

**LG Electronics** 

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# VENTILATION SOLUTIONS

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## 028

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## **OUTDOOR UNITS**

 MULTI V i
 030

 MULTI V S
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 MULTI V M
 096

 MULTI V WATER 5
 106







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**AHU SOLUTION** 



## **ACCESSORIES**

Mechanical accessories 332
Piping accessories 344



## THE EU BUILDING SECTOR

Buildings account for 40% of the total carbon emissions in Europe. The building stock that dates back to the 90s is three times less energy efficient than the new construction built today.



OF EU ENERGY IS USED BY THE BUILDING SECTOR, MAKING IT THE SINGLE LARGEST ENERGY CONSUMER IN EUROPE



OF GREENHOUSE GAS EMISSIONS COMES FROM BUILDINGS

## **LG: OUR MISSION**

- ① Create low-consuming or self-consuming innovations
- ② Build awareness and help people use energy more conservatively
- 3 Reimagine a building's usability, connectivity, convenience & health

Source: The European Commission website. https://commission.europa.eu/news/focus-energy-efficiency-buildings-2020-02-17\_en

## **RE-DESIGN**

#### IMPROVE CIRCULARITY OF RAW MATERIALS

We minimize environmental impact with our eco-conscious air conditioning solutions. By reducing reliance on finite resources such as plastic, aluminum, and copper, LG's innovative approach embraces a circular economy supply chain. This not only lessens carbon emissions during pre-manufacturing but also ensures resource efficiency, particularly for energy-hungry materials. Discover the sustainability of LG air conditioners, where recycled materials play a pivotal role. We conduct thorough stability and quality tests to guarantee optimal performance, leading the way toward a more sustainable and efficient future.



### RECYCLING OLD APPLIANCES

Many reusable resources are left in discarded products. Founded in 2001 through investment from LG, the Chilseo Recycling Center acts as a virtuous cycle of resources, from product design, use, and recovery, to disposal. Engineers collect old appliances from LG and other brands, then carefully take them apart. More than 40 kinds of renewable raw materials, including separated plastic, iron, and non-ferrous metals, are reborn into new LG products.



## **RE-PROGRAM**

### ACHIEVE 95% WASTE RECYCLING AT PRODUCTION SITES BY 2030

At LGE, we continuously invest in environmental facilities and improve our waste treatment processes with a view to being able to recycle 95% of waste generated at production sites around the world by 2030.



## **INNOVATE**

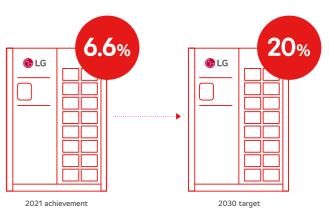
#### REDUCE RELIANCE ON HIGH GWP REFRIGERANT GASES

While they are not the biggest contributors, refrigerant gasses do contribute to global warming. LG was the first manufacturer to launch an R32 monobloc air-to-water heat pump in 2018 and have also converted our full single split lineup to R32 with 3 years lead time on the EU-driven planned ban in 2025. Also, LG is likely to put in place collection and recovery streams of refrigerant gases from end-of-life equipment at no extra cost for its customers.

#### CONSTANT PRODUCT EFFICIENCY IMPROVEMENTS

Electrically-driven heating and cooling equipment is LG's signature. What's more, we always aim for the highest energy ratings with each generation of our products.

## Reduce the carbon emissions of our 7 major products (baseline year 2020)



#### FIRST HOME APPLIANCES LIGHTHOUSE FACTORY

In March 2022, Changwon LG Smart Park was named the first 'lighthouse factory' but he World Economic Forum (WEF). The WEF "Lighthouse" facilities implement Fourth Industrial Revolution technologies, such as the Internet of Things, big data, artificial intelligence and robots into manufacturing and supply chain operations to deliver a wide range of benefits, from increased production efficiency to enhanced environmental sustainability. LG plans to apply the innovative, smart production technologies pioneered at LG Smart Park to a total of 26 LG production facilities in 13 countries, accelerating the digital transformation of its global manufacturing network by 2025.

## **CERTIFICATIONS**

#### LG Electronics is listed in the:

- DJSI World for 9 consecutive years
- 2020 Global Sustainability Leadership top 100, announced by Privileged United Nationals Sustainability Development Goals (UNSDGs)
- 6<sup>th</sup> place in the top 100 World Sustainable Management Companies by Wall Street Journal
- ECOVADIS Platinum certified in 2021 & 2023



## **EU MARKET TRENDS**

More efficient HVAC systems are required to significantly reduce energy consumption and to meet energy regulations.



## **Soaring Energy Prices in Europe**

- Climate change increases the need for more efficient mechanical HVAC systems and energy usage
- Electricity and gas prices are constantly rising for a number of reasons, such as growing energy demand, taxes, oil prices, wars, etc

#### Electricity & Gas price

Wholesale Prices EU27





## **Environment**

- The EU reinforces its efforts to stimulate energy efficiency as part of its 2050 decarbonization objectives
- HVAC accounts for more than 50% of a building's energy consumption

#### Low-carbon Strategy (Targets compared to 1990)

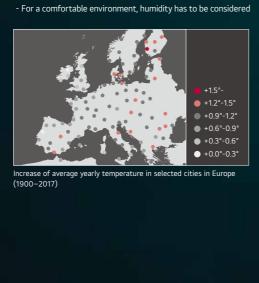
- Cutting emissions by at least 55% by 2030.
- EU targets a minimum reduction of 80% in carbon emissions by 2050.



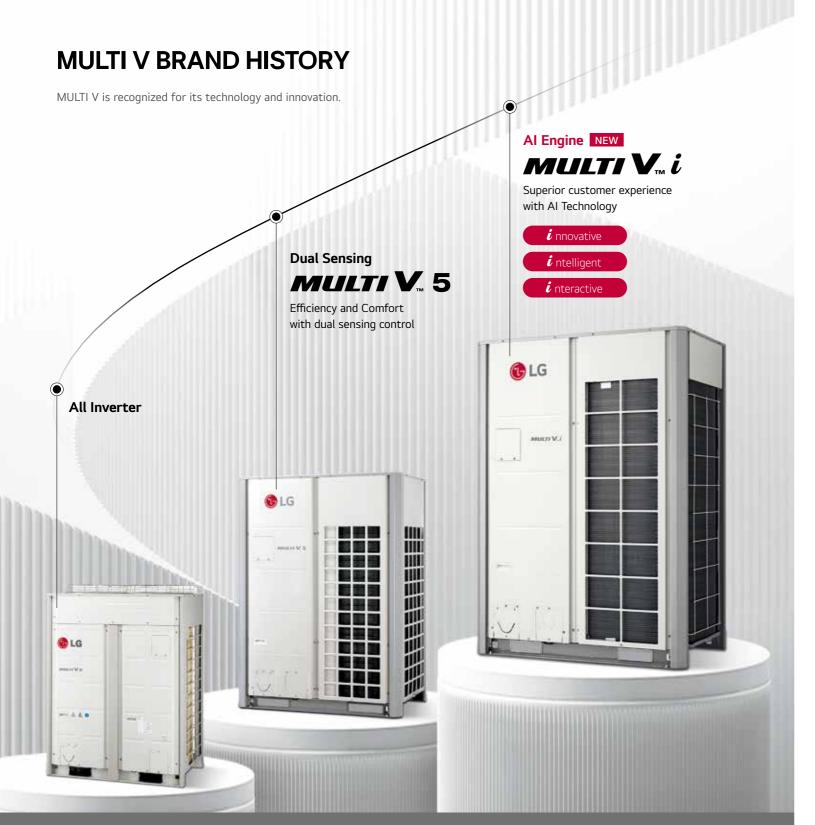


## **Efficiency**

- Global warming in Europe is faster than the rest of world according to the IPCC
- Al, big data, 5G, and cloud technologies can improve the human lifestyle







## HISTORY OF MULTI V LEADERSHIP

# 2013 **MULTI V**... W

- · Active Refrigerant Control
- Variable Heat Exchanger Circuit
- · Smart Load Control
- · Smart Oil
- · Vapor Injection (Advanced)

## 2017 **MULTI V...** 5

- Dual Sensing Control
- Ultimate Inverter Compres
- · Large Capacity ODU with

  Biomimetic Technology Fan
- · Continuous Heating

# 2023 **MULTI V**<sub>TM</sub> *i*

- · Energy Saving with AI Engine
- · Adaptive Noise Control
- · Smart Diagnosis Reporting
- · Remote Upgrade System
- · Weather Information Interlocking Control

## **INFRASTRUCTURE IN EUROPE**



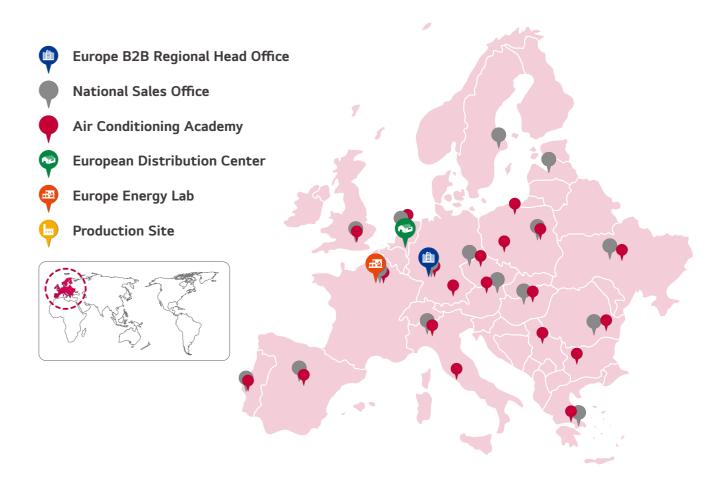


LG has set up 20 official air conditioning academies in Europe, teaching much needed skills to thousands of current industry professionals including installers, consultants, designers, sales staff and service technicians. The academy program is being used to share expertise and educate these HVAC experts by providing a cutting-edge technical experience with the newest and most advanced technologies 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.



## European Air Conditioning Distribution Center

LG's European Air Conditioning Distribution Center is located in Oosterhout, in the Netherlands. Supplying and delivering products all over Europe, this distribution hub has contributed to smooth and rapid delivery, including 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.



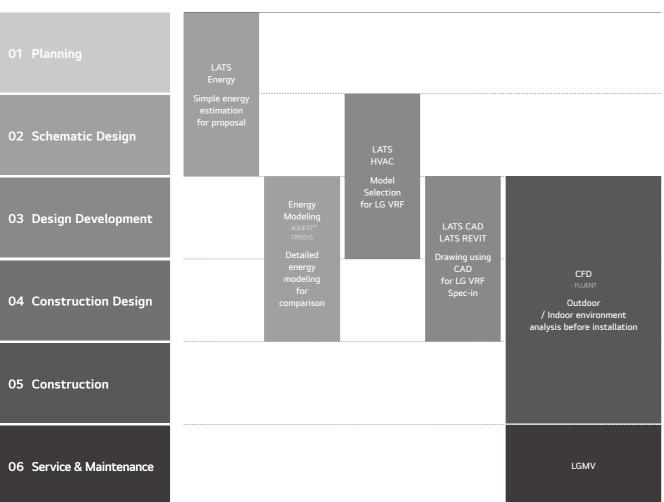
## **ENGINEERING TOOLS & SUPPORT**

From planning to service & maintenance and then to de-construction, an architectural project goes through 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. Given the usage of such tools, buildings are effectively designed, built, supervised, and maintained throughout their lifecycle.

Dedicated to provide the best HVAC engineering support, LG Electronics Air Solution Business Unit offers several engineering tools and solutions focused on HVAC. Among them, the LATS\* Program series has been developed to offer the best tool for LG HVAC systems, providing our customers with a solution that allows for faster, easier and more accurate model selection, draft energy estimations and more.

<sup>\*</sup> LATS : LG Air-conditioner Technical Solution





## 01 Draft Energy Estimation

#### LATS Energy

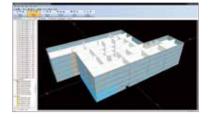
LATS Energy is a program developed by LG to estimate energy consumption and analyze the life cycle cost of LG commercial air conditioning systems at the early stages of a project.



## 02 Building Energy Modeling

#### eQuest, EnergyPro, Trace700 and More

These are certified commercial programs which assess a HVAC system's efficiency and a building's annual energy savings for building standards or certifications, like LEED. LG HQ supports these programs for the project stages of Design Development and Construction Design where the overall design is finished.



## 03 Model Selection

#### LATS HVAC

LATS HVAC is a model selection program that accurately and quickly selects the most suitable LG commercial air conditioning systems for each design. 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

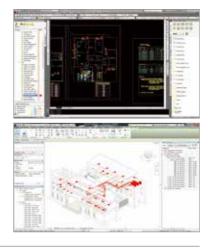
LATS CAD enables faster and more accurate 2D design of LG commercial air conditioning systems. It also enables modules for quotation and installation review that minimize inherent problems during installation and commissioning.

\*\* AutoCAD program is required.

#### LATS REVIT

LATS REVIT allows BIM users to have an attractive 3D design of LG commercial air conditioning systems with embedded calculations for refrigerant and efficiency features.

\* AutoCAD Revit program is required.

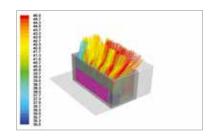


## 05 Environment Simulation

## CFD Analysis

CFD Analysis is applied to estimate indoor airflow, temperature distribution, outdoor airflow distribution and noise level while operating VRF products.

By running a simulation before construction, engineers estimate potential issues and find optimal solutions for malfunctions that could occur after construction.



## 06 Service & Maintenance

#### IGMV

LGMV offers real-time MULTI V cycle monitoring. During start-up, LGMV can check for normal operation as well as troubleshoot any errors. Also it helps to find causes of errors and solve the problem faster.



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## **BENEFITS OF LG MULTI V**

## Benefits for

## **Building Owners**



### **Efficient Management & Cost Reduction**

- Fault Detection Diagnosis enables easy maintenance with no extra manpower for regular maintenance
- Saves space, time, and installation costs by offering a larger capacity single outdoor unit
- More reliable heating operation provides stable and powerful heating during unexpected extreme environments



#### Reliability at Every Stage

- Ultimate Inverter Compressor developed and manufactured in Korea
- Corrosion resistant Black Fin & Panel for harsh conditions operation



#### **Customized Comfort and Solution**

 Preset monthly energy usage and consume power according to the target that has been previously set



#### Benefits for

## **Developers & Construction Companies**



#### **Green Solutions**

- Hydro kit provides environmentally friendly systems with higher energy efficiency and less carbon emissions.



