				
HP	8 ~ 16	18 ~ 26	28~36	38~46	48~56
Cooling (kW)	22.4 ~ 44.8	50.4 ~ 72.8	78.4 ~ 100.8	106.4 ~ 128.8	134.4 ~ 156.8
Heating (kW)	25.2 ~ 50.4	56.7 ~ 81.9	88.2 ~ 112.1	118.4 ~ 143.6	148.5 ~ 175.1

* Capacities are based on the following conditions :
- Cooling : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
Condensing temperature (tc) 46°C, Subcool (SC) 3 K, Evaporating temperature (te) 6°C, Superheat (SH) 5 K
- Heating : Indoor 20°C(68°F) DB / 15°C(59°F) WB Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
Hot gas inlet temperature 70°C, Condensing temperature (tc) 46°C, Subcool (SC) 3 K
- Piping Length : Interconnected Pipe Length = 7.5m
- Difference Limit of Elevation (Outdoor ~ Indoor Unit) is zero

AHU KITS

Control Kit

List	Required Item
Heating / Cooling	SA / RA temperature sensor (or SA / RA temperature & humidity sensor)
Automatic Ventilation	SA / RA temperature, CO_2 sensor, Damper actuator (OA, EA, MA)
Energy Saving (Cooling Mode Only)	SA temperature, OA / RA temp&humidity sensor, Damper actuator (OA, EA, MA)
Humidification	SA temperature, RA temperature & humidity sensor, Humidifier
Inverter Fan Control	SA / RA temperature, Static pressure sensor, Inverter driver for fan control
Filter Alarm	Difference pressure sensor
Smoke Detecting	Smoke detection sensor

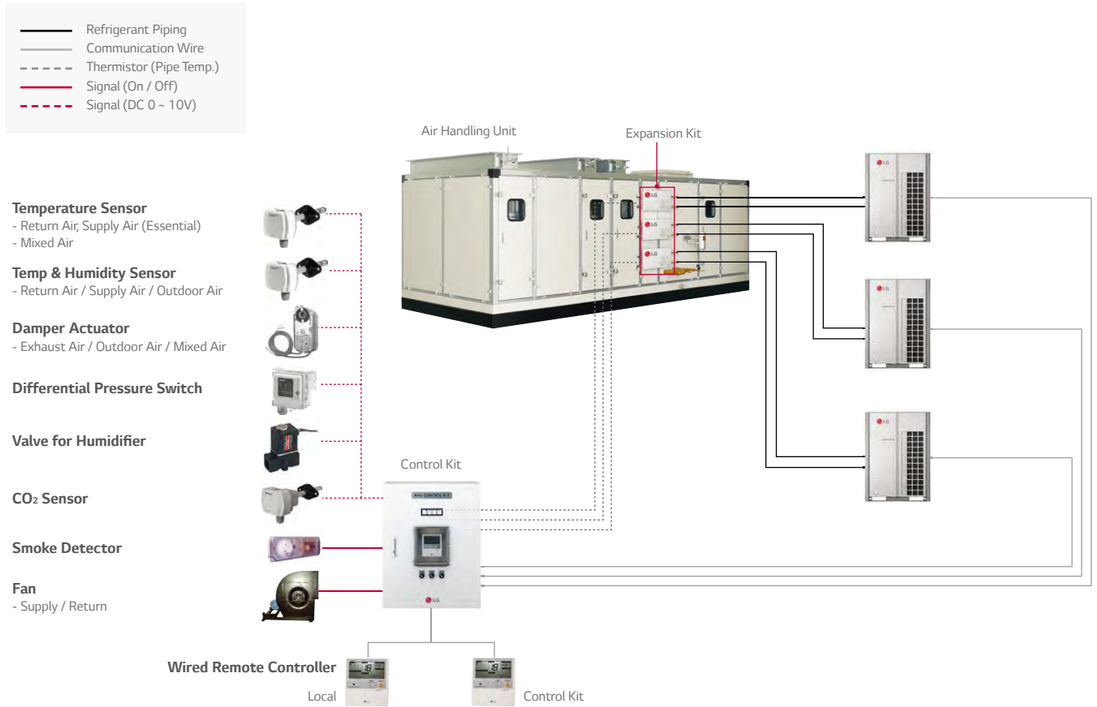
RA : Return Air, EA : Exhaust Air, OA : Outdoor Air, SA : Supply Air, MA : Mix air (RA + OA)

Field Supplied Item

List	Required Specification	Apply Location
Temperature Sensor	- Power : AC 24V, Output signal : DC 0 ~ 10V - Temperature boundary : -50 ~ 50°C	- Apply to MA, SA, RA
Temperature & Humidity Sensor	- Power : AC 24V, Output signal : DC 0 ~ 10V - Temperature boundary : -40 ~ 70°C - Humidity boundary : 0 ~ 95% RH	- Apply to SA, RA, OA - Can not be applied to MA
Damper Actuator	- Power : AC 24V, In/Output signal : DC 0 ~ 10V - Torque : 15 Nm, Operation time : 150sec. - Rotation angle : 90°	- Apply to OA, EA, MA damper
Difference Pressure Sensor (for Filter)	- Power : AC 24V, Output signal : DC 0 ~ 10V * Boundary : 0 ~ 1000Pa - Switch type : Relay Open / Close	- Apply to filter
Static Pressure Sensor	- Power : AC 24V, Output signal : DC 0 ~ 10V - Boundary : 0 ~ 1000pa	- Apply to SA (for inverter control)
CO_2 Sensor	- Power : AC 24V, Output signal : DC 0 ~ 10V - Boundary : 0 ~ 2000ppm	- Apply to RA duct
Smoke Detection Sensor	- Power : AC 24V, From : Contact point type	- Apply to RA duct

Note : Boundary of specification can be changed through LGAV software. However, please make a specification referring to the above table

Various Control with Control kit – Multiple MULTI Vs + TXV Kits



ACCESSORIES

MECHANICAL ACCESSORIES

CASSETTE PANEL

Stylish designed panels make more unique space by various applications

4 Way Cassette
PT-MCHW0
PT-QCHW0
PT-UQC / PT-UMC1

2 Way Cassette
PT-HLC / PT-USC

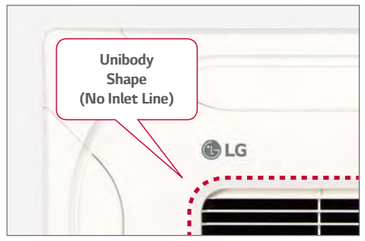
1 Way Cassette (Grill Type)
PT-UUC / PT-UUC1 / PT-UTC
(Panel Type)
PT-UUD / PT-UTD

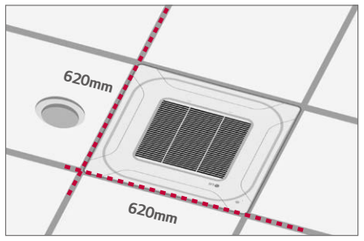
Features

- Independent vane operation uses separate motors, making it Possible to control all four vanes independently.
- The detachable corner design makes it easy to adjust the hanger during installation and to check for leakages in the drain connection pipe.

Compact and Stylish Design

- New 4 way cassette panel adapted unibody shape and matching with into the ceiling
- Panel size is fit into the ceiling tile





Specifications

Model name		Suction Type	Color (RAL)	Gloss	Weight (kg)	Dimension (mm)			Applied model		
						W	H	D	SINGLE SPLIT	MULTI SPLIT	MULTI V
4-Way	PT-MCHW0	Horizontal Grill	Morning Fog (RAL 120-4)	X	3.0	620	20	620	2.5 ~ 5.0kw	2.5 ~ 5.0kw	1.5 ~ 5.0kw
	PT-QCHW0	Horizontal Grill	Morning Fog (RAL 120-4)	X	3.0	620	20	620	2.5 ~ 5.0kw	2.5 ~ 5.0kw	1.5 ~ 5.0kw
	PT-UQC	Horizontal Grill	Morning Fog (RAL 120-4)	X	3.0	700	22	700	2.5 ~ 5.0kw	1.5 ~ 5.0kw	1.5 ~ 5.0kw
	PT-UMC1	Horizontal Grill	Morning Fog (RAL 120-4)	X	5.6	950	25	950	7.1 ~ 15.0kw	7.1kw	7.1 ~ 14.0kw
2-Way	PT-HLC	Grill	Morning Fog (RAL 120-4)	X	4.0	1,050	28	640	-	-	5.0 ~ 7.1kw
	PT-USC	Grill	Morning Fog (RAL 120-4)	X	4.7	1,100	33	690	-	-	5.0 ~ 7.1kw
1-Way	PT-UUC	Grill	Noble White (RAL 110-1)	O	4.6	1,100	34	500	-	-	2.1 ~ 3.5kw
	PT-UUC1	Grill	Morning Fog (RAL 120-4)	X	4.4	1,100	34	500		2.5 ~ 3.5kw	2.5 ~ 3.5kw
	PT-UTC	Grill	Noble White (RAL 110-1)	O	5.5	1,420	34	500	-	-	5.0 ~ 7.1kw
	PT-UUD	Panel	Noble White (RAL 110-1)	O	4.6	1,100	34	500	-	-	2.1 ~ 3.5kw
	PT-UTD	Panel	Noble White (RAL 110-1)	O	5.5	1,420	34	500	-	-	5.0 ~ 7.1kw

MECHANICAL ACCESSORIES

CASSETTE COVER / PLASMA KIT

Air purifying filter to prevent dust and allergens

PTDCM / PTDCQ

Features

- Specially designed for indoor unit
- Covers the side area of cassette
- Gives elegant looks
- Light weight

Models Applied

- 4 Way Cassette (for chassis TP, TN, TM, TQ, TR)

Parts Included

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

Accessory Model Name

Model	Front Panel		Weight (kg)		Dimensions (mm)		
			NET	Gross	W	H	D
PTDCM	PT-UMC / PT-UMC1	TP / TN	5.9	8.8	1,157	1,157	268
		TM	5.9	8.8	1,157	1,157	310
PTDCQ	-	TR	5.0	7.2	907	907	268
	-	TQ	5.0	7.2	907	907	310

Air purifying filter to repel dust and allergens

PTPKM0 / PTPKQ0

Features

It can remove microscopic contaminants such as dust and pollen to help reduce allergies.