#### Maximizing Space Utilization

- Large capacity in a compact size enhances space utilization



#### Smart Building Solutions

- Seamless integration with current Building Management Systems
- User friendly interface, flexible interlocking environment, energy management and smart individual controller for the optimized controlling conditions and smart building management
- Expandable control system can makes building management smart by setting up logic optimized for the site



## Benefits for

## Consultants



#### **Versatile Solutions**

- Air-cooled, Water-cooled, Heating, ERV, and Air Handling Unit interlocking solutions



#### Professional Design Support

- LATS (LG Air-conditioner Technical Solution) for draft energy estimation, model selection, HVAC design and 3D designing
- CFD Analysis to ensure suitable solutions and prevent malfunctions
- Energy simulation offered to find the optimal solution



#### Optimized Convenience with HVAC Design

- Flexible combination provides more options for designing according to customers' preferences
- The outdoor unit noise can be restricted by the set noise level in advance



## Benefits for

## **End-users**



#### Cost Saving Operation

- High efficiency guaranteed throughout product line-up
- Overuse of the HVAC system operational costs is prevented with Al Energy management



## Comfort Cooling & Heating

- MULTI V  $m{i}$  is able to take control by itself in various situations through deep learning algorithms that enable it to self-learn
- Automatic operation provides more comfort and convenience by checking ambient weather conditions



#### Convenient Functions

- Low-noise operation provides a pleasant environment



## **APPLICATION SOLUTIONS**

## Office

Supporting efficiency with flexibility

#### High Rise Office Building



Small to Medium sized Office Building



The MULTI V series revitalizes the workspace by providing fresh air at all times. LG's intelligent control solutions add comfort to any space.

## Commercial

Maximizing business, minimizing cost

Shopping Mall



Retail



Quick Service Restaurant (QSR)



The highly efficient, energy saving MULTI V *i* and MULTI V M reduce operation costs and provide comfort to suit any purpose and any interior, helping your business save extra space and reduce expenses.

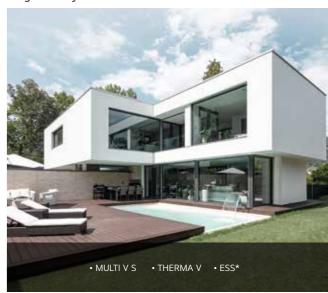
## Residential

Creating a comfortable home

Condominium & Apartments



Single Family House & Villa



015

The remarkably compact size and high static pressure of the MULTI V S enables optimal space solution, providing comfort to every space through individual zone control and hot water solution.

## Hospitality

Meeting diverse needs



The variety of applications that MULTI V i offers represents a perfect opportunity for a sophisticated hotel business.

\* ESS : Energy Storage System

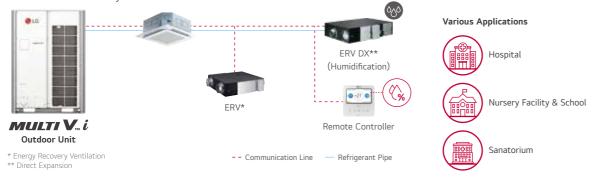
## **Hot Water Solution**

MULTI V i with Hydro kit provides floor heating and hot water supply as well as space heating & cooling. It is a more environmentally friendly system with higher energy efficiency and lower carbon emissions.



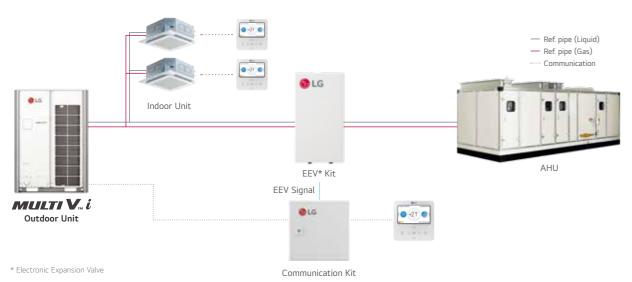
## **Interlocking Operation with ERV**

LG ERV DX with humidification function interlock operation is a solution for humidifying and ventilating the indoor space while communicating with other IDUs and the ODU. They provide improved comfort condition, while taking into account the indoor conditions without additional facility installation.



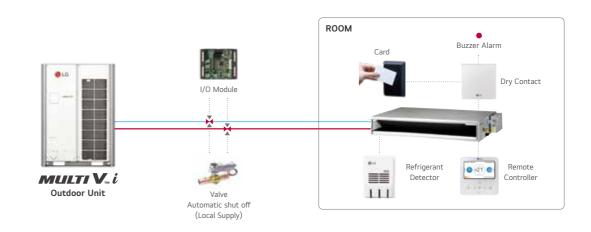
## Air Handling Unit (AHU) Solution

AHU is a suitable solution for cooling and heating in large spaces. With an LG AHU Comm. Kit (for both return air / supply air control) connected to the DX coil of the AHU, LG VRF system can be applied to deliver conditioned air.



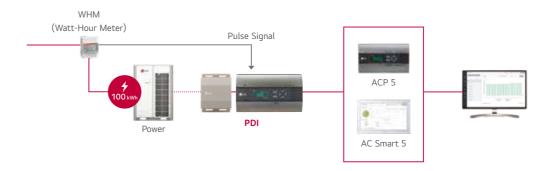
## **Refrigerant Leak Detection Solution**

LG leakage detector keep the indoor space safe and guarantees the customer's peace of mind.



## **Power Consumption Distribution Solution**

In case of shared power consumption in a building, a solution to distribute the power consumption amount per tenant might be necessary. Electricity charges can be billed to each tenant by using output from the LG Power Distributor Indicator (PDI). An administrator is able to check the power usage for each space and date as needed. If the PDI is used in conjunction with an LG central controller, the results can be exported in excel format.



## **Total Control via Any Device**

When managing multiple spaces, building administrators should be able to control systems from wherever they are.

The LG central controller can be accessed from any web browser that supports HTML5. The interface has been adapted to look great and perform well on any device.



## **Energy Management Solution**

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



## **Integration Solution with BMS**

There are many BMS protocols used for the control of buildings' various systems such as HVAC, lighting, power and security. LG has a wide range of gateway products for different protocols such as BACnet, Modbus, and LonWorks. In addition, LG gateways include Standalone central control capability to act as a back-up controller of the BMS if needed.



## Interlocking Solution by Using ACU Module

It is costly to introduce a BMS system to control multiple devices or systems in a small building. With the ACU module, various IO contact points (DI, DO, UI, AO) can be interlocked and integrated, while control is possible from the LG central controller. This enables an efficient management of lighting, pumps and other devices in the building in conjunction with the HVAC system.



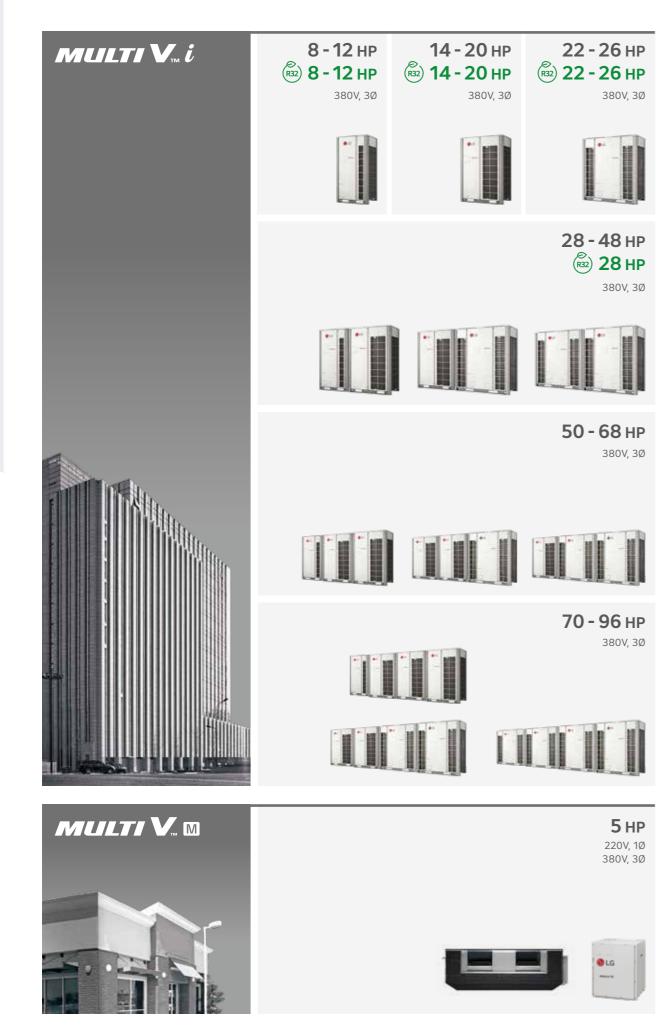
## **Interlocking Solution Using Dry Contact**

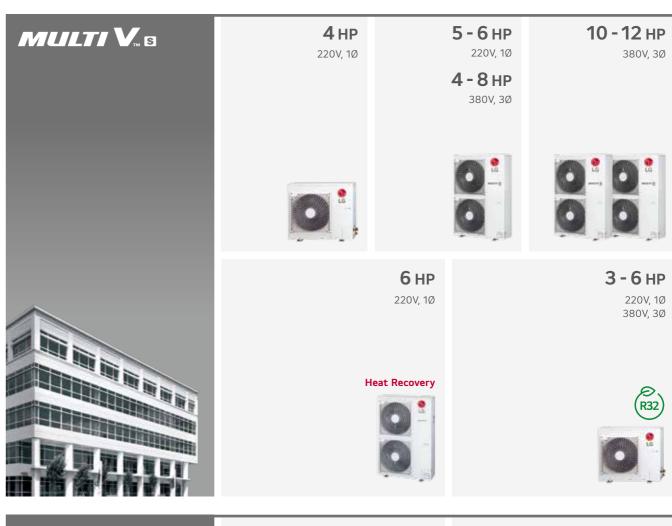
3<sup>rd</sup> party thermostats can be used to control LG air conditioners in a room by using a multi point dry contact. The dry contact enables basic control of air conditioners as well as making it possible to report the status and any errors impacting the indoor unit.

The Standard III remote controller has a DO port. With this DO port, it is possible to interlock the indoor unit with 3<sup>rd</sup> party devices such as lighting, a fan, or a radiator, based on parameters like operation mode or current temperature.

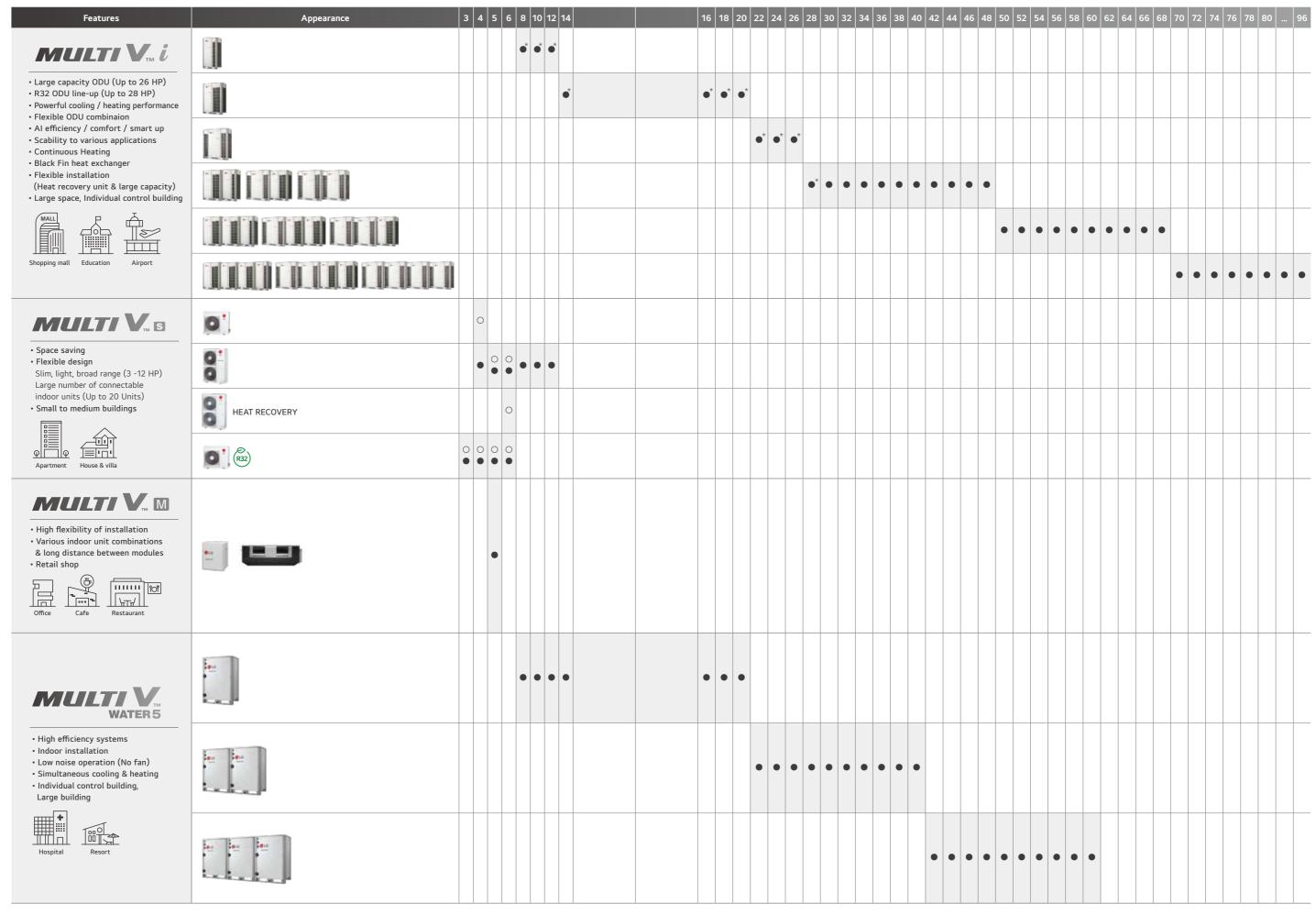
The indoor unit can be interlocked with various types of input such as card key-tag, door sensor, human detection sensor ect., so that the air conditioner is automatically operated. In addition, the dry contact option settings enable the operation of the air conditioner to maintain proper temperature when the occupant is absent. This solution makes sure that the room does not overheat or become too cold when unoccupied so that energy cost can be saved.