* Plasma kit and Auto Elevation Grille are not applicable at the same time

Models Applied

Type	SINGLE SPLIT	MULTI SPLIT	MULTI V
4 Way Cassette	Option (2.5 / 3.5 / 5.0kw : PTPKQ0) (7.1kw ~ 15.0kw : PTPKM0)	Option (1.5 / 2.1kw : PTPKQ0)	Built-in
2 Way Cassette	-	-	-
1 Way Cassette	-	Built-in	Built-in

Parts Included

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

MECHANICAL ACCESSORIES

VENTILATION KIT

Fresh air can be supplied from outside through this ventilation kit

PTVK410
PTVK420
PTVK430

Features

• The ventilation kit can be supplied air from outside.

Models Applied

There are 2 Solutions for Fresh Air

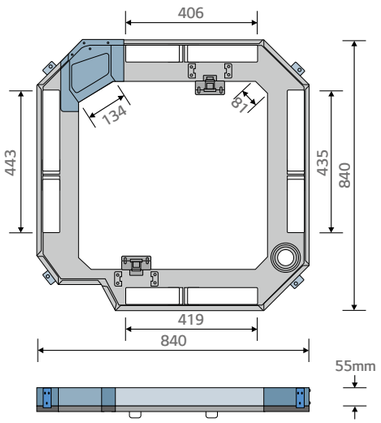
- PTVK410+PTVK420 (for chassis TP, TN, TM)
- PTVK430 (for chassis TR, TQ, TP, TN, TM)

*** Users can purchase and use PTVK430 in addition to PTVK410+PTVK420 in need to phase in larger outdoor air volume.**

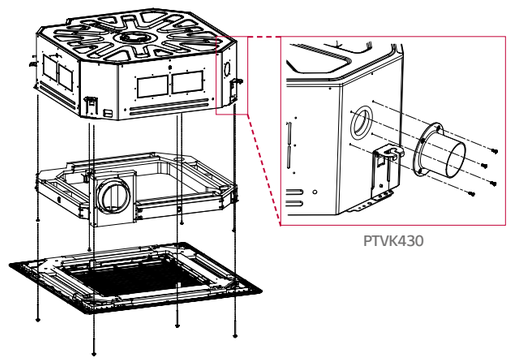
Parts Included

• PTVK410 : 1 Ventilation Kit, 8 Bolts, 1 Insulation
• PTVK420 : 1 Flange, 4 Screws, 1 Insulation
• PTVK420 : 1 Flange, 7 Screws

Dimensions



Assembly Diagram



PTVK430

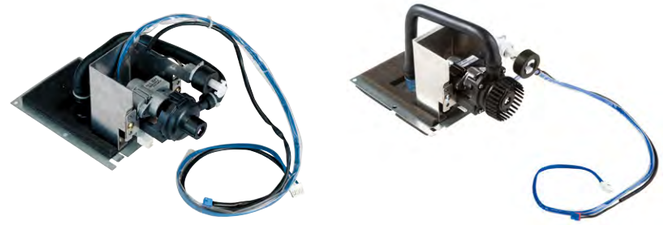
PTVK410 + PTVK420

MECHANICAL ACCESSORIES

DRAIN PUMP KIT

Drains away condensed water

ABDPG
PBDP9



Features

• In some places where natural drainage is not possible, a drain pump is very useful to pump out condensed water from indoor units.
• Drain pump assembly (AC 220 ~ 240V, 50 / 60Hz)

Models Applied

• Ceiling Concealed Duct (Refer to PDB for applicable models)

Accessory Model Name

Ceiling Concealed Duct (Refer to PDB for applicable models)

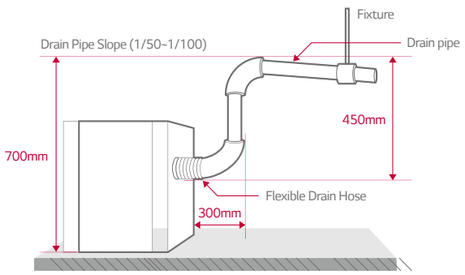
Product	Model		Drain Pump
SINGLE / MULTI SPLIT	H-INVERTER		Included
	Standard Inverter	CB**L	Included
		CM** / UM**	ABDPG
		UB70 / UB85	PBDP9
	Compact Inverter		ABDPG
MULTI V			Included

Application

High head drain pump automatically drains water up to 700mm of drain-head height.
It provides perfect solution for water drainage.

High Head Drain Pump

*** Included in H-Inverter**
*** Supplied as accessory for Standard Inverter (ABDPG/ PBDP9)**



CO_2 SENSOR

CO_2 sensor in ventilation system.

PES-C0RV0

Features

• Specification

- Applied Model : ERV, ERV DX
- Function
  - Supply Vottage : DV 12V ± 5%
  - Output : 0 ~ 5V
    (Linear output, 1 ~ 2,000ppm CO_2)
  - Accuracy : 30ppm ± 5% of reading

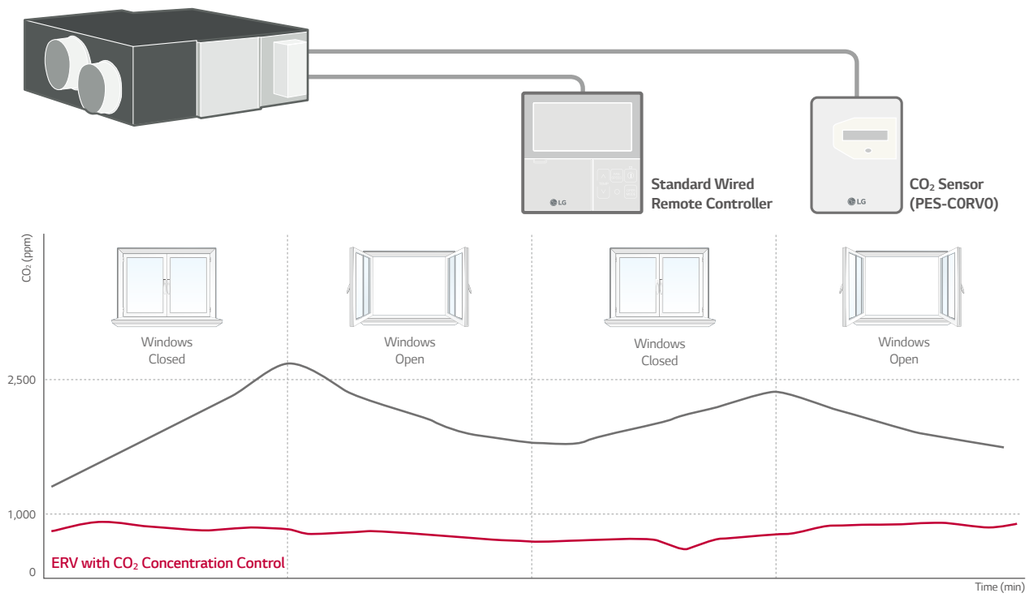
• Description

The product is especially designed to detect CO_2 concentration in ERV system.

• Operation Table

CO_2 Sensor Reading	ERV Fan Operation
<500ppm	Off
500 ~ 700ppm	Low Speed
700 ~ 900ppm	High Speed
>900ppm	Super High Speed

Installation Scene



AHCS100H0

Features

• Specification

- Applied Model : ERV, ERV DX
- Supply voltage : DV12V ± 5%
- Output : 0.6 ~ 4.4V (Linear output, 240 ~ 1,760 ppm CO_2)
- Accuracy : ± 10% (2 days after installation)

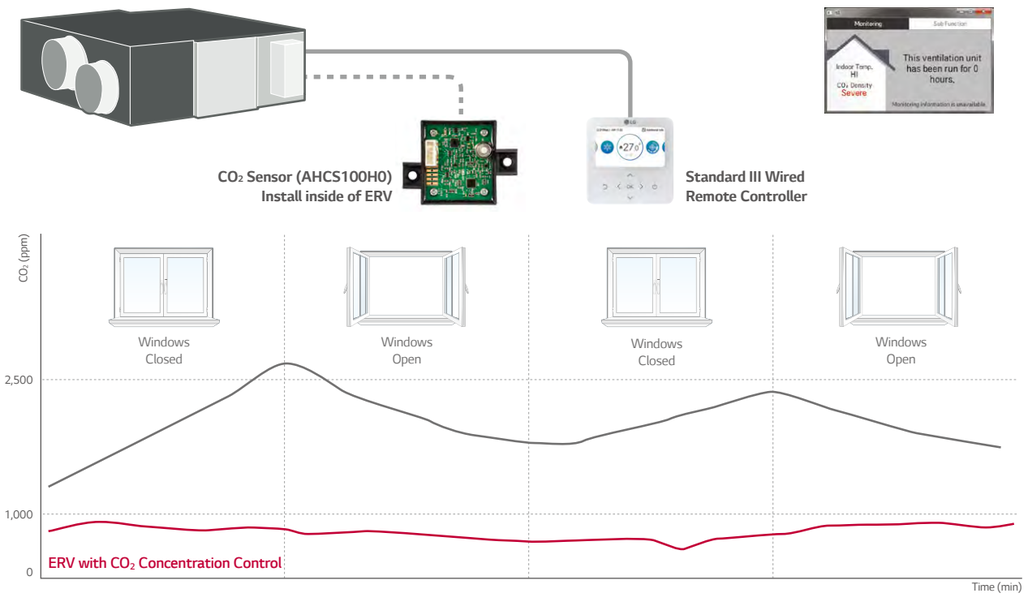
• Description

- The product is especially designed to detect CO
- This model requires Standard III Wired Remote Controller for display