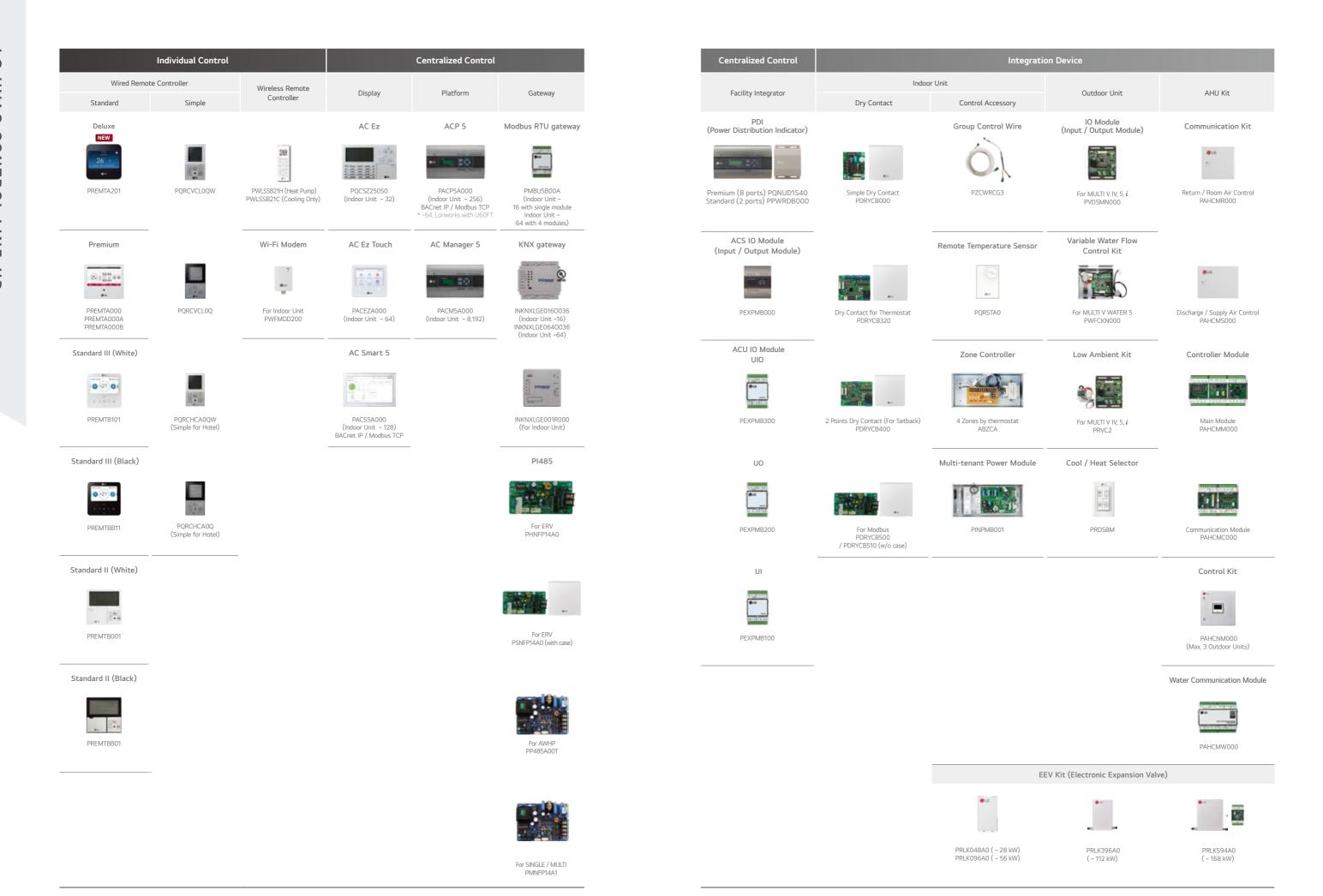








	kW		1.5	2.2 2.	8 3.6	4.5 5	6.6 6.2	7.1	8.2	9.0 10	0.6 12.	3 14.1	15.8	22.4 2	28.0	Energy Monitoring	2 Set Point	Occupied / Unoccupied Scheduling	Group	Test Run	Test Run (Heating)	Model Information Monitoring	Auto	Refrigerant	Thermo On / Off	Thermo On / Off	Static Pressure 11 Step Control (Only for Ceiling	1 Point External	Filter Sign	Auto Restart Function	Wi-Fi
			5k	7k 9l	k 12k	15k 1	8k 21k	24k	28k 3	30k 3	6k 42	k 48k	54k	76k 9	96k	Monitoring	Point	Scheduling Function	Control	Test Run (Cooling)	(Heating)	Monitoring	Addressing	Detection	Thermo On / Off Range Setting (Cooling)	Range Setting (Heating)	Concealed Duct Type)	(On / Off Control)	Time)	Disable / Enable	Ready
	Artcool Gallery			•	•											•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
4 <sup>th</sup> generation Wall Mounted	Artcool Mirror		•	•	•	•	•	•								•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
	Standard		•	• •	•	•	•	•		•	•					•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
	4 Way Cassette (570 x 570)		•	• •	•	•	• •									•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
	4 Way Cassette (840 x 840)							•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
4 <sup>th</sup> generation	4 Way Cassette High Sensible (840 x 840)		•	•	•	•	•	•	•		•	•				•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
Ceiling Mounted Cassette	Round Ceiling Cassette							•			•	•				•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
	2 Way Cassette			•	•		•	•								•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
	1 Way Cassette			• •	•		•	•								•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
	Mid / High Statics			• •	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4 <sup>th</sup> generation Ceiling	Low Static		•	•	•	•	• •	•								•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Concealed Duct	(Slim) High Sensible			•		•		•	•			•				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4 <sup>th</sup> generation			H			_																									
Fresh Air Intak	e													•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4 <sup>th</sup> generation Ceiling & Floor	Convertible			•	•											•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4 <sup>th</sup> generation Ceiling Suspend	ded					•	•	•		•	•	•				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4 <sup>th</sup> generation Console				•		•										•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
4 <sup>th</sup> generation	Floor Standing with Case			• •	•	•	•	•								•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Floor Standing without Case			•	•	•	•	•								•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Floor Standing	(PAC)											•			•	•			•	•	•	•	•	•	•	•			•	•	•
	Wall-Mounted						•	•		•						•			•	•	•	•	•	•	•	•		•		•	•
	IWT						•	•		•						•			•	•	•	•	•	•	•	•		•		•	•
4 <sup>th</sup> generation HYDRO KIT	Low Temperature										•				•	•			•	•	•	•	•	•	•	•		•		•	•
	High Temperature	•									•			•		•			•	•	•	•	•	•		•		•		•	•
4 <sup>th</sup> generation	with Humidifier	B				•		•		•									•	•	•		•	•				•	•	•	
Energy Recovery Ventilator with DX Coil	without Humidifier					•		•		•									•	•	•		•	•				•	•	•	
with DA COIL						lable																									





028 ~ 123

# OUTDOOR UNITS

MULTI V i

MULTI V S

MULTI V M

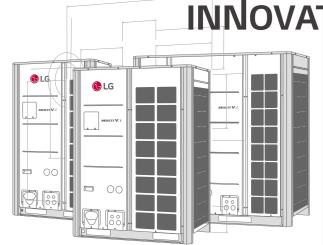
MULTI V WATER 5

# MULTI V<sub>IM</sub> i



INNOVATIVE

# INNOVATIVE



Innovative Energy efficiency / Performance realization

- Maximum 26HP for a Single Outdoor Unit
- Compact Design with Larger Capacity
- Powerful Performance
- Powerful Cooling Performance
- Powerful Heating Performance
- Newly Designed Compact Fan
- Flexible Outdoor Units Combination
- Corrosion Resistant

02 INTELL GENT

Recognizes various environments & optimizes itself through its AI Engine

#### AI EFFICIENCY UP

- Al Smart Care
- Al Energy Management

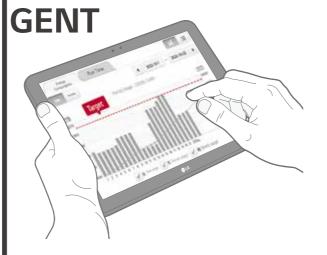
#### AI COMFORT UP

- Adaptive Noise Control
- Noise Target Control
- Weather Information Interlocking Control

#### AI SMART UP

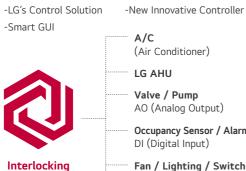
System

- Al Smart Diagnosis
- Large Capacity Black Box
- Auto Tuning System
- Remote Upgrade System



INTERACTIVE

Upgrading & evolutionary system according to customer



AO (Analog Output)

Occupancy Sensor / Alarm / Key-Tag DI (Digital Input)

Fan / Lighting / Switch DO (Digital Output)

Temperature / Humidity / CO<sub>2</sub> Sensor AI (Analog Input)



## Maximum 26HP for a Single Outdoor Unit

LG MULTI V i saves space, time, and installation costs by offering a larger capacity single outdoor unit.

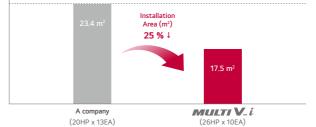


## **Compact Design with Larger Capacity**

Lighter outdoor units reduce the installation area and architecture structure, increasing the space for roof gardens.



#### Install 260HP





- \* Previous model: ARUM261LTE5. New model: ARUM260LTE6
- \* This scene is designed only for easier understanding, because 26HP unit cannot be applicable.

## **Powerful Performance**

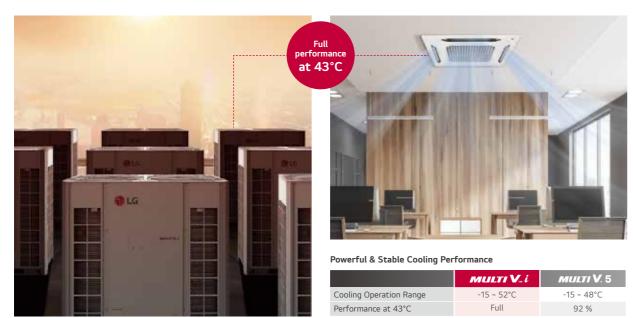
MULTI V 5 has already proved itself highly competitive in the European market in terms of efficiency levels, but MULTI V i exceeded its predecessor.

[ Better than the Best ]



## **Powerful Cooling Performance**

Reliable cooling operation up to 52°C, with full performance at 43°C. End users are able to enjoy comfortable indoor environments, even with extreme weather conditions outside.



\* Final specifications may change slightly.

## **Powerful Heating Performance**

More reliable heating operation is provided at down to -30°C and full performance at -10°C. Stable heating performance is guaranteed even in the case of an unexpected outdoor temperature drop.



O MULTI V. i 60 55 55 60 45

-10 -20

 MULTI V. i
 MULTI V. 5

 Heating Operation Range
 -30 ~ 16°C
 -25 ~ 16°C

 Performance at -10°C
 Full
 92 %

% Final specifications may change slightly.

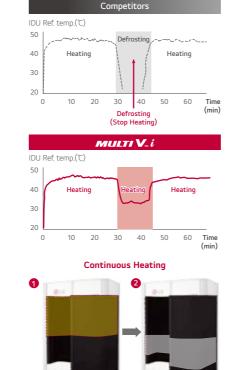
#### Improved design

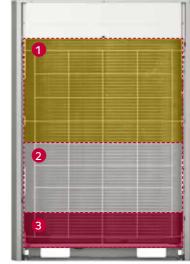
Improved design for defrost with an independent HEX system and accumulated freezing prevention design. With a differentiated structure and design, it provides longer heating time and reduced defrost time.

-25 -30 Temp.

#### Continuous Heating

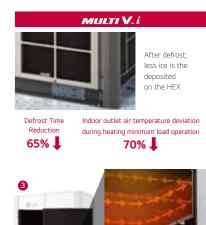
The heating operation duration was extended by independent HEX system for defrosting.





NEW Accumulated Freezing Prevention Design
Preventing the freezing of the lower part of the heat





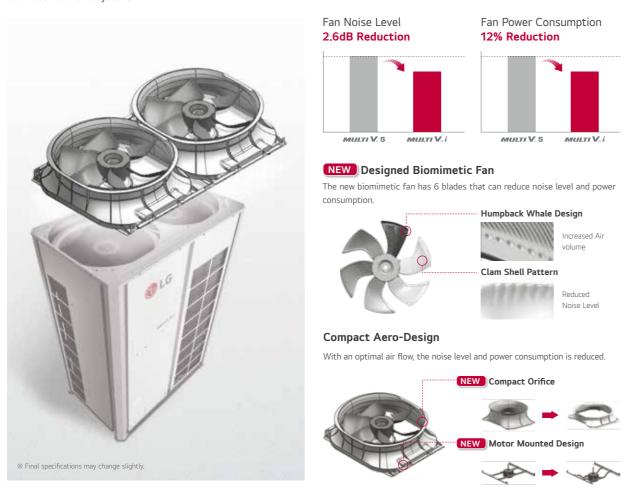
\* The defrost process is simplified for easier understanding.

※ HEX: Heat Exchanger

INNOVATIVE

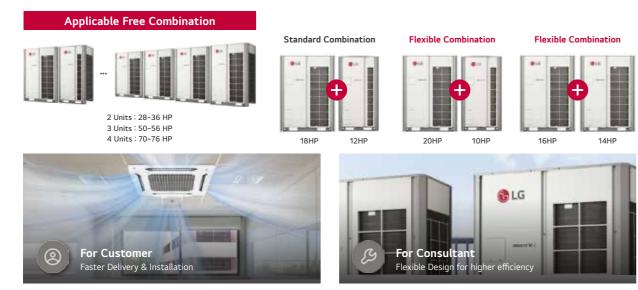
## **Newly Designed Compact Fan**

The design of a new biomimetic fan was inspired by nature. It brings more air volume and less noise with the same air flow rate compared to the conventional system.



## **Flexible Outdoor Unit Combination**

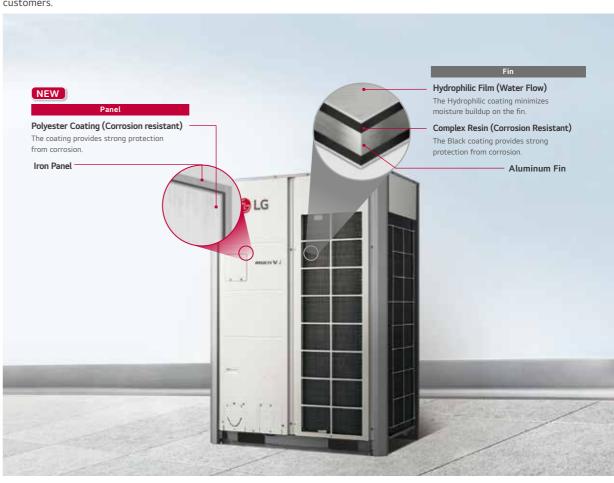
Flexible combination can contribute to faster delivery and installation. It provides more options for designing according to customers' preferences.



- The 26 HP model of UXC chassis cannot be combined with other models
   More information can be checked in the LATS tool.

## **Corrosion Resistant**

"Corrosion Resistant Black Fin" heat exchanger is designed for improved corrosion resistance. Body panels are also designed for improved corrosion resistance. 2,000 hours for body panels and 10,000 hours for heat exchanger make the product more reliable for customers.



### Salt Spray Test (SST) × Process repeated

5% Area of defects compared to initial state.

286 %







- Test Method B of ISO21207 - ASTM B117 / (2,000 hours) (Last updated : Jul.

Test process is conducted according to

1) Salty water concentration : NaCl aqueous solution (5%)

Salt Spray Test (SST) × Process repeated

5% Area of defects compared to initial state.



 ※ Verification of corrosion resistance performance
 - Test Method B of ISO21207
 - ASTM B117 / ISO 9227 (5,000 hours →10,000 hrs.) (Last updated : Dec. 2020)



Test process is conducted according to ASTM B117.