• Operation Table

CO_2 Sensor Reading	ERV Fan Operation
<500ppm	Off
500 ~ 700ppm	Low Speed
700 ~ 900ppm	High Speed
>900ppm	Super High Speed

Installation Scene



F7 FILTER

F7 filter for ventilation system

AHFT035H0
AHFT050H0
AHFT100H0

Specification

For ERV

Filter Model			AHFT035H0		AHFT050H0	AHFT100H0		AHFT100H0	
Product Model			LZ-H025GBA4	LZ-H035GBA4	LZ-H050GBA4	LZ-H080GBA4	LZ-H100GBA4	LZ-H150GBA4	LZ-H200GBA4
Dimension	W	mm	423.5	423.5	425	520	520	520	520
	H		132	132	194	192	192	192	192
	D		25	25	25	25	25	25	25
Quantity		EA	2	2	2	2	2	4	4

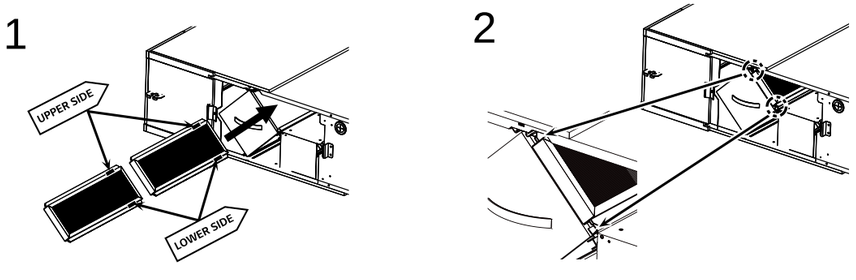
* 2 pieces in 1 filter package

For ERV DX

Filter Model			AHFT100H0					
Product Model			LZ-H050GXH4	LZ-H080GXH4	LZ-H100GXH4	LZ-H050GXN4	LZ-H080GXN4	LZ-H100GXN4
Dimension	W	mm	520					
	H		192					
	D		25					
Quantity		EA	2					

* 2 pieces in 1 filter package

Installation



1. Please check the direction of the filter's label.
2. Insert the filters on the right upper side of the total heat exchanger.

* Maintain once every 6 months.
* The part and standard of installation is designed for LG product, it is not allowed them to adapt non - LG product.

REFRIGERANT LEAKAGE DETECTOR

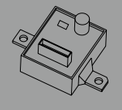
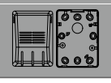
R410A refrigerant leakage detector makes our space safer

PRLDNVS0

Features

- This detector senses refrigerant leakage and when the refrigerant concentration exceeds 6,000ppm not only it will stop indoor unit operation, but also it will give an alarm using buzzer and sensor LED. (The green and red LED lights blink simultaneously.)
- Alarm is "ON" over 6,000ppm has been maintained 5 seconds, and on the contrary to this, Alarm is "OFF" under 6,000ppm has been maintained 5 seconds.
- When the alarm of the refrigerant leak detector is switched on the user must ventilate until the alarm is disabled.
- The detector has to be installed inside the room and it can be installed 300 ~ 500mm from floor.

Specifications

Parts		Specifications	
Sensor		Rated Voltage (V)	DC 5.0 ± 5%
		Dimensions (W x H x D, mm)	31 x 44 x 20
		Weight (g)	22
		Detectable Refrigerant	R410A
		Detected Concentration (ppm)	0 / 6,000 Alarm Off / On
		Operating Temperature Range (°C)	-10 ~ 50
		Preserved Temperature Range (°C)	- 40 ~ 60
		Average Power Consumption (mA)	35
Connecting Cable		Cable Length (m)	10
Sensor Protective Cover		Dimensions of Front Plate (W x H x D, mm)	80 x 110 x 44.6
		Dimension of Backplate (W x H x D, mm)	80 x 110 x 6.5

Application

MECHANICAL ACCESSORIES

EEV KIT

MULTI V EEV KIT is specially designed to reduce noise and make comfort environment

PRGK024A0

Features

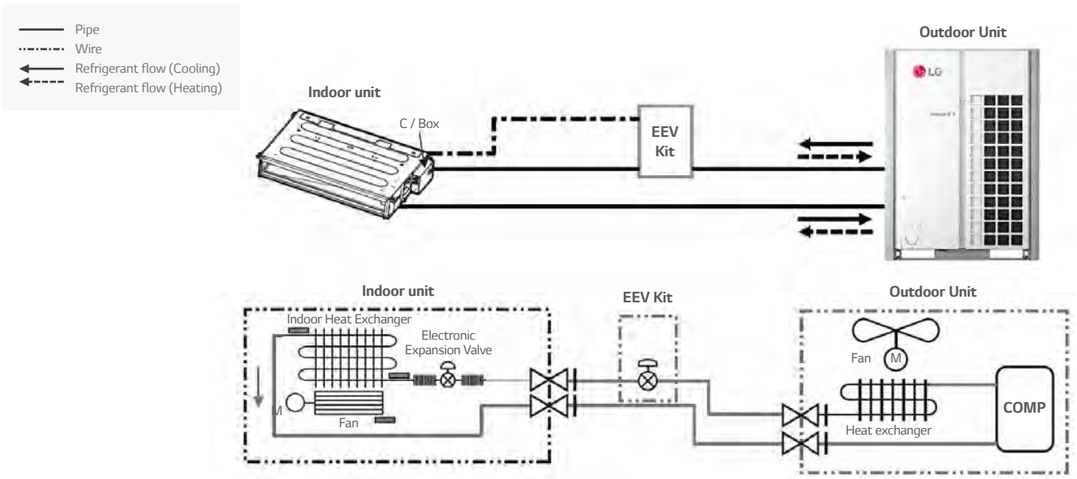
• Decreasing noise level of Multi V Indoor units Easy installation

Models Applied

• Ceiling Cassette (up to 15kBtu)
• Ceiling concealed duct (up to 18kBtu)
• Wall mounted (up to 24kBtu)
• Console (up to 15kBtu)
• Floor Standing Unit (with case / without case) (up to 15kBtu)
• Convertible (up to 12kBtu, Ceiling Suspended Type is not able to connect this Kit)

*** Fresh Air intake Unit is not able to connect this Kit**

Application



Note : If you don't use EEV of same specification, Cooling (Heating) capacity may decrease.

MECHANICAL ACCESSORIES

IR RECEIVER

IR RECEIVER can be connected to CCD where the customer wants to control by wireless remote controller

PWLRVN000

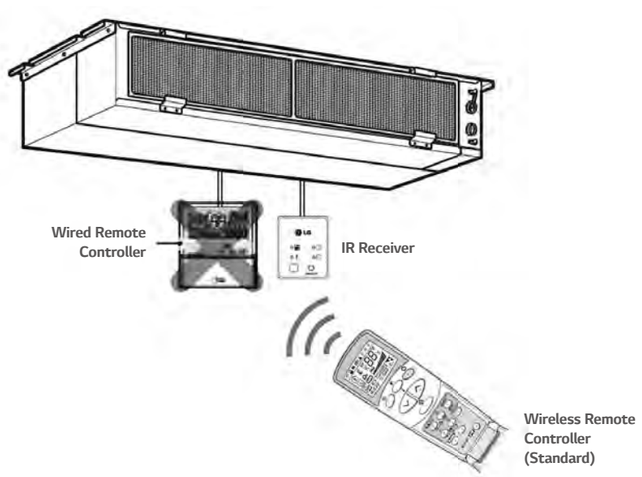
Features

• Designed for wireless control to operate Ceiling concealed duct Operation of Indication lamp (3 colors)
Self-diagnosis function

Models Applied

• MULTI V Indoors (Ceiling concealed duct, Floor standing units)

Application



Note : Do not install both the IR Receiver and Wired Remote Controller. This may cause malfunctions.

INDEPENDENT POWER MODULE

EEV full close function in case of power cut

PRIP0

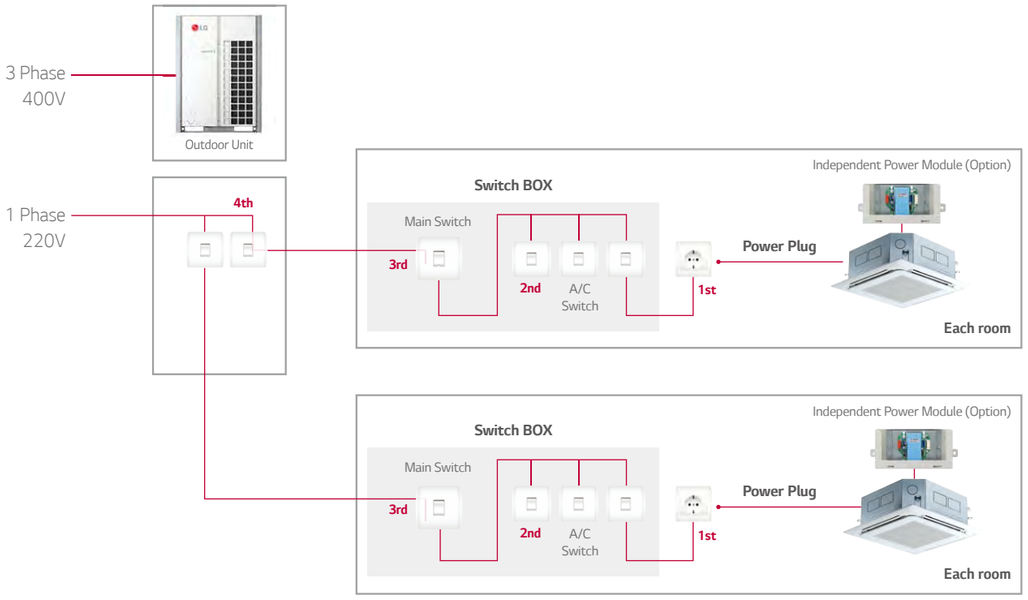
Features

Independent Power Module is specially designed to close the Indoor EEV at power cut-Off.

- Supply Voltage : DC 12V ± 50%

Models Applied

• MULTI V Indoors



SOLARS HEATING KIT

Air discharge in difficult to access areas

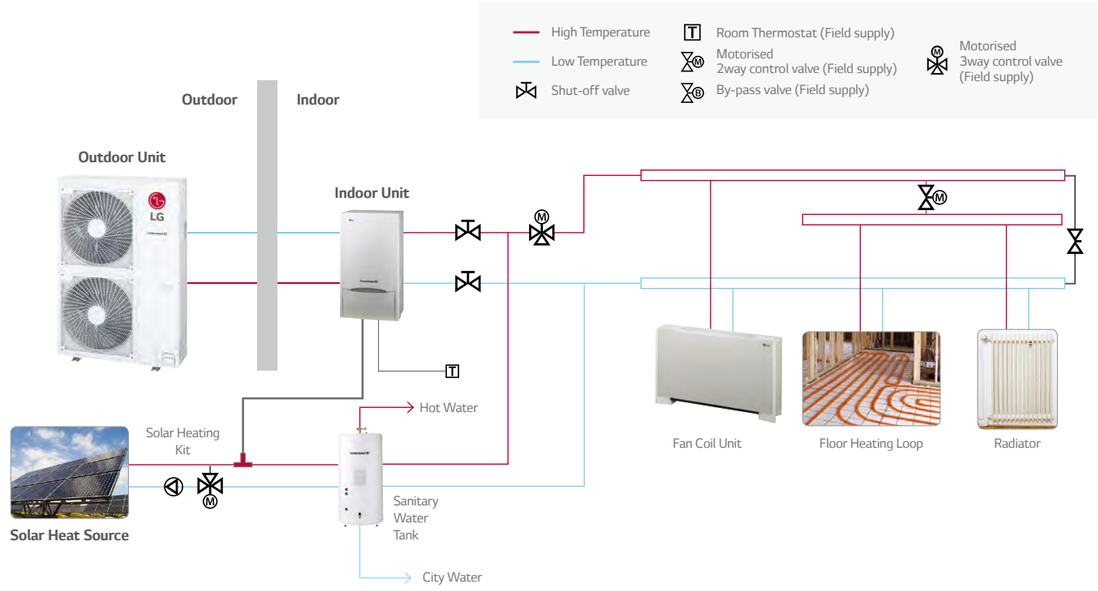
PHLLA

Features

- Interface for solar-thermal system with split-type THERMA V and double coil sanitary tank
- Installed at the water pipe, between sanitary tank and solar-thermal system
- Dimensions (H x W x D, mm) : 110 x 55 x 22
- According to solar system's water temperature, THERMA V controls 3 way valve's direction

Installation Scene

• Components : THERMA V system, PHLTA, PHLTC, and field-supplied items.



MECHANICAL ACCESSORIES

SANITARY TANK KIT

PHLTA (1Ø, Spilt) / PHLTC (3Ø, Spilt)
PHLTB (Monobloc)

* The sensor (PHRSTA0) can be purchased separately in case of using other brand's sanitary tank. PHRSTA0 is included in PHLTA, PHLTC, PHLTB.

Features

Spilt

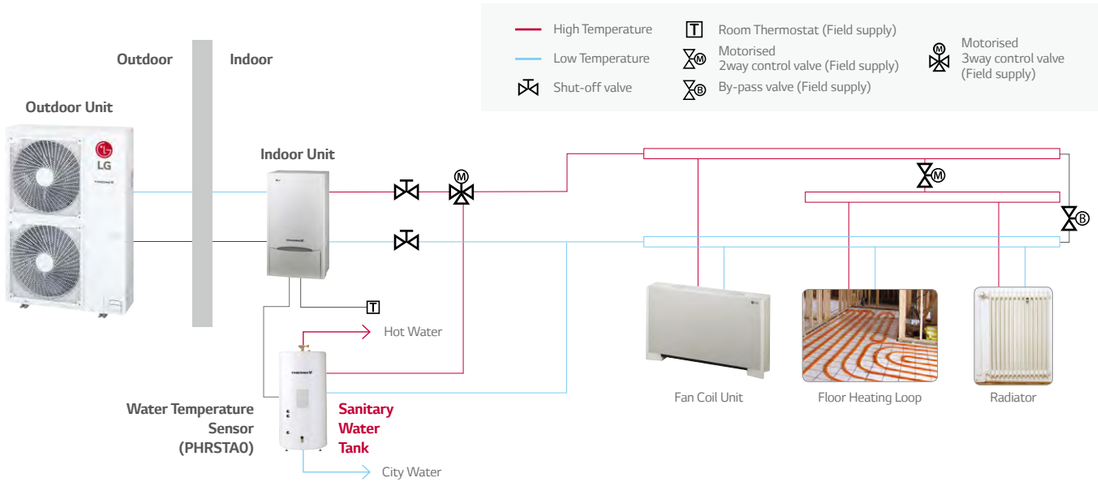
- **PHLTA (1Ø) / PHLTC (3Ø)**
  - To control sanitary tank temperature and sanitary tank electric heater for split models.
  - This unit will be installed inside indoor unit.

Monobloc

- **PHLTB**
- **Easy to install sanitary water tank for monobloc.**
  - There is a MCCB (Mold Case Current Breaker) to protect the product.
- **Dimensions (H x W x D, mm) : 250 x 170 x 110**
- **Weight (kg) : 2.1**
  - This unit will be installed outdoor.

Installation Scene

Components : THERMA V system, PHLTA, PHLTC, and field-supplied items.



MECHANICAL ACCESSORIES

DOMESTIC HOT WATER TANK

SINGLE COIL
LGRTV200E (198 LITERS)
LGRTV300E (287 LITERS)

DOUBLE COIL
LGRTV200VE (198 LITERS)
LGRTV300VE (287 LITERS)

Features

Store and provide hot water for sanitation

Installation Scene

Domestic Hot Water Tank - Single Coil

Domestic Hot Water Tank			LGRTV200E	LGRTV300E
General Characteristics	Water Volume	L	198	287
	Diameter	mm	580	580
	Height	mm	1,230	1,680
	Empty Weight	kg	45	59
	Tank - Materials		Stainless steel	Stainless steel
	Outer Skin - Materials		Paint Epoxy	Paint Epoxy
	Color - White RAL		White NC	White NC
Characteristics of Electrical Back-up	Additional Electric Heater	kW	3	3
	Adjustable Thermostat	°C	60-90	60-90
Characteristics of Exchanger	Exchanger Type		Single	Single
	Material Exchanger		LDX 2101 - Stainless Steel	LDX 2101 - Stainless Steel
	Maximum Water Temperature	°C	80	80
Hydraulic Connections - Heat Pump	THERMA V Entry	mm	25	25
	THERMA V Exit	mm	25	25
Hydraulic Connections - Domestic Hot Water Tank	City Water Entry	mm	22	22
	Hot Water Exit	mm	22	22
Electric Connection	Suppy	Ø / V / Hz	1 / 220-240 / 50	1 / 220-240 / 50
MANDATORY OPTIONAL ACCESSORIES				
Domestic Hot Water Tank Installation Kit			PHLTA	PHLTA

Domestic Hot Water Tank - Double Coil

Domestic Hot Water Tank			LGRTV200VE	LGRTV300VE
General Characteristics	Water Volume	L	198	287
	Diameter	mm	580	580
	Height	mm	1,230	1,680
	Empty Weight	kg	49	64
	Tank - Materials		Stainless steel	Stainless steel
	Outer Skin - Materials		Paint Epoxy	Paint Epoxy
	Color - White RAL		White NC	White NC
Characteristics of Electrical Back-up	Additional Electric Heater	kW	3	3
	Adjustable Thermostat	°C	60-90	60-90
Characteristics of Exchanger	Exchanger Type		Double	Double
	Material Exchanger		LDX 2101 - Stainless Steel	LDX 2101 - Stainless Steel
	Maximum Water Temperature	°C	80 (With an Heat Pump)	80 (With an Heat Pump)
Hydraulic Connections - Heat Pump	THERMA V Entry	mm	25	25
	THERMA V Exit	mm	25	25
Hydraulic Connections - Domestic Hot Water Tank	City Water Entry	mm	22	22
	Hot Water Exit	mm	22	22
Electric Connection	Suppy	Ø / V / Hz	1 / 220-240 / 50	1 / 220-240 / 50
MANDATORY OPTIONAL ACCESSORIES				
Domestic Hot Water Tank Installation Kit			PHLTA	PHLTA

LINE-UP

SINGLE SPLIT	MULTI SPLIT	MULTI V	ETC
Y Branch and Header Branch (Synchro)  2 Units PMUB11A 3 Units PMUB111A 4 Units PMUB1111A	**Branch Distributor**  PMBD3620 PMBD3630 PMBD3640 **Y Branch and Branch Kit**  2 Units PMBL3620 PMBL5620 2 Units PMBL1203F0	**Heat Recovery Unit**  PRHR022 PRHR032 PRHR042 **Y Branch and Header Branch** 	**Refrigerant Charging Kit**  PRAC1 **Stopper Valve**  PRVT120 PRVT780 PRVT980 **Drain Hose**  PHDHA05T PHDHA07T PHDHA05B PHDHA07B

Mechanical Accessories Line up and Application

Model name	SINGLE SPLIT	MULTI	MULTI V	Remark
Y Branch and Header Branch (Synchro)	•	-	-	-
Branch Distributor (MULTI)	-	•	-	MULTI F DX systems
Y Branch and Branch Kit (MULTI)	-	•	-	MULTI F DX systems
Heat Recovery Unit (MULTI V)	-	-	•	MULTI V Sync II / MULTI V III Heat Recovery / MULTI V IV Heat Recovery
Y Branch and Header Branch (MULTI V)	-	-	•	Various type of MULTI V Series