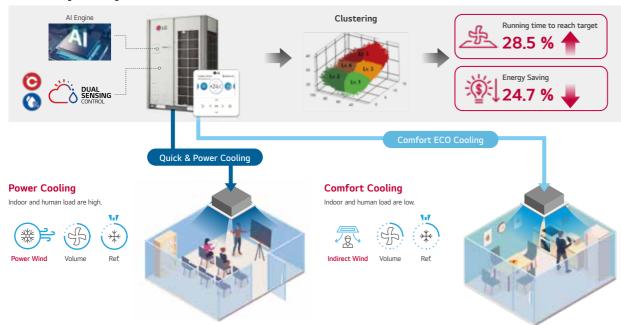
ASTM B117

<sup>\*</sup> The product is not fully anticorrosive. To install near the sea, additional measures can be required.

## **Al Smart Care**

MULTI V i is capable of autonomous adaptation to various situations. When no one is in the space, power saving mode automatically turns on. MULTI V i is equipped with deep learning algorithms enabling it to self-learn.

#### Data Collecting and Saving from IDU & ODU

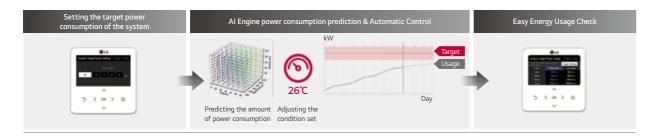


<sup>※</sup> This is the result from internal test that is followed KS Test Standard, the result may be differed by applied model, local temperature, and environment.
- Model : MULTI V i 57 kW − Test Standard : KS B ISO15042

## **Al Energy Management**

MULTI V i is able to preset monthly energy usage and consume power according to the target that has been previously set. By comparing and analyzing previous power consumption of the current month and planned daily energy usage, overuse of the HVAC system operational costs can be prevented by AI Energy management.





#### \* If more accurate status for energy consumption is needed, ACP and PDI have to be installed.

## **Adaptive Noise Control**

The outdoor unit's noise level is automatically adjusted to the ambient conditions guaranteeing the customers' peace of mind, as they no longer have to worry about causing noise damage to neighbors.



## **Noise Target Control**

The outdoor unit's noise can be restricted by the set sound level in advance, allowing customers to enjoy comfortable conditions while avoiding disturbing their neighbors and complying with the local noise regulations.



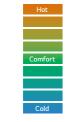
INTELLIGENT

## **Weather Information Interlocking Control**

LG MULTI V i provides more comfort and convenience by checking ambient weather conditions.











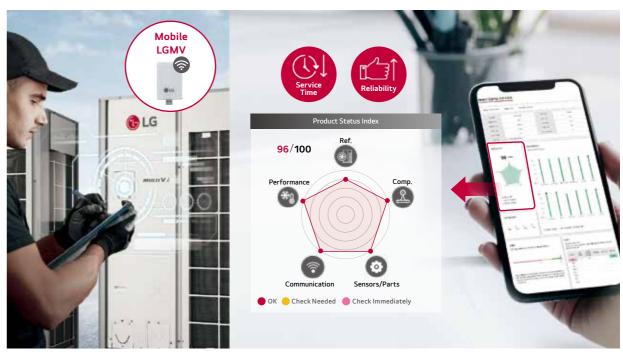




040

## **Al Smart Diagnosis**

Al Smart Diagnosis saves service time and provides for reliable LG MULTI V i operation by automatically analyzing and visualizing the product's performance status.



## **Large Capacity Black Box**

Operation data can be saved for up to 6 months before the system failure, contributing to quick service of the product.



\* UI may be changed without notification.

## **Auto Tuning System**

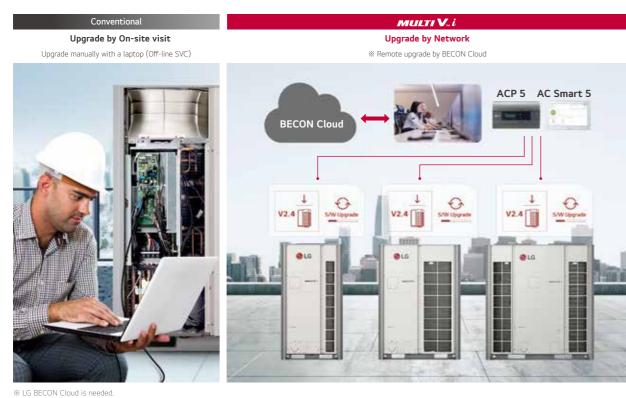
LG MULTI V i provides a new experience to customers with faster and easier installation and service. The AI engine is automatically upgradable when the compressor and motor are replaced.



\* This function is to be applied to compressor and fan motor.

## **Remote Upgrade System**

Like a smart phone, LG MULTI V i upgrades itself remotely! You can opt for the latest version of software immediately without on-site service



## **LG's Control Solution**

LG MULTI V i offers a diverse range of effective control solutions that satisfy the specific needs of each building and its user scene.





## Apartment

Power Distribution Solution



## Residential

Smart Individual Control Solution





## Small Central Control Solution

Small Building



## **Smart GUI**

Smart GUI allows remote management via various devices such as PC, tablet and smart phone.









Monitoring room

hecking each room **Tablet** 

Working outsi Mobile







Operation Trending Report



Automatic --mail Sending

## **New Innovative Controller**

LG Deluxe remote controller provides better customer experiences. (It's easy to use, with E-saving and simple maintenance.)



#### **Features**

Installation wizard
Built-in Wi-Fi with ThinQ Capability
Humidity / Proximity sensor
Seven (7) Day Scheduling with Mode
- Home / Away / Sleep / Awake
Function Code search Tool

## Full touch & Easy access



LG Deluxe has full touch LCD screen & slim design suitable for the residential application. In addition, user-oriented UX design enhances user convenience.

## Air quality Monitoring



LG Deluxe can display air quality status when the air purifying device is installed. It also shows air quality monitoring history by day, week, month and year.

## ess Pre-set Schedule



Seven Day scheduling with Home/ Away/Sleep/Awake mode makes configuration much easier. And seasonal program setting offers more flexibility.

#### **Energy Navigation**



The Energy Navigation provides system operation trend per day. Running time and power consumption is also provided compared to last year by week, month and year.

## Remote Control



The built-in Wi-Fi module makes the connection to ThinQ cloud simple and easy. Seven day schedule is synchronized between ThinQ cloud and wired remote controller.

## Easy Installation



The installation wizard helps the customer set up the basic configurations (Date & Time, Language, Temperature unit etc.) easily during installation.

## **Simpler Installation by Free HR Unit Function**

When an indoor unit is used solely for cooling or heating, it can be connected to the simultaneous system without the need to connect to the HR unit, allowing it to operate seamlessly.

#### Without HR Unit heat recovery system >

## An HR Unit is not required for a single operating mode (cooling only or heating only) IDUs.



#### **Features**

Applicable in sites where cooling, heating and hot water are simultaneously needed

(ex. hotel, hospital, etc.)

Save time and money with the Free HR Unit Function

(Cost reduction through fewer HR units, piping installations and reduced labor)

\* This function will be available within 1H, 24 (This function application schedule may be changed without notification).

#### AI Function Application

			Auglioskian			Al Funct	ion (IDU)			Al Funct	ion (ODU)
Category	Sub Category	Tool	Application Date <sup>1)</sup> (Based on MP)	Al Smart Care	Al Indoor Space Care	Al Smart Metering	Al Energy Management	Noise Target Control	AccuWeather Interlocking Control	Smart Diagnosis	Big Capacity Black Box
	Dual Vane 4 Way	TM-A / TP-B	available	•	•	•	•	•	•	•	•
	1 Way	TU / TT	available	•	•	•	•	•	•	•	•
Cassette	2 Way	TS	available	•	•	•	•	•	•	•	•
	Round	TY	available	•	•	•	•	•	•	•	•
	Mini 4 Way	TQ / TR	available	•	•	•	•	•	•	•	•
	Low Static	L4 / L5 / L6	available	•	X	•	•	•	•	•	•
Duct	High Static	B8	available	•	Х	•	•	•	•	•	•
	Mid Static	M1 / M2 / M3	available	•	Χ	•	•	•	•	•	•
Floor Standin	g	CE / CF	available	•	•	•	•	•	•	•	•
	Ceiling Suspended	VM1 / VM2	`24	•	•	•	•	•	•	•	•
Convertible*	Ceiling & Floor	VE	`24	•	•	•	•	•	•	•	•
Console*		QA	`24	•	•	•	•	•	•	•	•
Floor Standin	g (PAC)*	PT3 / PF2	Apr,`24	•	•	•	•	•	•	•	•
Wall Mounted*	Artcool, Standard	SJ / SK / SR	Apr,`24	•	•	•	•	•	•	•	•

<sup>\*</sup> Indoor units produced from 2020.

- Al Functions available via indoor units' Main PCB Onboarding.

- Al Functions available of marked models(\*) by replacing indoor units' Main PCB.

1) Application Date is subject to change.

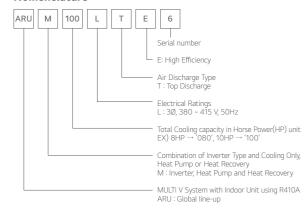
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CHNIC

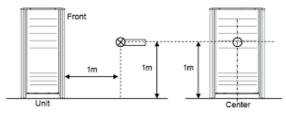
A

ATA

#### Nomenclature



### Position of Sound Pressure Level Measuring



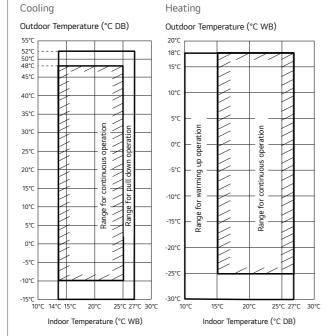
- Data is valid at diffuse field condition.
- Data is valid at nominal operating condition.
- Reference accoustic pressure OdB = 20µPa.
- Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Refer to the model specifications for nominal conditions (Power source and Ambient
- Sound levels can be increased in accordance with installation and operating conditions. (Operating conditions include some functional condition like Static pressure mode, air guide use, Room target temperature setting, etc and these functions are different in accordance with each model).
- Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of particular room in which the equipment in installed.

#### **Outdoor Units Function**

Category	Functions	Value
	Defrost / Deicing	0
	High Pressure Switch	0
	Phase Protection	0
Reliability	Restart Delay (3-minutes)	0
	Self Diagnosis	0
	Soft Start	0
	Compressor Balanced Operation	0
	Test Function	0
	Night Low Noise Operation	0
	Peak Control	0
	Mode Lock	0
Convenience	SLC (Smart Load Control)	0
	Linear Bypass Cycle	0
	Noise Target Control	0
	Weather Information Interlocking Control	0
	Comfort Cooling	0
	ODU Dry Contact Function	0
	High Static Pressure Compensation	0
	Continuous Cooling	0
	Continuous Heating (Partial Defrost)	0
Cassial Functions	Convenient Energy Check	0
Special Functions	Automatic Tuning Upgrade	0
	Remote Software Upgrade	0
	Al Smart Care	0
	Al Indoor Space Care	0
	AI Energy Target Control	0
	Al Smart Diagnosis	0

- Accessory: Ordered and purchased separately the accessory package referring to the model name provided and install at field.
- Accessory line-ups varies by region, so check your local catalogue or local sales

## Cooling / Heating Operation

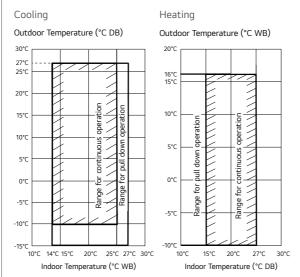


or protection logic.

- 1. These figures assume the following operating conditions
- Equivalent piping length is standard condition, and level differenc is Om.

  Range of pull down operation: If the relative humidity is too high, cooling capacity can
- be decreased by the sensible heat reduction.
- 3. Warming up operation means that the outdoor (outside) unit operates to reach the range of continuous operating, however it may not operate continuously due to safety

## Simultaneous Cooling / Heating Operation



- 1. These figures assume the following operating conditions
- : Equivalent piping length is standard condition, and level differenc is 0m.

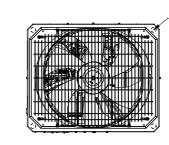
  2. Range of pull down operation: If the relative humidity is too high, cooling capacity can
- be decreased by the sensible heat reduction.
- 3. Warming up operation means that the outdoor (outside) unit operates to reach the range of continuous operating, however it may not operate continuously due to safety

## ARUM080LTE6 / ARUM100LTE6 ARUM120LTE6

No.	Part Name	Description
1	Leakage test hole (Side)	Ø22.2
2	Wire routing hole (Front)	2-Ø30
3	Wire routing hole (Bottom)	2-Ø22.2
4	Power cord routing hole (Front)	2-Ø45
5	Power cord routing hole (Bottom)	2-Ø50
6	Pipe routing hole (Front)	-
7	Pipe routing hole (Bottom)	-

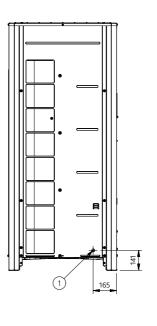
[Unit:mm]

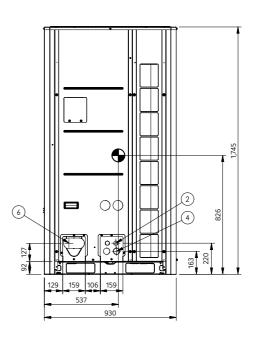


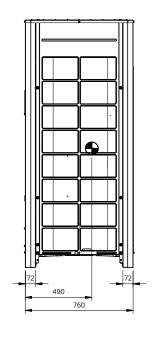


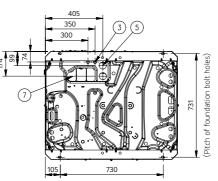
Airguide fastening total 12 places

(Refer to the hole on the Airguide for the fastening position.)









TECHNICAL

DATA

ARUM140LTE6 / ARUM160LTE6 ARUM180LTE6 / ARUM200LTE6

		[Unit · mi
No.	Part Name	Description
1	Leakage test hole (Side)	Ø22.2
2	Wire routing hole (Front)	2-Ø30
3	Wire routing hole (Bottom)	2-Ø22.2
4	Power cord routing hole (Front)	2-Ø45
5	Power cord routing hole (Bottom)	2-Ø50
6	Pipe routing hole (Front)	-
7	Pipe routing hole (Bottom)	-

ARUM220LTE6 / ARUM240LTE6 ARUM260LTE6

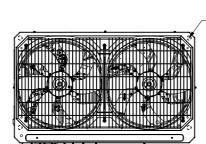
No.	Part Name	Description
1	Pipe routing hole (Bottom)	-
2	Pipe routing hole (Front)	-
3	Power cord routing hole (Front)	2-Ø30
4	Wire routing hole (Front)	2-Ø45

Airguide fastening total 12 places

(Refer to the hole on the Airguide for the fastening position.)