Y BRANCH AND HEADER BRANCH

Refrigerant distribution channel

Gas Pipe

Liquid Pipe

2 UNITS
PMUB11A

3 UNITS
PMUB111A

4 UNITS
PMUB1111A

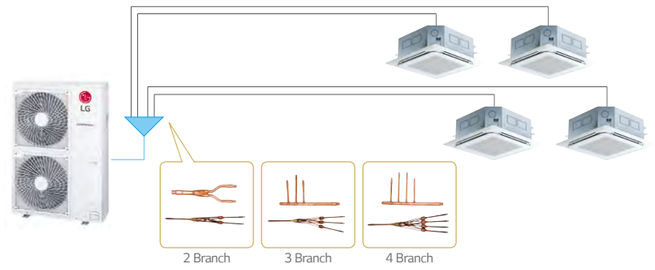
Features

- Various Y Branch pipes of different capacities make installation easier
- Y Branch and header branch for both gas and liquid are provided
- Insulation material is also provided for covering the branches

Models Applied

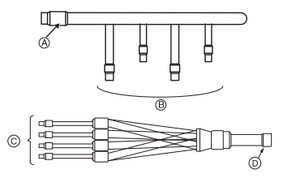
- H-inverter : 10.0 / 12.5 / 13.4kw
- Standard inverter : 12.5 / 14.0 / 15.0 / 20.0 / 25.0kw

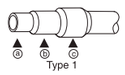
Application



Accessory Model Name

Model name	SINGLE SPLIT	Remark
2 Units	PMUB11A	50:50 (1:1)
3 Units	PMUB111A	33:33:33 (1:1:1)
4 Units	PMUB1111A	25:25:25:25 (1:1:1:1)





	a	b	c	Type
A	Ø15.88 (5/8)	Ø19.05 (3/4)	Ø25.4 (1)	1
B	Ø9.52 (3/8) Ø12.7 (1/2)	Ø12.7 (1/2) Ø15.88 (5/8)	-	2
C	Ø6.35 (1/4)	Ø9.52 (3/8)	-	2
D	Ø9.52 (3/8)	Ø12.7 (1/2)	-	2

PIPING ACCESSORIES

BRANCH DISITRIBUTOR DISTRIBUTOR BOX

Effective way of distributing refrigerant

PMBD3620
PMBD3630
PMBD3640

Features

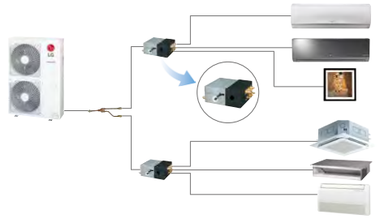
- Distribution of refrigerant to various indoor units
- 3 models (2, 3, 4 indoor units)
- Consists of LEVs inside it
- Controlling PCB inside the unit
- Internally insulated (Prevents any chances of drainage)
- Flare joints for easy and clean installation
- Compact design (Low height)
- Flexible installation

Models Applied

- MULTI F DX systems (Refer to PDB for applicable models)

Parts Included

- BD (Banch Distributor) unit (1EA)
- Brackets (4EA)
- Screws (8EA)
- Installation Manual (1EA)



Models Applied

Model Name			PMBD3620	PMBD3630	PMBD3640
Connectable Indoor Units	Number of Indoor Units		1~2	1~3	1~4
Capacity	(Btu/hr)		5k / 7k / 9k / 12k / 18k / 24k	5k / 7k / 9k / 12k / 18k / 24k	5k / 7k/9k / 12k / 18k / 24k
Casing Colour			Paintingless	Paintingless	Paintingless
Power Source	Ø / V / Hz		1 / 220-240 / 50	1 / 200-240 / 50	1 / 200-240 / 50
Power Consumption	(W)		10	10	10
Running Current	(A)		0.05	0.05	0.05
Dimensions	(W x H x D)	(mm)	302 x 143 x 252	302 x 143 x 252	302 x 143 x 252
Packing Dimensions	(W x H x D)	(mm)	422 x 202 x 300	422 x 202 x 300	422 x 202 x 300
Net Weight			4.8	4.9	5.0
Connecting Cable	Indoor Unit No. x mm²		4 x 0.75	4 x 0.75	4 x 0.75
	Outdoor Unit No. x mm²		4 x 0.75	4 x 0.75	4 x 0.75
Piping Connection (Outdoor Unit)	liquid	(mm)	9.52	9.52	9.52
	Gas	(mm)	19.05	19.05	19.05
Piping Connection (Indoor Unit)	Liquid	(mm)	6.35 x 2	6.35 x 3	6.35 x 4
	Gas	(mm)	9.52 x 2	9.52 x 3	9.52 x 4
Parts	Hanger	(EA)	4	4	4
	Screw	(EA)	8	8	8
	Manual	(EA)	1	1	1

PIPING ACCESSORIES

Y BRANCH AND BRANCH KIT MULTI F DX

Refrigerant distribution channel

2 UNITS
PMBL3620 / PMBL5620

2 UNITS
PMBL1203F0

Features

- Y Branch and Branch kit make Multi F DX installation easier
- Y Branch and Branch kit for both gas and liquid are provided
- Insulation material is also provided for covering the branches

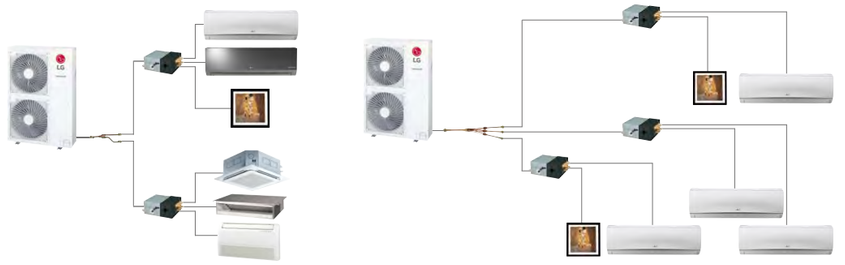
Models Applied

- MULTI F DX systems (refer to PDB for applicable models)

Parts Included

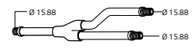
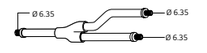
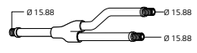
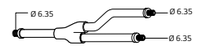
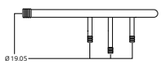
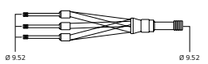
- Y Branch for gas side and liquid side (1set)
- Installation manual (1EA)

Application



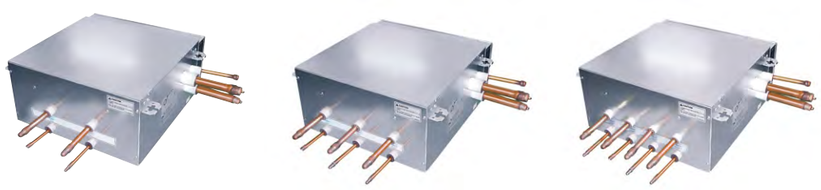
Accessory Model Name

(Unit : mm)

Model Name	No. of Branch Distribution Units	Applicable Model	Specifications	
			Gas	Liquid
PMBL3620	2 units	Only 3ø, 36k Btu/h		
PMBL5620	2 units	1ø, 3ø		
PMBL1203F0	3 units	1ø, 3ø		

HEAT RECOVERY UNIT (FOR MULTI V S / MULTI V WATER)

PRHR022 (2 branch Unit)
PRHR032 (3 branch Unit)
PRHR042 (4 branch Unit)



Features

- Max. 32 indoor units can be connected (Max. 8 indoor units per branch)
- It is easy to install due to the automatic search algorithm for piping detection
- Subcooling cycle in HR unit makes the system efficiency maximum

Models Applied

- MULTI V 5
- MULTI V SYNC II
- MULTI V WATER II Heat Recovery
- MULTI V IV Heat Recovery
- MULTI V SYNC
- MULTI V III Heat Recovery
- MULTI V WATER IV Heat Recovery

Specifications

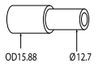
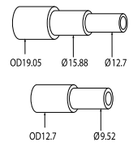
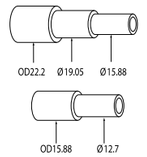
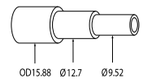
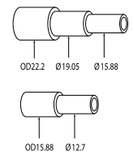
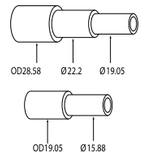
Model name				PRHR022	PRHR032	PRHR042
Number of Branch			EA	2	3	4
Maximum Connectable Capacity of Indoor Units (Per branch / unit)			kW	16 / 32	16 / 48	16 / 58
Maximum Number of Connectable Indoor units per Branch			EA	8	8	8
Nominal Input	Cooling		kW	0.026	0.040	0.040
	Heating		kW	0.026	0.040	0.040
Net. Weight			kg	18	20	22
Dimensions (W x H x D)			mm	831 x 218 x 617	831 x 218 x 617	831 x 218 x 617
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)	12.7 (1/2)	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 / 60	1 / 220-240 / 50 1 / 220 / 60	1 / 220-240 / 50 1 / 220 / 60

Parts Included

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

Reducers for Indoor Unit and HR Unit

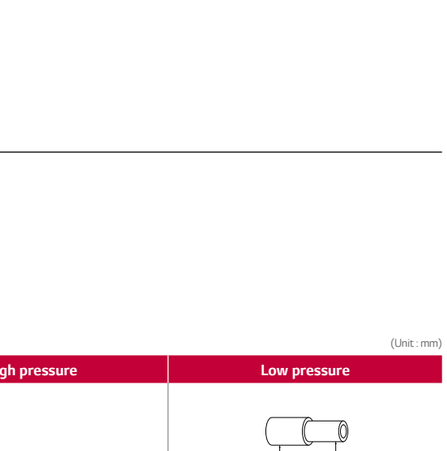
(Unit : mm)