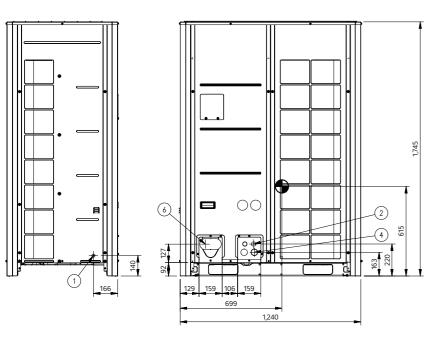
[Unit:mm]

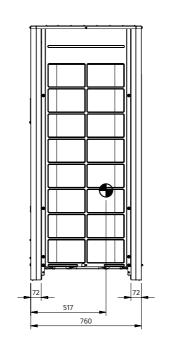


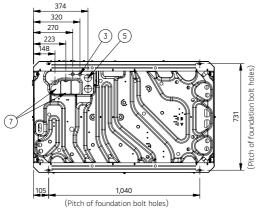


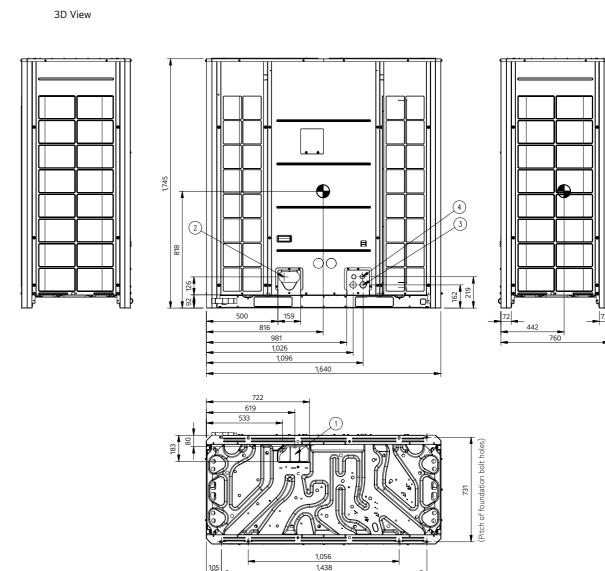
Airguide fastening total 12 places











(Pitch of foundation bolt holes)

## ARUM080LTE6 / ARUM100LTE6 ARUM120LTE6 / ARUM140LTE6







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

	HP		8	10	12	14
Classification	Chassis		UXA	UXA	UXA	UXB
Classification	Combination Unit		ARUM080LTE6	ARUM100LTE6	ARUM120LTE6	ARUM140LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	22.4	28.0	33.6	39.2
Heating	Rated	kW	22.4	28.0	33.6	39.2
Capacity	Max	kW	25.2	31.5	37.8	44.1
Power Input (Cooling)	Rated	kW	6.10	8.33	11.65	11.88
Power Input (Heating)	Rated	kW	5.16	6.22	7.77	8.43
	EER (Rated)	W/W	3.67	3.36	2.88	3.30
Efficiency	COP (Rated)	W/W	4.34	4.50	4.32	4.65
Lincicity	SEER	Wh/Wh	8.28	8.11	7.94	8.55
	SCOP	Wh/Wh	4.45	4.52	4.99	5.17
	Туре		Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	220 x 1	220 x 1	220 x 1	320 x 1
	Discharge direction (Side	/ Top)	Тор	Тор	Тор	Тор
Outdoor Fan	Drive		Direct	Direct	Direct	Direct
Motor	Output	W x No.	1,200 x 1	1,200 x 1	1,200 x 1	900 x 2
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1	62.1	62.1	62.1
Compressor	Number of Revolution	rev./min	3,600	3,600	3,600	3,600
	Motor Output	W x No.	5,300 × 1	5,300 x 1	5,300 x 1	5,300 x 1
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	930 x 1,745 x 760	930 x 1,745 x 760	930 x 1,745 x 760	1,240 x 1,745 x 760
Difficusions	Shipping (W x H x D)	mm	965 x 1,919 x 802	965 x 1,919 x 802	965 x 1,919 x 802	1,282 x 1,919 x 802
Weight	Net	kg	215	215	215	255
· · · · · · · · · · · · · · · · · · ·	Shipping	kg	225	225	225	265
	Туре		R410A	R410A	R410A	R410A
Refrigerant	Precharged Amount	kg	8.5	9.5	9.5	13.0
, <b>,</b> , ,	t-CO <sub>2</sub> eq.		17.744	19.831	19.831	27.138
	Control Type		EEV	EEV	EEV	EEV
	Liquid	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø12.70 (1/2)	Ø12.70 (1/2)
	Gas	mm (inch)	Ø19.05 (3/4)	Ø22.20 (7/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
Connecting Pipe	Low Pressure Gas (Heat Recovery)	mm (inch)	Ø19.05 (3/4)	Ø22.20 (7/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø15.88 (5/8)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø22.20 (7/8)
Sound Pressure Level*	Cooling	dB (A)	57.0	57.5	59.0	60.0
(Outdoor Unit)	Heating	dB (A)	58.0	58.5	60.0	61.0
Sound Power	Cooling	dB (A)	78.0	79.0	80.0	81.0
Level (Outdoor Unit)	Heating	dB (A)	78.0	79.0	82.0	81.0
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C			
Connectable Indoor Units Number	Max. (Conditional)	EA	13 (20)	16 (25)	20 (30)	23 (35)

## ARUM200LTE6 / ARUM220LTE6

ARUM160LTE6 / ARUM180LTE6







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

	HP		16	18	20	22
Classification	Chassis		UXB	UXB	UXB	UXC
Classification	Combination Unit		ARUM160LTE6	ARUM180LTE6	ARUM200LTE6	ARUM220LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	44.8	50.4	56.0	61.6
Heating	Rated	kW	44.8	50.4	56.0	61.6
Capacity	Max	kW	50.4	56.7	63.0	69.3
Power Input (Cooling)	Rated	kW	15.45	14.39	17.54	22.00
Power Input (Heating)	Rated	kW	10.09	10.59	12.64	15.96
	EER (Rated)	W/W	2.90	3.50	3.19	2.80
Efficiency	COP (Rated)	W/W	4.44	4.76	4.43	3.86
Linciency	SEER	Wh/Wh	7.97	8.65	8.42	7.20
	SCOP	Wh/Wh	5.46	4.81	5.13	4.62
	Туре		Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	320 x 1	320 x 1	320 x 1	430 x 1
	Discharge direction (Side	/ Top)	Тор	Тор	Тор	Тор
Outdoor Fan	Drive		Direct	Direct	Direct	Direct
Motor	Output	W x No.	900 x 2	900 x 2	900 x 2	1,500 x 2
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scro
	Piston Displacement	cm³/rev	62.1	62.1 x 2	62.1 x 2	62.1 x 2
Compressor	Number of Revolution	rev./min	3,600	3,600 x 2	3,600 x 2	3,600 x 2
	Motor Output	W x No.	5,300 x 1	5,300 x 2	5,300 x 2	5,300 x 2
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	1,240 x 1,745 x 760	1,240 x 1,745 x 760	1,240 x 1,745 x 760	1,640 x 1,745 x 760
Dillicitations	Shipping (W x H x D)	mm	1,282 x 1,919 x 802	1,282 x 1,919 x 802	1,282 x 1,919 x 802	1,675 x 1,919 x 802
Weight	Net	kg	255	300	300	362
weight	Shipping	kg	265	310	310	372
	Туре		R410A	R410A	R410A	R410A
Refrigerant	Precharged Amount	kg	13.0	16.0	16.0	16.0
Remigerane	t-CO <sub>2</sub> eq.		27.138	33.400	33.400	33.400
	Control Type		EEV	EEV	EEV	EEV
	Liquid	mm (inch)	Ø12.70 (1/2)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)
	Gas	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
Connecting Pipe	Low Pressure Gas (Heat Recovery)	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø22.20 (7/8)	Ø22.20 (7/8)	Ø22.20 (7/8)	Ø28.58 (1-1/8)
Sound Pressure Level*	Cooling	dB (A)	60.5	61.0	62.0	64.0
(Outdoor Unit)	Heating	dB (A)	61.5	62.0	63.5	66.0
Sound Power Level	Cooling	dB (A)	85.0	85.0	86.0	84.0
(Outdoor Unit)	Heating	dB (A)	85.0	86.0	89.0	88.0
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	26 (40)	29 (45)	32 (50)	35 (56)

<sup>\*:</sup> Sound Pressure is not a value declared on Eurovent Program.

1) Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% ~ 200%). The recommended ratio is 130%.

<sup>\*:</sup> Sound Pressure is not a value declared on Eurovent Program.

1) Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.

2) Applying to 16, 18, 20HP outdoor units only.

## ARUM240LTE6 / ARUM260LTE6 ARUM280LTE6 / ARUM300LTE6





	HP		24	26	28	30
	Chassis		UXC	UXC	UXB + UXA	UXB + UXA
Classification	Combination Unit		ARUM240LTE6	ARUM260LTE6	ARUM160LTE6 ARUM120LTE6	ARUM180LTE6 ARUM120LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	67.2	72.8	78.4	84.0
Heating	Rated	kW	67.2	72.8	78.4	84.0
Capacity	Max	kW	75.6	81.9	88.2	94.5
Power Input (Cooling)	Rated	kW	26.15	31.52	27.10	26.04
Power Input (Heating)	Rated	kW	18.61	21.60	17.86	18.36
	EER (Rated)	W/W	2.57	2.31	2.89	3.23
Efficiency	COP (Rated)	W/W	3.61	3.37	4.39	4.58
Efficiency	SEER	Wh/Wh	6.91	6.62	7.96	8.30
	SCOP	Wh/Wh	4.31	4.11	5.22	4.90
	Туре		Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	430 x 1	430 x 1	(320 × 1) + (220 × 1)	(320 × 1) + (220 × 1)
	Discharge direction (Sid	e / Top)	Тор	Тор	Тор	Тор
Outdoor Fan	Drive		Direct	Direct	Direct	Direct
Motor	Output	W x No.	1,500 x 2	1,500 x 2	(900 × 2) + (1,200 × 1)	(900 × 2) + (1,200 × 1)
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1 x 2	62,1 x 2	62,1 x 2	62.1 x 3
Compressor	Number of Revolution	rev./min	3,600 x 2	3,600 x 2	3,600 x 2	3,600 x 3
	Motor Output	W x No.	5,300 x 2	5,300 x 2	5,300 x 2	5,300 x 3
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)	FW68L (PVE)
Heat Exchanger	* '		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Net (W x H x D)	mm	1,640 x 1,745 x 760	1,640 x 1,745 x 760	((1,240 x 1,745 x 760) x 1) + ((930 x 1,745 x 760) x 1)	((1,240 x 1,745 x 760) x 1) + ((930 x 1,745 x 760) x 1)
Dimensions	Shipping (W x H x D)	mm	1,675 x 1,919 x 787	1,675 x 1,919 x 787	((1,282 x 1,919 x 802) x 1) + ((965 x 1,919 x 802) x 1)	((1,282 x 1,919 x 802) x 1) + ((965 x 1,919 x 802) x 1)
	Net	kg	362	362	(255 × 1) + (215 × 1)	(300 × 1) + (215 × 1)
Weight	Shipping	kg	372	372	(265 x 1) + (225 x 1)	(310 x 1) + (225 x 1)
	Туре		R410A	R410A	R410A	R410A
	Precharged Amount	kg	16.0	16.0	22.5	25.5
Refrigerant	t-CO <sub>2</sub> eq.		33.400	33.400	46.969	53.231
	Control Type		EEV	EEV	EEV	EEV
	Liquid	mm (inch)	Ø15.88 (5/8)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
	Gas	mm (inch)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)
Connecting Pipe	Low Pressure Gas (Heat Recovery)	mm (inch)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
Sound Pressure	Cooling	dB (A)	65.0	65.0	62.8	63.1
Level (Outdoor Unit)	Heating	dB (A)	66.0	66.5	63.8	64.1
Sound Power	Cooling	dB (A)	85.0	89.0	86.2	86.2
Level (Outdoor Unit)	Heating	dB (A)	88.0	89.0	86.8	87.5
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	39 (61)	42 (64)	45 (56)	49 (60)

## ARUM320LTE6 / ARUM340LTE6 ARUM360LTE6 / ARUM380LTE6





	НР		32	34	36	38
	Chassis		UXB + UXA	UXB + UXB	UXB + UXB	UXB + UXB
Classification	Combination Unit		ARUM200LTE6 ARUM120LTE6	ARUM200LTE6 ARUM140LTE6	ARUM200LTE6 ARUM160LTE6	ARUM200LTE6 ARUM180LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	89.6	95.2	100.8	106.4
Heating	Rated	kW	89.6	95.2	100.8	106.4
Capacity			100.8	107.1	113.4	119.7
Power Input (Cooling)	Cooling) Rated KW		29.19	29.42	32.99	31.93
Power Input (Heating)	Rated	kW	20.41	21.07	22.73	23.23
	EER (Rated)	W/W	3.07	3.24	3.06	3.33
Efficiency	COP (Rated)	W/W	4.39	4.52	4.43	4.58
Linciency	SEER	Wh/Wh	8.18	8.48	8.19	8.53
	SCOP	Wh/Wh	5.06	5.15	5.29	4.97
	Туре		Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	(320 × 1) + (220 × 1)	(320 × 1) + (320 × 1)	(320 × 1) + (320 × 1)	(320 × 1) + (320 × 1)
	Discharge direction (Side	e / Top)	Тор	Тор	Тор	Тор
Outdoor Fan	Drive		Direct	Direct	Direct	Direct
Motor	Output	W x No.	(900 × 2) + (1,200 × 1)	(900 × 2) + (900 × 2)	(900 × 2) + (900 × 2)	(900 × 2) + (900 × 2
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scro
	Piston Displacement	cm³/rev	62.1 x 3	62.1 x 3	62.1 x 3	62.1 x 4
Compressor	Number of Revolution	rev./min	3,600 x 3	3,600 x 3	3,600 x 3	3,600 x 4
	Motor Output	W x No.	5,300 x 3	5,300 x 3	5,300 x 3	5,300 x 4
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	((1,240 x 1,745 x 760) x 1) + ((930 x 1,745 x 760) x 1)	(1,240 x 1,745 x 760) x 2	(1,240 x 1,745 x 760) x 2	(1,240 x 1,745 x 760) x
Dimensions	Shipping (W x H x D)	mm	((1,282 x 1,919 x 802) x 1) + ((965 x 1,919 x 802) x 1)	(1,282 x 1,919 x 802) x 2	(1,282 x 1,919 x 802) x 2	(1,282 x 1,919 x 802) x
	Net	kg	(300 × 1) + (215 × 1)	(300 × 1) + (255 × 1)	(300 × 1) + (255 × 1)	(300 × 1) + (300 × 1)
Weight	Shipping	kg	(310 x 1) + (225 x 1)	(310 x 1) + (265 x 1)	(310 x 1) + (265 x 1)	(310 x 1) + (310 x 1)
	Туре		R410A	R410A	R410A	R410A
D.f.:	Precharged Amount	kg	25.5	29.0	29.0	32.0
Refrigerant	t-CO <sub>2</sub> eq.		53.231	60.538	60.538	66.800
	Control Type		EEV	EEV	EEV	EEV
	Liquid	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
	Gas	mm (inch)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
Connecting Pipe	Low Pressure Gas (Heat Recovery)	mm (inch)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
S 15	High Pressure Gas (Heat Recovery)	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø34.90 (1-3/8)
Sound Pressure Level	Cooling	dB (A)	63.8	64.1	64.3	64.5
(Outdoor Unit)	Heating	dB (A)	65.1	65.4	65.6	65.8
Sound Power	Cooling	dB (A)	87.0	87.2	88.5	88.5
(Outdoor Unit)	Heating	dB (A)	89.8	89.6	90.5	90.8
(Outdoor Unit) Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	52 (64)	55 (64)	58 (64)	61 (64)

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% ~ 200%). The recommended ratio is 130%.

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.

## ARUM400LTE6 / ARUM420LTE6 ARUM440LTE6





	HP		40	42	44
	Chassis		UXB + UXB	UXC + UXB	UXC + UXB
Classification	Combination Unit		ARUM200LTE6 ARUM200LTE6	ARUM220LTE6 ARUM200LTE6	ARUM240LTE6 ARUM200LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	112.0	117.6	123.2
Heating	Rated	kW	112.0	117.6	123.2
Capacity	Max	kW	126.0	132.3	138.6
Power Input (Cooling)	Rated	kW	35.08	39.54	43.69
Power Input (Heating)	Rated	kW	25.28	28.60	31.25
	EER (Rated)	W/W	3.19	2.97	2.82
Efficiency	COP (Rated)	W/W	4.43	4.11	3.94
Linciency	SEER	Wh/Wh	8.42	7.81	7.66
	SCOP	Wh/Wh	5.13	4.87	4.72
	Туре		Propeller Fan	Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	(320 × 1) + (320 × 1)	(430 x 1) + (320 × 1)	(430 x 1) + (320 × 1)
	Discharge direction (Side	e / Top)	Тор	Тор	Тор
Outdoor Fan	Drive		Direct	Direct	Direct
Motor	Output	W x No.	$(900 \times 2) + (900 \times 2)$	$(1,500 \times 2) + (900 \times 2)$	$(1,500 \times 2) + (900 \times 2)$
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1 x 4	62.1 x 4	62.1 x 4
Compressor	Number of Revolution	rev./min	3,600 x 4	3,600 x 4	3,600 x 4
	Motor Output	W x No.	5,300 x 4	5,300 x 4	5,300 x 4
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	(1,240 x 1,745 x 760) x 2	((1,640 x 1,745 x 760) x 1) + ((1,240 x 1,745 x 760) x 1)	((1,640 x 1,745 x 760) x 1) + ((1,240 x 1,745 x 760) x 1)
Difficusions	Shipping (W x H x D)	mm	(1,282 x 1,919 x 802) x 2	((1,675 x 1,919 x 802) x 1) + ((1,282 x 1,919 x 802) x 1)	((1,675 x 1,919 x 802) x 1) + ((1,282 x 1,919 x 802) x 1)
Weight	Net	kg	(300 × 1) + (300 × 1)	(362 x 1) + (300 × 1)	(362 x 1) + (300 × 1)
vveigiic	Shipping	kg	(310 x 1) + (310 x 1)	(372 x 1) + (310 x 1)	(372 x 1) + (310 x 1)
	Туре		R410A	R410A	R410A
Refrigerant	Precharged Amount	kg	32.0	32.0	32.0
Refrigerant	t-CO <sub>2</sub> eq.		66.800	66.800	66.800
	Control Type		EEV	EEV	EEV
	Liquid	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
	Gas	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
Connecting Pipe	Low Pressure Gas (Heat Recovery)	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)
Sound Pressure Level	Cooling	dB (A)	65.0	66.1	66.8
(Outdoor Unit)	Heating	dB (A)	66.5	67.9	67.9
Sound Power	Cooling	dB (A)	89.0	88.1	88.5
Level	Heating	dB (A)	92.0	91.5	91.5
(Outdoor Unit) Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	64	64	64

## ARUM460LTE6 / ARUM480LTE6 ARUM500LTE6





	HP		46	48	50	
	Chassis		UXC + UXC	UXC + UXC	UXB + UXB + UXA	
Classification	Combination Unit		ARUM240LTE6 ARUM220LTE6	ARUM240LTE6 ARUM240LTE6	ARUM200LTE6 ARUM180LTE6 ARUM120LTE6	
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50	
Cooling Capacity	Rated	kW	128.8	134.4	140.0	
Heating	Rated	kW	128.8	134.4	140.0	
Capacity	Max	kW	144.9	151.2	157.5	
Power Input (Cooling)	Rated	kW	48.15	52.30	43.58	
Power Input (Heating)	Rated	kW	34.57	37.22	31.00	
	EER (Rated)	W/W	2.67	2.57	3.21	
Efficiency	COP (Rated)	W/W	3.73	3.61	4.52	
,	SEER	Wh/Wh	7.06	6.91	8.34	
	SCOP	Wh/Wh	4.47	4.31	4.97	
	Туре		Propeller Fan	Propeller Fan	Propeller Fan	
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	(430 x 1) + (430 x 1)	(430 x 1) + (430 x 1)	(320 × 1) + (320 × 1) + (220 × 1)	
	Discharge direction (Side	e / Top)	Тор	Тор	Тор	
Outdoor Fan	Drive		Direct	Direct	Direct	
Motor	Output	W x No.	(1,500 x 2) + (1,500 x 2)	(1,500 x 2) + (1,500 x 2)	(900 × 2) + (900 × 2) + (1,200 × 1)	
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Piston Displacement	cm³/rev	62.1 x 4	62.1 x 4	62.1 x 5	
Compressor	Number of Revolution	rev./min	3,600 x 4	3,600 x 4	3,600 x 5	
	Motor Output	W x No.	5,300 x 4	5,300 x 4	5,300 x 5	
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)	
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	
Dimensions	Net (W x H x D)	mm	(1,640 x 1,745 x 760) x 2	(1,640 x 1,745 x 760) x 2	((1,240 x 1,745 x 760) x 2) + ((930 x 1,745 x 760) x 1) ((1,282 x 1,919 x 802) x 2) +	
	Shipping (W x H x D)	mm	(1,675 x 1,919 x 802) x 2	(1,675 x 1,919 x 802) x 2	((965 x 1,919 x 802) x 1)	
Weight	Net	kg	(362 x 1) + (362 x 1)	(362 x 1) + (362 x 1)	(300 × 1) + (300 × 1) + (215 × 1)	
	Shipping	kg	(372 x 1) + (372 x 1)	(372 x 1) + (372 x 1)	(310 x 1) + (310 x 1) + (225 x 1)	
	Type  Procharged Amount	ka	R410A 32.0	R410A 32.0	R410A	
Refrigerant	Precharged Amount	kg	32.0 66.800	66.800	41.5 86.631	
	t-CO₂ eq. Control Type		66.800 EEV	66.800 EEV	86.631 EEV	
	Liquid	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)	
	Gas	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	
Connecting Pipe	1 0	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)	
Sound Pressure	Cooling	dB (A)	67.5	68.0	65.6	
Level (Outdoor Unit)	Heating	dB (A)	69.0	69.0	66.8	
Sound Power	Cooling	dB (A)	87.5	88.0	89.1	
Level (Outdoor Unit)	Heating	dB (A)	91.0	91.0	91.3	
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	
Connectable Indoor Units Number	Max. (Conditional)	EA	64	64	64	

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% ~ 200%). The recommended ratio is 130%.

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.

## ARUM520LTE6 / ARUM540LTE6 ARUM560LTE6





	НР		52	54	56
	Chassis		UXB + UXB + UXA	UXB + UXB + UXB	UXB + UXB + UXB
Classification	Combination Unit		ARUM200LTE6 ARUM200LTE6 ARUM120LTE6	ARUM200LTE6 ARUM200LTE6 ARUM140LTE6	ARUM200LTE6 ARUM200LTE6 ARUM160LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	145.6	151.2	156.8
Heating	Rated	kW	145.6	151.2	156.8
Capacity	Max	kW	163.8	170.1	176.4
Power Input (Cooling)	Rated	kW	46.73	46.96	50.53
Power Input (Heating)	Rated	kW	33.05	33.71	35.37
	EER (Rated)	W/W	3.12	3.22	3.10
Efficiency	COP (Rated)	W/W	4.41	4.49	4.43
Linciency	SEER	Wh/Wh	8.26	8.46	8.27
	SCOP	Wh/Wh	5.08	5.14	5.24
	Туре		Propeller Fan	Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	(320 × 1) + (320 × 1) + (220 × 1)	(320 × 1) + (320 × 1) + (320 × 1)	(320 × 1) + (320 × 1) + (320 × 1)
	Discharge direction (Side	e / Top)	Тор	Тор	Тор
Outdoor Fan	Drive		Direct	Direct	Direct
Motor	Output	W x No.	(900 × 2) + (900 × 2) + (1,200 × 1)	(900 × 2) + (900 × 2) + (900 × 2)	(900 × 2) + (900 × 2) + (900 × 2)
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1 x 5	62.1 x 5	62.1 x 5
Compressor	Number of Revolution	rev./min	3,600 x 5	3,600 x 5	3,600 x 5
	Motor Output	W x No.	5,300 x 5	5,300 x 5	5,300 x 5
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	((1,240 x 1,745 x 760) x 2) + ((930 x 1,745 x 760) x 1)	(1,240 x 1,745 x 760) x 3	(1,240 x 1,745 x 760) x 3
Dimensions	Shipping (W x H x D)	mm	((1,282 x 1,919 x 802) x 2) + ((965 x 1,919 x 802) x 1)	(1,282 x 1,919 x 802) x 3	(1,282 x 1,919 x 802) x 3
	Net	kg	(300 × 1) + (300 × 1) + (215 × 1)	(300 × 1) + (300 × 1) + (255 × 1)	(300 × 1) + (300 × 1) + (255 × 1)
Weight	Shipping	kg	(310 x 1) + (310 x 1) + (225 x 1)	(310 x 1) + (310 x 1) + (265 x 1)	(310 x 1) + (310 x 1) + (265 x 1)
	Туре		R410A	R410A	R410A
Defriesrent	Precharged Amount	kg	41.5	45.0	45.0
Refrigerant	t-CO <sub>2</sub> eq.		86.631	93.938	93.938
	Control Type		EEV	EEV	EEV
	Liquid	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
	Gas	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
Connecting Pipe	(Heat Recovery)	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)
Sound Pressure Level	Cooling	dB (A)	66.0	66.2	66.3
(Outdoor Unit)	Heating	dB (A)	67.4	67.6	67.7
Sound Power	Cooling	dB (A)	89.5	89.6	90.5
Level (Outdoor Unit)	Heating	dB (A)	92.4	92.3	92.8
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	64	64	64

## ARUM580LTE6 / ARUM600LTE6 ARUM620LTE6





	HP		58	60	62
	Chassis		UXB + UXB + UXB	UXB + UXB + UXB	UXC + UXB + UXB
Classification	Combination Unit		ARUM200LTE6 ARUM200LTE6 ARUM180LTE6	ARUM200LTE6 ARUM200LTE6 ARUM200LTE6	ARUM220LTE6 ARUM200LTE6 ARUM200LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	162.4	168.0	173.6
Heating	Rated	kW	162.4	168.0	173.6
Capacity	Max	kW	182.7	189.0	195.3
Power Input (Cooling)	Rated	kW	49.47	52.62	57.08
Power Input (Heating)	Rated	kW	35.87	37.92	41.24
	EER (Rated)	W/W	3.28	3.19	3.04
Efficiency	COP (Rated)	W/W	4.53	4.43	4.21
Linciency	SEER	Wh/Wh	8.49	8.42	8.01
	SCOP	Wh/Wh	5.02	5.13	4.96
	Туре		Propeller Fan	Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	(320 × 1) + (320 × 1) + (320 × 1)	(320 × 1) + (320 × 1) + (320 × 1)	(430 x 1) + (320 × 1) + (320 × 1)
	Discharge direction (Side	/ Top)	Тор	Тор	Тор
Outdoor Fan	Drive		Direct	Direct	Direct
Motor	Output	W x No.	(900 × 2) + (900 × 2) + (900 × 2)	(900 × 2) + (900 × 2) + (900 × 2)	(1,500 x 2) + (900 × 2) + (900 × 2)
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
Compressor	Piston Displacement	cm³/rev	62.1 x 6	62.1 x 6	62.1 x 6
	Number of Revolution	rev./min	3,600 x 6	3,600 x 6	3,600 x 6
	Motor Output	W x No.	5,300 x 6	5,300 x 6	5,300 x 6
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	(1,240 x 1,745 x 760) x 3	(1,240 x 1,745 x 760) x 3	((1,640 x 1,745 x 760) x 1) + ((1,240 x 1,745 x 760) x 2)
Dimensions	Shipping (W x H x D)	mm	(1,282 x 1,919 x 802) x 3	(1,282 x 1,919 x 802) x 3	((1,675 x 1,919 x 802) x 1) + ((1,282 x 1,919 x 802) x 2)
Weight	Net	kg	(300 × 1) + (300 × 1) + (300 × 1)	(300 × 1) + (300 × 1) + (300 × 1)	(362 x 1) + (300 × 1) + (300 ×
vveigiit	Shipping	kg	(310 x 1) + (310 x 1) + (310 x 1)	(310 x 1) + (310 x 1) + (310 x 1)	(372 x 1) + (310 x 1) + (310 x
	Туре		R410A	R410A	R410A
Defuirement	Precharged Amount	kg	48.0	48.0	48.0
Refrigerant	t-CO <sub>2</sub> eq.		100.200	100.200	100.200
	Control Type		EEV	EEV	EEV
	Liquid	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø22.20 (7/8)
	Gas	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
Connecting Pipe	Low Pressure Gas (Heat Recovery)	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)	Ø34.90 (1-3/8)
Sound Pressure Level	Cooling	dB (A)	66.5	66.8	67.5
(Outdoor Unit)	Heating	dB (A)	67.8	68.3	69.3
Sound Power	Cooling	dB (A)	90.5	90.8	90.2
Level	Heating	dB (A)	93.0	93.8	93.5
(Outdoor Unit) Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	64	64	64

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% ~ 200%). The recommended ratio is 130%.

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% ~ 200%). The recommended ratio is 130%.