Model Name		Liquid	High pressure	Low pressure
Indoor Unit Reducer				
HR Unit Reducer	PRHR022			
	PRHR032 / PRHR042			

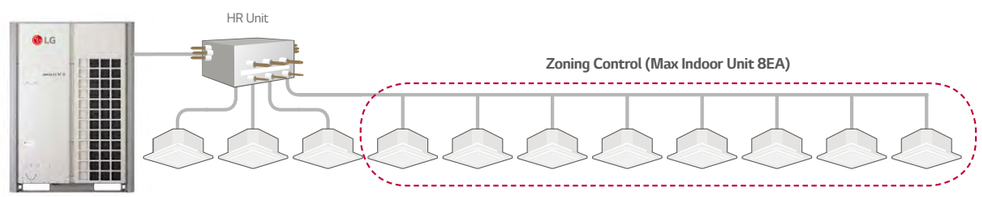
Convenient Free Zoning

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

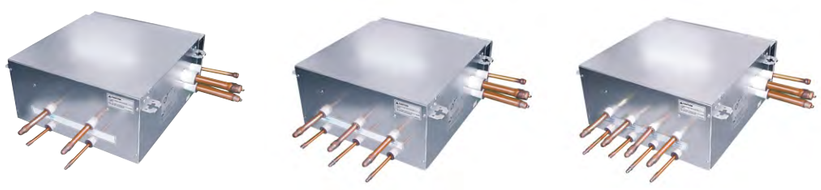
- **Individual Control**
  - Perfect individual control over spaces ventilation needed
- **Zone Control**
  - Max. of 8 indoor units can be connected for one branch
  - Max. of 32 indoor units can be connected for one HR unit
  - Same opeational model can be operated by indoor units with zone control function installed
- **Combination of Individual and Zoning Installations**
  - Flexible piping design
- **Save Product and Installation Cost**



[Zoning Control]



NEW HEAT RECOVERY UNIT



PRHR023 (2 Branch Unit)
PRHR033 (3 Branch Unit)
PRHR043 (4 Branch Unit)
PRHR063 (6 Branch Unit)
PRHR083 (8 Branch Unit)

Features

- Max. 64 indoor units can be connected (Max. 8 indoor units per branch)
- It is easy to install due to the automatic search algorithm for piping detection
- Subcooling cycle in HR unit makes the system efficiency maximum

Models Applied

- MULTI V 5 Heat Recovery

Specifications

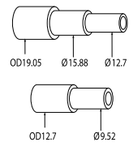
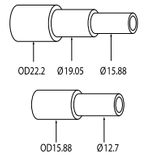
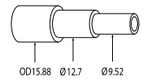
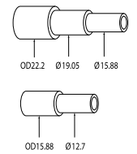
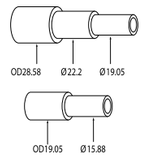
Model name				PRHR023	PRHR033	PRHR043	PRHR063	PRHR083
Number of Branch			EA	2	3	4	6	8
Maximum Connectable Capacity of Indoor Units (Per branch / unit)			kW	17/34	17/51	17/67	17/67	17/67
Maximum Number of Connectable Indoor units per Branch			EA	8	8	8	8	8
Nominal Input	Cooling		kW	0.040	0.040	0.040	0.076	0.076
	Heating		kW	0.038	0.038	0.038	0.072	0.072
Net. Weight			kg	18.5	20.3	22.0	28.3	31.8
Dimensions (W x H x D)			mm	866 x 218 x 657	866 x 218 x 657	866 x 218 x 657	1,113 x 218 x 657	1,113 x 218 x 657
Piping connections	Indoor Unit	Liquid	mm (inch)	9.52 (3/8)	9.52 (3/8)	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)	15.88 (5/8)	15.88 (5/8)
	Outdoor Unit	Liquid	mm (inch)	9.52 (3/8)	12.7 (1/2)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
		Low pressure	mm (inch)	22.2 (7/8)	28.58 (11/8)	28.58 (11/8)	28.58 (11/8)	28.58 (11/8)
		High Pressure	mm (inch)	19.05 (3/4)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)
Power supply			Ø / V / Hz	1 / 220-240 / 50 1 / 220 / 60	1 / 220-240 / 50 1 / 220 / 60	1 / 220-240 / 50 1 / 220 / 60	1 / 220-240 / 50 1 / 220 / 60	1 / 220-240 / 50 1 / 220 / 60

Parts Included

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

Reducers for Indoor Unit and HR Unit

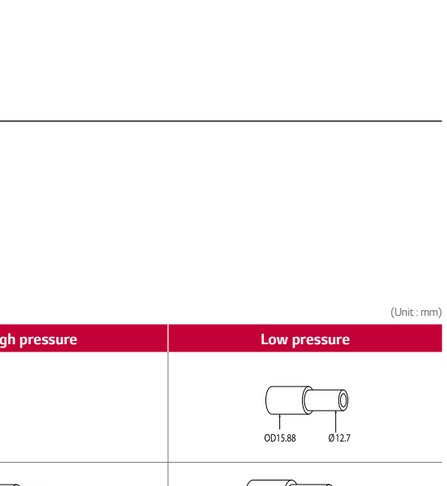
(Unit : mm)

Model Name		Liquid	High pressure	Low pressure
Indoor Unit Reducer				
HR Unit Reducer	PRHR023			
	PRHR033 PRHR043 PRHR063 PRHR083			

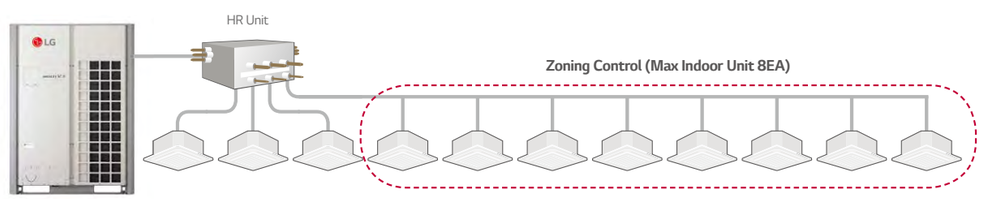
Convenient Free Zoning

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

- **Individual Control**
  - Perfect individual control over spaces ventilation needed
- **Zone Control**
  - Max. of 8 indoor units can be connected for one branch
  - Max. of 64 indoor units can be connected for one HR unit
  - Same opeational model can be operated by indoor units with zone control function installed
- **Combination of Individual and Zoning Installations**
  - Flexible piping design
- **Save Product and Installation Cost**



[Zoning Control]

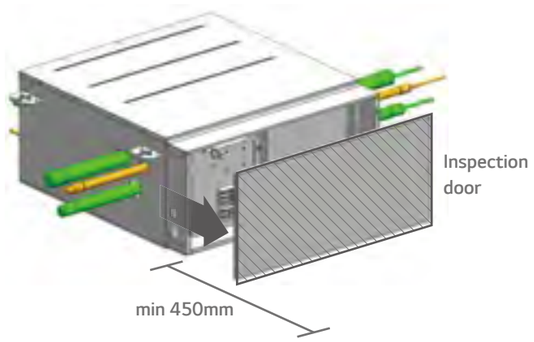


NEW HEAT RECOVERY UNIT

Improving Service Workability

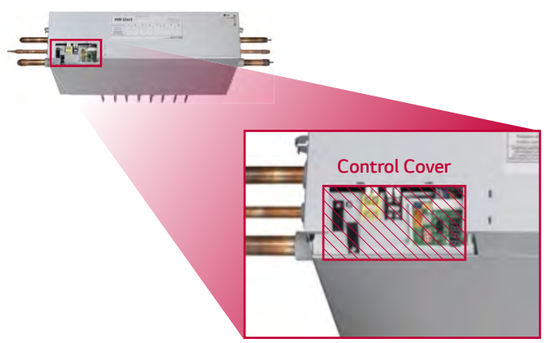
Can inspect valves and PCBs under the product.(looking up at the product)

Conventional



At least 450 mm of space is required to open the control cover and to inspect or repair the product.

New

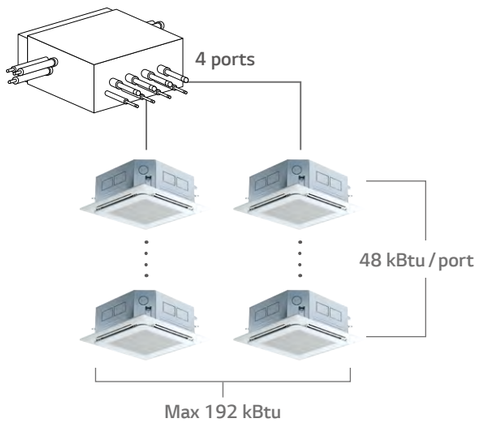


The control cover can be opened(disassembled) in the downward direction. → Error code check and simple check & repair are possible.

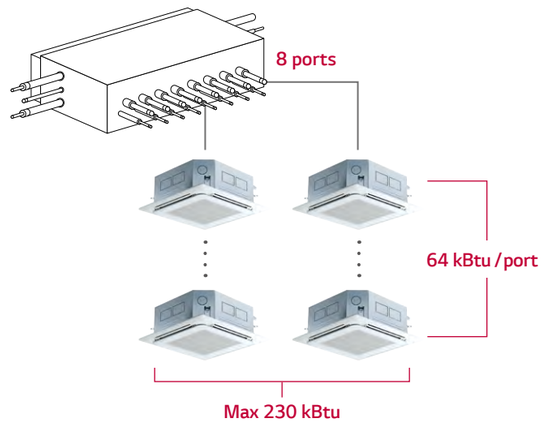
Expansion of connection capacity

- Expansion of connection capacity per port : (old) 48 kBtu → (new) 64 kBtu
- Expansion of total connectable capacity : (old) 192 kBtu → (new) 230 kBtu

Conventional

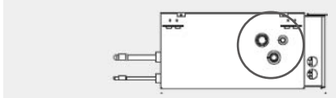
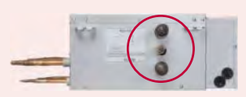
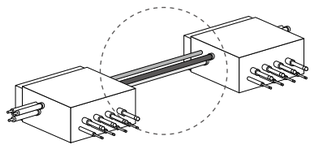
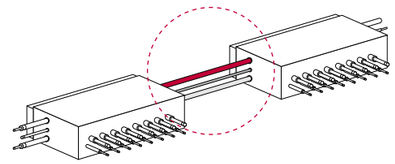
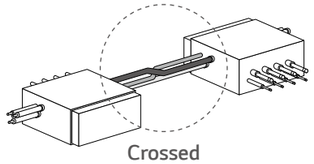
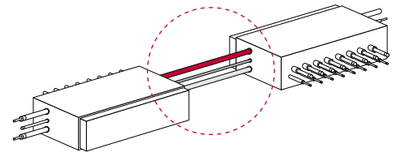


New



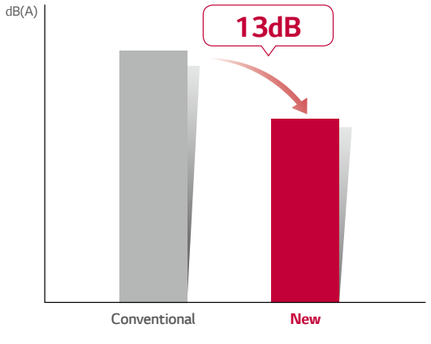
Easy Series Connection

Series connection can be installed without pipes crossing.

	Conventional	New
		
Series connection in the same direction		
Series connection in the reverse direction	 Crossed piping	

Reduce Noise

Cooling ↔ Heating changeover noise improvement



Y BRANCH AND HEADERBRANCH

For refrigerant distribution of indoor units

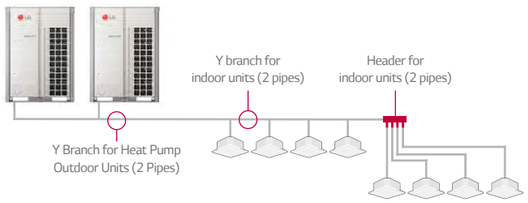
Y Branch
Header Branch

Features

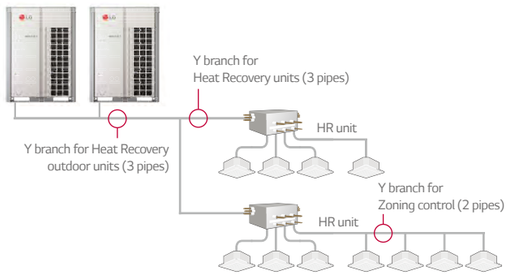
- Various Y Branch pipe of different capacities make MULTI V installation much easier.
- Y Branch and header branch for both gas and liquid are provided.
- Insulation material is also provided for covering the branches.

Piping Diagram

Heat Pump System



Heat Recovery system



Models Applied

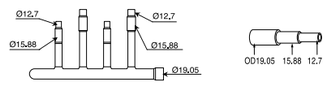
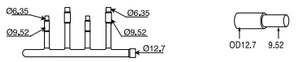
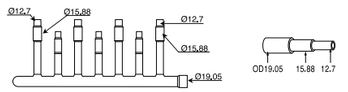
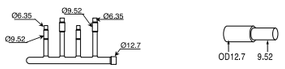
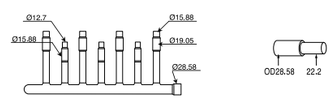
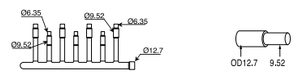
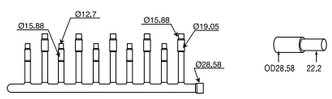
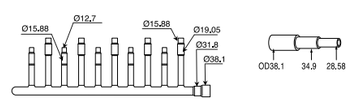
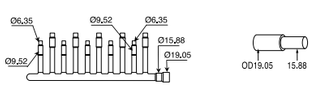
- MULTI V 5
- MULTI V IV
- MULTI V III, MULTI V PLUS II, MULTI V PLUS
- MULTI V S
- MULTI V WATER IV
- MULTI V WATER II
- MULTI V WATER S
- MULTI V SPACE II
- MULTI V MINI

Details of Model Name

Header Branch

R410A

(Unit : mm)

Model Name	Gas Pipe	Liquid Pipe
4 Branch / ARBL054		
7 Branch / ARBL057		
4 Branch / ARBL104		
7 Branch / ARBL107		
10 Branch / ARBL1010		
10 Branch / ARBL2010		

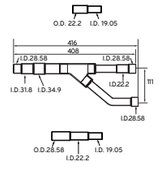
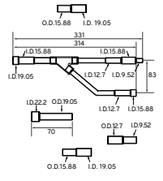
PIPING ACCESSORIES

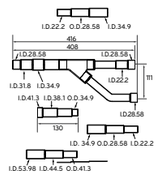
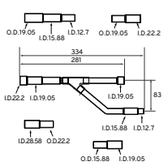
Y Branch pipe for connection of outdoor units

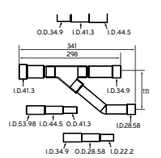
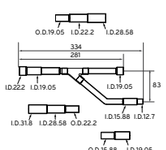
Heat Pump

R410A MULTI V 5, MULTI V IV, MULTI V III, MULTI V WATER IV, MULTI V WATER II

(Unit : mm)

2 Outdoor Units		
Model Name	**High Pressure Gas Pipe**	**Liquid Pipe**
ARCNN21		

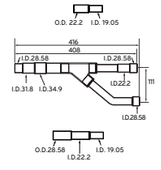
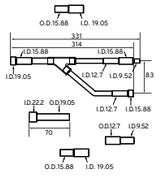
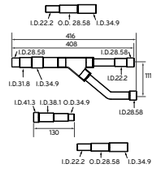
3 Outdoor Units		
Model Name	**High Pressure Gas Pipe**	**Liquid Pipe**
ARCNN31		

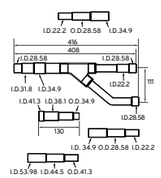
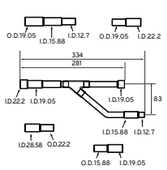
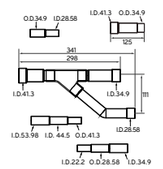
4 Outdoor Units		
Model Name	**High Pressure Gas Pipe**	**Liquid Pipe**
ARCNN41		

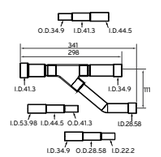
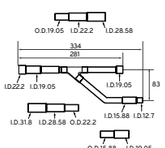
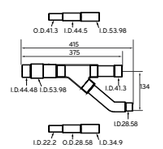
Heat Recovery

R410A MULTI V 5, MULTI V IV Heat Recovery, MULTI V III Heat Recovery, MULTI V WATER IV Heat Recovery, MULTI V WATER II Heat Recovery

(Unit : mm)

2 Outdoor Units			
Model Name	**High Pressure Gas Pipe**	**Liquid Pipe**	**Low Pressure Gas Pipe**
ARCNB21			

3 Outdoor Units			
Model Name	**High Pressure Gas Pipe**	**Liquid Pipe**	**Low Pressure Gas Pipe**
ARCNB31			

4 Outdoor Units			
Model Name	**High Pressure Gas Pipe**	**Liquid Pipe**	**Low Pressure Gas Pipe**
ARCNB41			

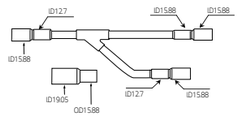
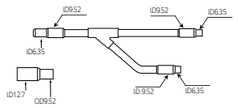
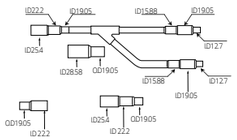
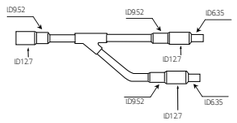
PIPING ACCESSORIES

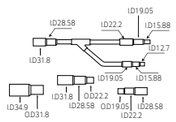
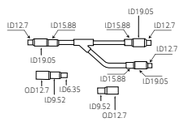
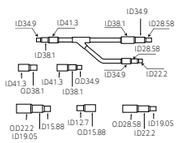
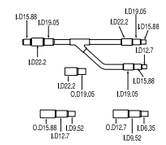
Y Branch pipe for connection of outdoor units

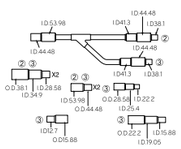
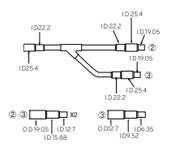
Heat Pump, Heat Recovery zone control

R410A MULTI V 5, MULTI V IV, MULTI V III, MULTI V PLUS II, MULTI V PLUS, MULTI V S, MULTI V MINI, MULTI V SPACE II, MULTI V WATER IV, MULTI V WATER S, MULTI V WATER II

(Unit : mm)

Model Name	Gas Pipe	Liquid Pipe
ARBLN01621		
ARBLN03321		

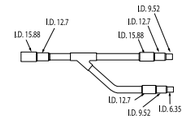
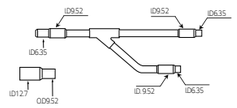
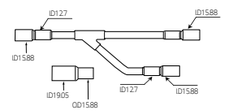
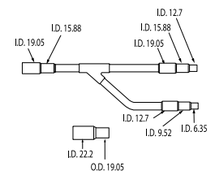
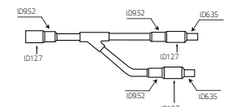
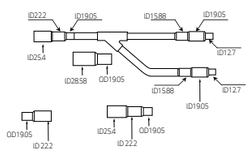
Model Name	Gas Pipe	Liquid Pipe
ARBLN07121		
ARBLN14521		