## ARUM640LTE6 / ARUM660LTE6 ARUM680LTE6





	HP		64	66	68
	Chassis		UXC + UXB + UXB	UXC + UXC + UXB	UXC + UXC + UXB
Classification	Combination Unit		ARUM240LTE6 ARUM200LTE6 ARUM200LTE6	ARUM240LTE6 ARUM220LTE6 ARUM200LTE6	ARUM240LTE6 ARUM240LTE6 ARUM200LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	179.2	184.8	190.4
Heating	Rated	kW	179.2	184.8	190.4
Capacity	Max	kW	201.6	207.9	214.2
Power Input (Cooling)	Rated	kW	61.23	65.69	69.84
Power Input (Heating)	Rated	kW	43.89	47.21	49.86
	EER (Rated)	W/W	2.93	2.81	2.73
Efficiency	COP (Rated)	W/W	4.08	3.91	3.82
Efficiency	SEER	Wh/Wh	7.91	7.51	7.41
	SCOP	Wh/Wh	4.86	4.69	4.58
	Туре		Propeller Fan	Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	(430 x 1) + (320 × 1) + (320 × 1)	(430 x 1) + (430 x 1) + (320 x 1)	(430 x 1) + (430 x 1) + (320 x 1)
	Discharge direction (Side	/ Top)	Тор	Тор	Тор
0.1.5	Drive		Direct	Direct	Direct
Outdoor Fan Motor	Output	W x No.	(1,500 x 2) + (900 × 2) + (900 × 2)	(1,500 x 2) + (1,500 x 2) + (900 × 2)	(1,500 x 2) + (1,500 x 2) + (900 × 2)
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1 x 6	62.1 x 6	62.1 x 6
Compressor	Number of Revolution	rev./min	3,600 x 6	3,600 x 6	3,600 x 6
	Motor Output	W x No.	5,300 x 6	5,300 x 6	5,300 x 6
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Net (W x H x D)	mm	((1,640 x 1,745 x 760) x 1) + ((1,240 x 1,745 x 760) x 2)	((1,640 x 1,745 x 760) x 2) + ((1,240 x 1,745 x 760) x 1)	((1,640 x 1,745 x 760) x 2) + ((1,240 x 1,745 x 760) x 1)
Dimensions	Shipping (W x H x D)	mm	((1,675 x 1,919 x 802) x 1) + ((1,282 x 1,919 x 802) x 2)	((1,675 x 1,919 x 802) x 2) + ((1,282 x 1,919 x 802) x 1)	((1,675 x 1,919 x 802) x 2) + ((1,282 x 1,919 x 802) x 1)
	Net	kg	(362 x 1) + (300 × 1) + (300 × 1)	(362 x 1) + (362 x 1) + (300 × 1)	(362 x 1) + (362 x 1) + (300 × 1)
Weight	Shipping	kg	(372 x 1) + (310 x 1) + (310 x 1)	(372 x 1) + (372 x 1) + (310 x 1)	(372 x 1) + (372 x 1) + (310 x 1)
	Туре		R410A	R410A	R410A
D. 61	Precharged Amount	kg	48.0	48.0	48.0
Refrigerant	t-CO <sub>2</sub> eq.		100,200	100.200	100.200
	Control Type		EEV	EEV	EEV
	Liquid	mm (inch)	Ø22.20 (7/8)	Ø22.20 (7/8)	Ø22.20 (7/8)
	Gas	mm (inch)	Ø41.30 (1-5/8)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)
Connecting Pipe	Low Pressure Gas (Heat Recovery)	mm (inch)	Ø41.30 (1-5/8)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø34.90 (1-3/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
Sound Pressure Level	Cooling	dB (A)	68.0	68.6	69.0
(Outdoor Unit)	Heating	dB (A)	69.3	70.1	70.1
Sound Power	Cooling	dB (A)	90.5	89.8	90.1
Level (Outdoor Unit)	Heating	dB (A)	93.5	93.1	93.1
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	64	64	64

## ARUM700LTE6 / ARUM720LTE6 ARUM740LTE6





	HP		70	72	74
	Chassis		UXB + UXB + UXB + UXA	UXB + UXB + UXB + UXA	UXB + UXB + UXB + UXB
Classification	Combination Unit		ARUM200LTE6 ARUM200LTE6 ARUM180LTE6 ARUM120LTE6	ARUM200LTE6 ARUM200LTE6 ARUM200LTE6 ARUM120LTE6	ARUM200LTE6 ARUM200LTE6 ARUM200LTE6 ARUM140LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Cooling	Rated	kW	196.0	201.6	207.2
Capacity Heating	Rated	kW	196.0	201.6	207.2
Capacity	Max	kW	220.5	226.8	233.1
Power Input (Cooling)	Rated	kW	61.12	64.27	64.50
Power Input (Heating)	Rated	kW	43.64	45.69	46.35
	EER (Rated)	W/W	3.21	3.14	3.21
Efficiency	COP (Rated)	W/W	4.49	4.41	4.47
	SEER	Wh/Wh	8.36	8.30	8.45
	SCOP	Wh/Wh	5.01	5.09	5.14
	Туре		Propeller Fan	Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	(320 × 1) + (320 × 1) + (320 × 1) + (220 × 1)	(320 × 1) + (320 × 1) + (320 × 1) + (220 × 1)	(320 × 1) + (320 × 1) + (320 × 1) + (320 × 1)
	Discharge direction (Sid	e / Top)	Тор	Тор	Тор
Outdoor Fan	Drive		Direct	Direct	Direct
Motor	Output	W x No.	(900 × 2) + (900 × 2) + (900 × 2) + (1,200 × 1)	(900 × 2) + (900 × 2) + (900 × 2) + (1,200 × 1)	(900 × 2) + (900 × 2) + (900 × 2) + (900 × 2)
Compressor	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1 x 7	62.1 x 7	62.1 x 7
	Number of Revolution	rev./min	3,600 x 7	3,600 x 7	3,600 x 7
	Motor Output	W x No.	5,300 x 7	5,300 x 7	5,300 x 7
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	((1,240 x 1,745 x 760) x 3) + ((930 x 1,745 x 760) x 1)	((1,240 x 1,745 x 760) x 3) + ((930 x 1,745 x 760) x 1)	(1,240 x 1,745 x 760) x 4
J	Shipping (W x H x D)	mm	((1,282 x 1,919 x 802) x 3) + ((965 x 1,919 x 802) x 1)	((1,282 x 1,919 x 802) x 3) + ((965 x 1,919 x 802) x 1)	(1,282 x 1,919 x 802) x 4
Weight	Net	kg	(300 × 1) + (300 × 1) + (300 × 1) + (215 × 1)	(300 × 1) + (300 × 1) + (300 × 1) + (215 × 1)	(300 × 1) + (300 × 1) + (300 × 1 + (255 × 1)
	Shipping	kg	(310 x 1) + (310 x 1) + (310 x 1) + (225 x 1)	(310 x 1) + (310 x 1) + (310 x 1) + (225 x 1)	(310 x 1) + (310 x 1) + (310 x 1) (265 x 1)
	Туре		R410A	R410A	R410A
Refrigerant	Precharged Amount	kg	57.5	57.5	61.0
	t-CO <sub>2</sub> eq.		120.031	120.031	127.338
	Control Type	(: )	EEV	EEV	EEV
	Liquid	mm (inch)	Ø22.20 (7/8)	Ø22.20 (7/8)	Ø22.20 (7/8)
Connecting Pipe	Compressure Gas	mm (inch)	Ø53.98 (2-1/8) Ø53.98 (2-1/8)	Ø53.98 (2-1/8) Ø53.98 (2-1/8)	Ø53.98 (2-1/8) Ø53.98 (2-1/8)
	(Heat Recovery) High Pressure Gas (Heat Recovery)	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
Sound Pressure	Cooling	dB (A)	67.2	67.4	67.6
Level (Outdoor Unit)	Heating	dB (A)	68.5	68.9	69.0
Sound Power	Cooling	dB (A)	90.8	91.1	91.2
Level (Outdoor Unit)	Heating	dB (A)	93.3	94.1	94.0
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	64	64	64

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% ~ 200%). The recommended ratio is 130%.

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% ~ 200%). The recommended ratio is 130%.

## ARUM760LTE6 / ARUM780LTE6 ARUM800LTE6



	HP		76	78	80
	Chassis		UXB + UXB + UXB + UXB	UXB + UXB + UXB + UXB	UXB + UXB + UXB + UXB
Classification	Combination Unit		ARUM200LTE6 ARUM200LTE6 ARUM200LTE6 ARUM160LTE6	ARUM200LTE6 ARUM200LTE6 ARUM200LTE6 ARUM180LTE6	ARUM200LTE6 ARUM200LTE6 ARUM200LTE6 ARUM200LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	212.8	218.4	224.0
Heating	Rated	kW	212.8	218.4	224.0
Capacity	Max	kW	239.4	245.7	252.0
Power Input (Cooling)	Rated	kW	68.07	67.01 70.16	
Power Input (Heating)	Rated	kW	48.01	48.51	50.56
	EER (Rated)	W/W	3.13	3.26	3.19
Efficiency	COP (Rated)	W/W	4.43	4.50	4.43
	SEER	Wh/Wh	8.30	8.47	8.42
	SCOP	Wh/Wh	5.21	5.05	5.13
	Туре		Propeller Fan	Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	(320 × 1) + (320 × 1) + (320 × 1) + (320 × 1)	(320 × 1) + (320 × 1) + (320 × 1) + (320 × 1)	(320 × 1) + (320 × 1) + (320 × 1) + (320 × 1)
	Discharge direction (Side	e / Top)	Тор	Тор	Тор
Outdoor Fan	Drive		Direct	Direct	Direct
Motor	Output	W x No.	(900 × 2) + (900 × 2) + (900 × 2) + (900 × 2)	(900 × 2) + (900 × 2) + (900 × 2) + (900 × 2)	(900 × 2) + (900 × 2) + (900 × 2) + (900 × 2)
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1 x 7	62.1 x 8	62.1 x 8
Compressor	Number of Revolution	rev./min	3,600 x 7	3,600 x 8	3,600 x 8
	Motor Output	W x No.	5,300 x 7	5,300 x 8	5,300 x 8
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	(1,240 x 1,745 x 760) x 4	(1,240 x 1,745 x 760) x 4	(1,240 x 1,745 x 760) x 4
Difficusions	Shipping (W x H x D)	mm	(1,282 x 1,919 x 802) x 4	(1,282 x 1,919 x 802) x 4	(1,282 x 1,919 x 802) x 4
Weight	Net	kg	(300 × 1) + (300 × 1) + (300 × 1) + (255 × 1)	(300 × 1) + (300 × 1) + (300 × 1) + (300 × 1)	(300 × 1) + (300 × 1) + (300 × 1) + (300 × 1)
Weight	Shipping	kg	(310 x 1) + (310 x 1) + (310 x 1) + (265 x 1)	(310 x 1) + (310 x 1) + (310 x 1) + (310 x 1)	(310 x 1) + (310 x 1) + (310 x 1) + (310 x 1)
	Туре		R410A	R410A	R410A
Refrigerant	Precharged Amount	kg	61.0	64.0	64.0
ge.a	t-CO <sub>2</sub> eq.		127.338	133.600	133.600
	Control Type		EEV	EEV	EEV
	Liquid	mm (inch)	Ø22.20 (7/8)	Ø22.20 (7/8)	Ø22.20 (7/8)
	Gas	mm (inch)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)
Connecting Pipe	(Heat Recovery)	mm (inch)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)
Caunal Duagassus	High Pressure Gas (Heat Recovery)	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
Sound Pressure Level	Cooling	dB (A)	67.7	67.8	68.0
(Outdoor Unit)	Heating	dB (A)	69.1	69.2	69.5
Sound Power	Cooling	dB (A)	91.8	91.8	92.0
Level (Outdoor Unit)	Heating	dB (A)	94.3	94.4	95.0
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	64	64	64





	НР		82	84	
	Chassis		UXC + UXC + UXB + UXB	UXC + UXC + UXB + UXB	
Classification	Combination Unit		ARUM240LTE6 ARUM240LTE6 ARUM200LTE6 ARUM140LTE6	ARUM240LTE6 ARUM240LTE6 ARUM200LTE6 ARUM160LTE6	
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	
Cooling Capacity	Rated	kW	229.6	235.2	
Heating	Rated	kW	229.6	235.2	
Capacity	Max	kW	258.3	264.6	
Power Input (Cooling)	Rated	kW	81.72	85.29	
Power Input (Heating)	Rated	kW	58.29	59.95	
	EER (Rated)	W/W	2.81	2.76	
Efficiency	COP (Rated)	W/W	3.94	3.92	
	SEER	Wh/Wh	7.70	7.55	
	SCOP	Wh/Wh	4.73	4.80	
	Туре		Propeller Fan	Propeller Fan	
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	(430 x 1) + (430 x 1) + (320 × 1) + (320 × 1)	(430 x 1) + (430 x 1) + (320 × 1) + (320 × 1)	
	Discharge direction (Side	e / Top)	Тор	Тор	
Outdoor Fan	Drive		Direct	Direct	
Motor	Output	W x No.	(1,500 x 2) + (1,500 x 2) + (900 × 2) + (900 × 2)	(1,500 x 2) + (1,500 x 2) + (900 × 2) + (900 × 2)	
	Туре	2,	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
_	Piston Displacement	cm³/rev	62.1 x 7	62.1 x 7	
Compressor	Number of Revolution	rev./min	3,600 x 7	3,600 x 7	
	Motor Output	W x No.	5,300 x 7	5,300 x 7	
Heat Exchanger	Oil Type		FW68L (PVE) Wide Louver Plus	FW68L (PVE) Wide Louver Plus	
neat Exchanger	Fin Type  Net (W x H x D)	mm	((1,640 x 1,745 x 760) x 2) + ((1,240 x 1,745 x 760) x 2)	((1,640 x 1,745 x 760) x 2) + ((1,240 x 1,745 x 760) x 2)	
Dimensions	Shipping (W x H x D)	mm	((1,675 x 1,919 x 802) x 2) + ((1,282 x 1,919 x 802) x 2)	((1,240 x 1,743 x 700) x 2) + ((1,675 x 1,919 x 802) x 2) + ((1,282 x 1,919 x 802) x 2)	
	Net	kg	(362 x 1) + (362 x 1) + (300 × 1) + (255 × 1)	(362 x 1) + (362 x 1) + (300 × 1) + (255 × 1)	
Weight	Shipping	kg	(372 x 1) + (372 x 1) + (310 x 1) + (265 x 1)	(372 x 1) + (372 x 1) + (310 x 1) + (265 x 1)	
	Туре		R410A	R410A	
D. C	Precharged Amount	kg	61.0	61.0	
Refrigerant	t-CO <sub>2</sub> eq.		127.338	127.338	
	Control Type		EEV	EEV	
	Liquid	mm (inch)	Ø22,20 (7/8)	Ø22.20 (7/8)	
	Gas	mm (inch)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)	
Connecting Pipe	Low Pressure Gas (Heat Recovery)	mm (inch)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)	
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)	
Sound Pressure Level	Cooling	dB (A)	69.5	69.6	
(Outdoor Unit)	Heating	dB (A)	70.6	70.6	
Sound Power	Cooling	dB (A)	90.6	91.3	
Level (Outdoor Unit)	Heating	dB (A)	93.4	93.8	
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	
Connectable Indoor Units Number	Max. (Conditional)	EA	64	64	

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% ~ 200%). The recommended ratio is 130%.

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.