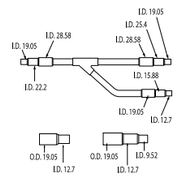
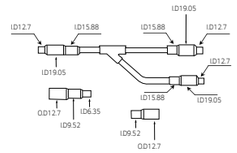
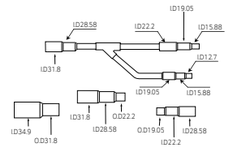
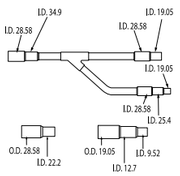
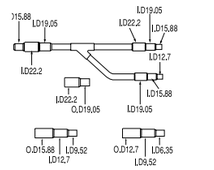
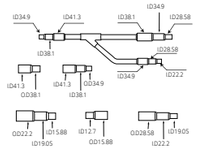
Model Name	Gas Pipe	Liquid Pipe
ARBLN23220		

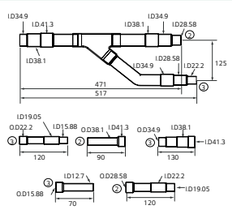
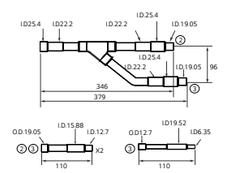
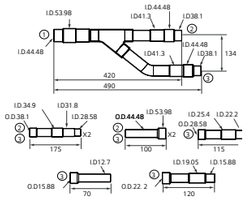
Heat Recovery

R410A MULTI V 5, MULTI V IV Heat Recovery, MULTI V III Heat Recovery, MULTI V WATER IV Heat Recovery, MULTI V WATER II Heat Recovery

(Unit : mm)

Model Name	High Pressure Gas Pipe	Liquid Pipe	Low Pressure Gas Pipe
ARBLB01621			
ARBLB03321			

Model Name	High Pressure Gas Pipe	Liquid Pipe	Low Pressure Gas Pipe
ARBLB07121			
ARBLB14521			

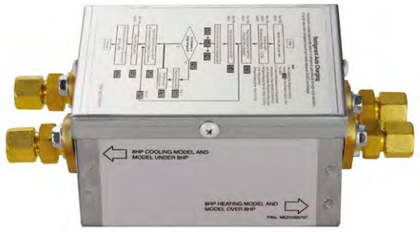
Model Name	High Pressure Gas Pipe	Liquid Pipe	Low Pressure Gas Pipe
ARBLB14521			

PIPING ACCESSORIES

REFRIGERANT CHARGING KIT

Recharging refrigerant after a pump down or when refrigerant is either insufficient or excessive

PRAC1

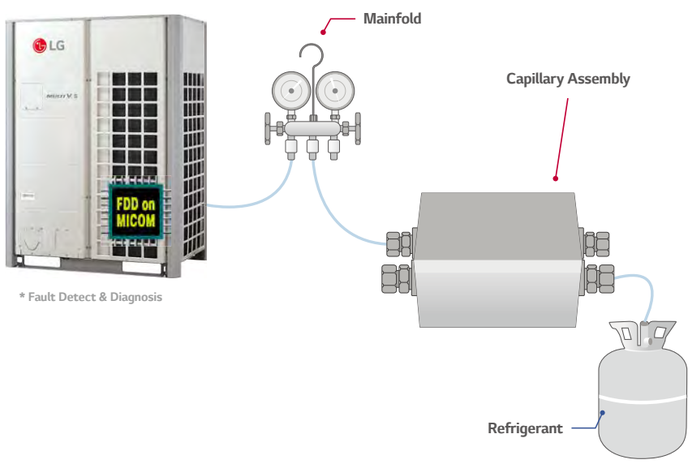


Features

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

Models Applied

- MULTI V 5
- MULTI V IV Heat Pump
- MULTI V IV Heat Recovery
- MULTI V III Heat Pump
- MULTI V III Heat Recovery
- MULTI V PLUS II
- MULTI V SYNC II



* Fault Detect & Diagnosis

PIPING ACCESSORIES

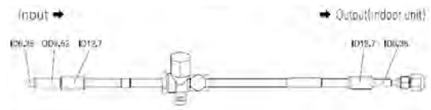
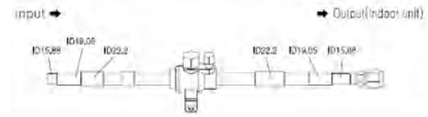
STOPPER VALVES

UNDER 1 / 2 (INCH)
PRVT120

UNDER 7 / 8 (INCH)
PRVT780

UNDER 9 / 8 (INCH)
PRVT980

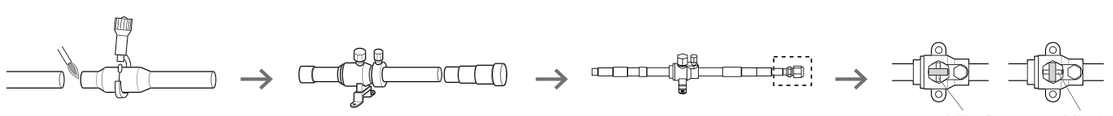
Features

Model Name	Specification
PRVT120	
PRVT780	
PRVT980	

Usage

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

Installation



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

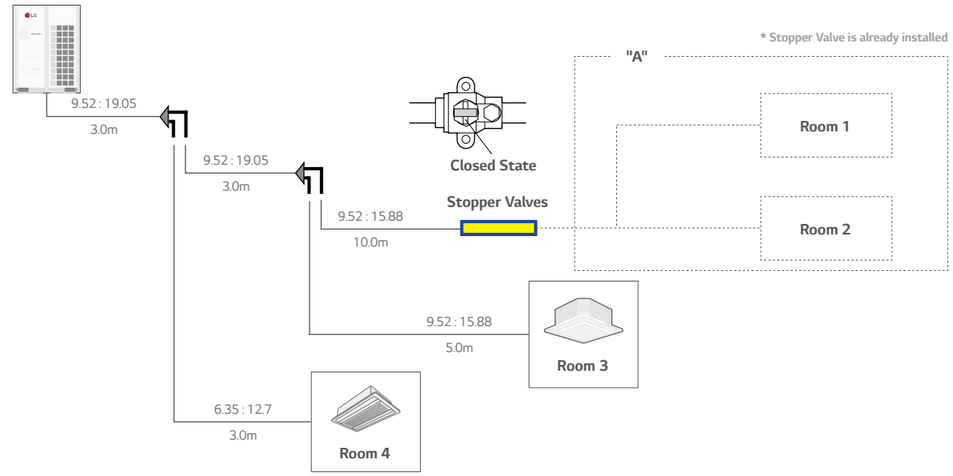
* When welding, service valve shoud be wrapped by wet cloth.

STOPPER VALVES

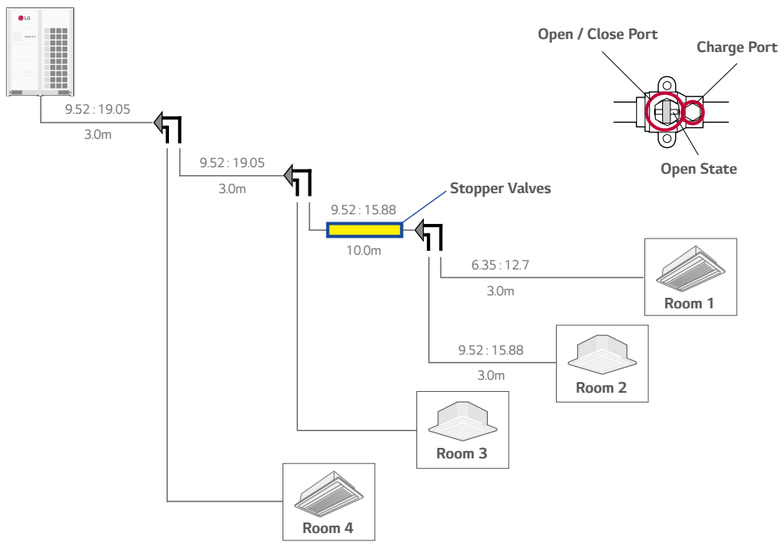
Details of Model Name

• **Case1**

(Room 3 & 4 : In use / Room 1 & 2 : Need to install indoor units)



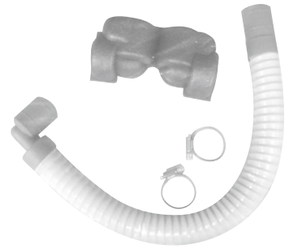
• In case of installation of additional indoor unit, refrigerant of used indoor unit must be discharged. (Room 3 & Room 4)
• If stopper valve is already installed, you can install additional indoor unit without refrigerant loss from the entire system.
• After installation of additional indoor unit, you just need refrigerant charging for "A" section.
• Then, open the Stopper Valve.



DRAIN HOSE

Easy drain installation

PHDHA05T
PHDHA07T
PHDHA05B
PHDHA07B

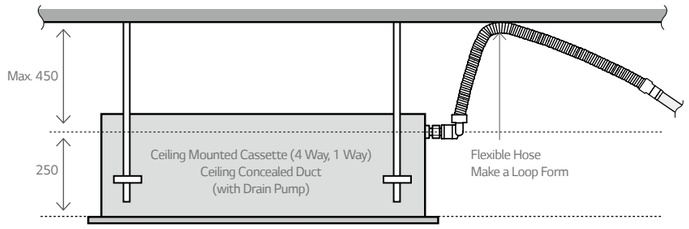


Features

• It reduces the installation time by over 40% with elbow-less drain hose.
• Midget drain pump covers maximum 800mm high, featuring easy piping installation.

Models Applied

• Ceiling Mounted Cassette
and Ceiling Concealed Duct
(refer to PDB for applicable model)



(Unit : mm)

Accessory Model Name

Model Name	Length	Quantity
PHDHA05T	500mm	30EA
PHDHA07T	700mm	30EA
PHDHA05B	500mm	5EA
PHDHA07B	700mm	5EA

MEMO

MEMO