## ARUM900LTE6 / ARUM920LTE6



ARUM860LTE6 / ARUM880LTE6

	HP		86	88
	Chassis		UXC + UXC + UXB + UXB	UXC + UXC + UXB + UXB
Classification	Combination Unit		ARUM240LTE6 ARUM240LTE6 ARUM200LTE6 ARUM180LTE6	ARUM240LTE6 ARUM240LTE6 ARUM200LTE6 ARUM200LTE6
Power Supply	V / Ø / Hz		380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	240.8	246.4
Heating	Rated	kW	240.8	246.4
Capacity	Max	kW	270.9	277.2
Power Input (Cooling)	Rated	kW	84.23	87.38
Power Input (Heating)	Rated	kW	60.45	62.50
	EER (Rated)	W/W	2.86	2.82
Efficiency	COP (Rated)	W/W	3.98	3.94
Linciency	SEER	Wh/Wh	7.72	7.66
	SCOP	Wh/Wh	4.64	4.72
	Туре		Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	(430 x 1) + (430 x 1) + (320 × 1) + (320 × 1)	(430 x 1) + (430 x 1) + (320 × 1) + (320 × 1)
	Discharge direction (Side	/ Top)	Тор	Тор
Outdoor Fan	Drive		Direct	Direct
Motor	Output	W x No.	(1,500 x 2) + (1,500 x 2) + (900 × 2) + (900 × 2)	(1,500 x 2) + (1,500 x 2) + (900 × 2) + (900 × 2)
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1 x 8	62.1 x 8
Compressor	Number of Revolution	rev./min	3,600 x 8	3,600 x 8
	Motor Output	W x No.	5,300 x 8	5,300 x 8
	Oil Type		FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	((1,640 x 1,745 x 760) x 2) + ((1,240 x 1,745 x 760) x 2)	((1,640 x 1,745 x 760) x 2) + ((1,240 x 1,745 x 760) x 2)
Dilliensions	Shipping (W x H x D)	mm	((1,675 x 1,919 x 802) x 2) + ((1,282 x 1,919 x 802) x 2)	((1,675 x 1,919 x 802) x 2) + ((1,282 x 1,919 x 802) x 2)
Weight	Net	kg	(362 x 1) + (362 x 1) + (300 × 1) + (300 × 1)	(362 x 1) + (362 x 1) + (300 × 1) + (300 × 1)
weight	Shipping	kg	(372 x 1) + (372 x 1) + (310 x 1) + (310 x 1)	(372 x 1) + (372 x 1) + (310 x 1) + (310 x 1)
	Туре		R410A	R410A
Refrigerant	Precharged Amount	kg	64.0	64.0
Remigerant	t-CO <sub>2</sub> eq.		133.600	133.600
	Control Type		EEV	EEV
	Liquid	mm (inch)	Ø22.20 (7/8)	Ø22.20 (7/8)
	Gas	mm (inch)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)
Connecting Pipe	Low Pressure Gas (Heat Recovery)	mm (inch)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
Sound Pressure	Cooling	dB (A)	69.6	69.8
Level (Outdoor Unit)	Heating	dB (A)	70.7	70.9
Sound Power	Cooling	dB (A)	91.3	91.5
Level (Outdoor Unit)	Heating	dB (A)	93.9	94.5
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	64	64





	HP		90	92
	Chassis		UXC + UXC + UXC + UXB	UXC + UXC + UXC + UXC
Classification	Combination Unit		ARUM240LTE6 ARUM240LTE6 ARUM220LTE6 ARUM200LTE6	ARUM240LTE6 ARUM240LTE6 ARUM220LTE6 ARUM220LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	252.0	257.6
Heating	Rated	kW	252.0	257.6
Capacity	Max	kW	283.5	289.8
Power Input (Cooling)	Rated	kW	91.84	96.30
Power Input (Heating)	Rated	kW	65.82	69.14
	EER (Rated)	W/W	2.74	2.67
Efficiency	COP (Rated)	W/W	3.83	3.73
,	SEER	Wh/Wh	7.36	7.06
	SCOP	Wh/Wh	4.59	4.47
	Туре		Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High) m³/min x No.		(430 x 1) + (430 x 1) + (430 x 1) + (320 × 1)	(430 x 1) + (430 x 1) + (430 x 1) + (430 x 1)
	Discharge direction (Side	e / Top)	Тор	Тор
Outdoor Fan	Drive		Direct	Direct
Motor	Output	W x No.	$(1,500 \times 2) + (1,500 \times 2) + (1,500 \times 2) + (900 \times 2)$	(1,500 x 2) + (1,500 x 2) + (1,500 x 2) + (1,500 x 2)
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1 x 8	62.1 x 8
Compressor	Number of Revolution	rev./min	3,600 x 8	3,600 x 8
	Motor Output	W x No.	5,300 x 8	5,300 x 8
	Oil Type		FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D) mm		((1,640 x 1,745 x 760) x 3) + ((1,240 x 1,745 x 760) x 1)	(1,640 x 1,745 x 760) x 4
Difficusions	Shipping (W x H x D)	mm	((1,675 x 1,919 x 802) x 3) + ((1,282 x 1,919 x 802) x 1)	(1,675 x 1,919 x 802) x 4
Weight	Net	kg	(362 x 1) + (362 x 1) + (362 x 1) + (300 x 1)	(362 x 1) + (362 x 1) + (362 x 1) + (362 x 1)
weight	Shipping kg		(372 x 1) + (372 x 1) + (372 x 1) + (310 x 1)	(372 x 1) + (372 x 1) + (372 x 1) + (372 x 1)
	Туре		R410A	R410A
Refrigerant	Precharged Amount	kg	64.0	64.0
	t-CO <sub>2</sub> eq.		133.600	133.600
	Control Type		EEV	EEV
	Liquid	mm (inch)	Ø22.20 (7/8)	Ø22.20 (7/8)
	Gas	mm (inch)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)
Connecting Pipe	Low Pressure Gas (Heat Recovery)	mm (inch)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)
Caused Decrees	High Pressure Gas (Heat Recovery)	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
Sound Pressure Level	Cooling	dB (A)	70.2	70.5
(Outdoor Unit)	Heating	dB (A)	71.5	72.0
Sound Power	Cooling	dB (A)	91.1 90.	
Level (Outdoor Unit)	Heating	dB (A)	94.3	94.0
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	64	64

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% ~ 200%). The recommended ratio is 130%.

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% ~ 200%). The recommended ratio is 130%.

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#### ARUM940LTE6 / ARUM960LTE6



	HP		94	96
	Chassis		UXC + UXC + UXC + UXC	UXC + UXC + UXC + UXC
Classification	Combination Unit		ARUM240LTE6 ARUM240LTE6 ARUM240LTE6 ARUM220LTE6	ARUM240LTE6 ARUM240LTE6 ARUM240LTE6 ARUM240LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	263.2	268.8
Heating	Rated	kW	263.2	268.8
Capacity	Max	kW	296.1	302.4
Power Input (Cooling)	Rated	kW	100.50	104.60
Power Input (Heating)	Rated	kW	71.79	74.44
	EER (Rated)	W/W	2.62	2.57
Efficiency	COP (Rated)	W/W	3.67	3.61
Linciency	SEER	Wh/Wh	6.98	6.91
	SCOP	Wh/Wh	4.39	4.31
	Туре		Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	(430 x 1) + (430 x 1) + (430 x 1) + (430 x 1)	(430 x 1) + (430 x 1) + (430 x 1) + (430 x 1)
	Discharge direction (Side	e / Top)	Тор	Тор
Outdoor Fan	Drive		Direct	Direct
Motor	Output	W x No.	(1,500 x 2) + (1,500 x 2) + (1,500 x 2) + (1,500 x 2)	(1,500 x 2) + (1,500 x 2) + (1,500 x 2) + (1,500 x 2)
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1 x 8	62.1 x 8
Compressor	Number of Revolution	rev./min	3,600 x 8	3,600 x 8
	Motor Output	W x No.	5,300 x 8	5,300 x 8
	Oil Type		FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	(1,640 x 1,745 x 760) x 4	(1,640 x 1,745 x 760) x 4
Dilliensions	Shipping (W x H x D)	mm	(1,675 x 1,919 x 802) x 4	(1,675 x 1,919 x 802) x 4
Weight	Net	kg	(362 x 1) + (362 x 1) + (362 x 1) + (362 x 1)	(362 x 1) + (362 x 1) + (362 x 1) + (362 x 1)
vveigne	Shipping	kg	(372 x 1) + (372 x 1) + (372 x 1) + (372 x 1)	(372 x 1) + (372 x 1) + (372 x 1) + (372 x 1)
	Туре		R410A	R410A
Refrigerant	Precharged Amount	kg	64.0	64.0
	t-CO <sub>2</sub> eq.		133.600	133.600
	Control Type		EEV	EEV
	Liquid	mm (inch)	Ø22.20 (7/8)	Ø22.20 (7/8)
	Gas	mm (inch)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)
Connecting Pipe	(Heat Recovery)	mm (inch)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)
6 18	High Pressure Gas (Heat Recovery)	mm (inch)	Ø41.30 (1-5/8)	Ø41.30 (1-5/8)
Sound Pressure Level	Cooling	dB (A)	70.8	71.0
(Outdoor Unit)	Heating	dB (A)	72.0	72.0
Sound Power	Cooling	dB (A)	90.8	91.0
Level (Outdoor Unit)	Heating	dB (A)	94.0	94.0
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	64	64

- 1. Eurovent Test Condition: For more info regarding program consult www.eurovent-certification.com
- 2. 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
  - 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
  - Piping Length: Interconnected Pipe Length = 7.5m
  - Elevation Difference (Outdoor ~ Indoor Unit) is 0m.
- 3. Wiring cable size must comply with the applicable local and national code.
- 4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Refer to the model specifications for nominal conditions. (Power source and Ambient temperature, etc.) Sound levels can be increased in accordance with installation and operating conditions. (Operating conditions include some functional condition like Static Pressure mode, air guide use, Room target temperature setting, etc and these functions are different in accordance with each model). Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of particular room in which the equipment in installed.

## 5. Explanation of Terms

- EER : Energy Efficiency Ratio (Cooling)
- SEER: Seasonal Energy Efficiency Ratio (Refer to Typical Cooling Season)
- COP : Coefficient Of Performance (Heating)
- SCOP : Seasonal Coefficient Of Performance (Refer to Typical Heating Season)
- 6. Due to our policy of innovation some specifications may be changed without notification.
- 7. This product contains Fluorinated greenhouse gas. (R410A, GWP (Global warming potential) = 2,087.5)

<sup>1)</sup> Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.



## **Highlight of the R32 Refrigerant**

# Low GWP - More eco-friendly refrigerant compliant with regulation

## Single Component

-Easy to handle, reuse and -Affordable and readily

available 50% + 50%

## High Volumetric Energy

- Lower compressor displacement



## Less Refrigerant Charge

- Savings on cost of injecting & replacing refrigerant
- Savings on purchase of refrigerant



than Gas Boiler

**Emission System** 

More precaution should be needed to use R32 refrigerant due to slightly higher toxicity level.
 Source: Global Warming Potential Values (2007, AR4)
 Based on MULTI V i specification. This ratio is general for helping understanding, It may differ depending on the each product.

## Less Charge, Less Carbon More Efficient Hot Water **Supply Solution**

MULTI V i R32 can save Max. 14% of refrigerant amount compared MULTI V i with Hydro kit provides floor heating and hot water to R410A system, which leads to reduced carbon dioxide emissions. supply without using gas. It is a more environmentally friendly system with higher energy efficiency and lower carbon emissions.



(R410A system model: ARU\*\*\*\*LTE6, R32 system model: ZRUM\*\*\*LTE6) \*\* Results may vary depending on the environment.

Saving additional charge amount

MULTI V., i 🚳 Hydro Kit (MT/HT/WM)\*\* \* These are the company's experimental values and experimental conditions, and may differ

## **Noise Target Control**

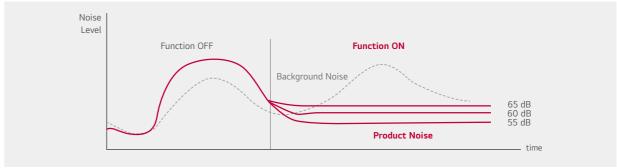
The outdoor unit noise can be restricted by the set noise level in advance. The function helps you to enjoy the comfortable conditions, avoid noise damage to neighbors and follow the local noise regulations.



Controlled by a Remote Controller



**Available Setting** 50 / 55 / 60 / 65 / 70 dB



\*\* The target noise value can be set only with the wired remote controller which is set as the master wired remote controller for the outdoor unit function

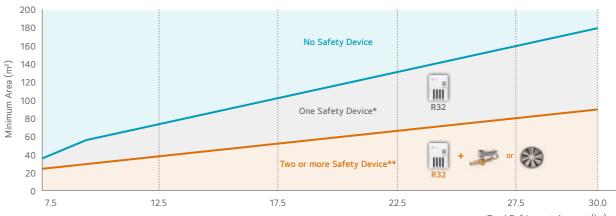
## **R32 Indoor Unit Design Guide**

A HVAC system using R32 refrigerant requires the minimum room area because of its flammability and it should be designed by LATS HVAC.

#### Minimum Area Requirement

- Each room area should be equal or larger than the minimum required area.
- The minimum required area is limited by the total amount of refrigerant in the system, which depends on the installation height of indoor unit and the number of safety devices.

#### Minimum Area Guideline (Installation height of IDU = 2.2 m)



Total Refrigerant Amount (kg)

<sup>\*</sup> These are the company's experimental values and experimental conditions, and may differ from the actual usage environment. In addition, power consumption may increase as the outside temperature decreases. Gas Boiler: 0.87, Hydro Kit: 3.75 (Model: ARNH10GK2A4 / 100% combination / Outdoor 7°CDB, water inlet 30°C, water outlet 35°C)

\*\* MT: Mid Temperature, HT: High Temperature, WM: Wall Mounted

\*Results may vary depending on the environment.

<sup>\*</sup> One safety device: Refrigerant leak detector with alarming function
\*\* Two or more device: Refrigerant leak detector + ventilator or Refrigerant leak detector + shut-off valve

## ZRUM080LTE6 / ZRUM100LTE6 ZRUM120LTE6







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

	MODEL	UNIT	ZRUM080LTE6	ZRUM100LTE6 ZRUM120LTE6		
Cl :5 ::	Chassis		UXA	UXA	UXA	
Classification	Combination Unit		ZRUM080LTE6	ZRUM100LTE6	ZRUM120LTE6	
Power Supply		V / Ø / Hz	380-400-415 / 3 / 50	380-400-415 / 3 / 50	380-400-415 / 3 / 50	
Cooling Capacity	Rated	kW	22.4	28.0	33.6	
Heating	Rated	kW	22.4	28.0	33.6	
Capacity	Max	kW	25.2	31.5	37.8	
Power Input (Cooling)	Rated	kW	6.10	8.33	11.65	
Power Input (Heating)	Rated	kW	5.16	6.22	7.77	
	EER (Rated)	W/W	3.67	3.36	2.88	
Efficiency	COP (Rated)	W/W	4.34	4.50	4.32	
Lineiency	SEER	Wh/Wh	8.28	8.11	7.94	
	SCOP	Wh/Wh	4.45	4.52	4.99	
	Туре		Propeller Fan	Propeller Fan	Propeller Fan	
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	220 x 1	220 x 1	220 x 1	
	Discharge direction (Side	/ Top)	Тор	Тор	Тор	
Outdoor Fan	Drive		Direct	Direct	Direct	
Motor	Output	W x No.	1,200 x 1	1,200 x 1	1,200 x 1	
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Piston Displacement	cm³/rev	62.1	62.1	62.1	
Compressor	Number of Revolution	rev./min	3,600	3,600	3,600	
	Motor Output	W x No.	5,300 × 1	5,300 x 1	5,300 x 1	
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)	
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	
Dimensions	Net (W x H x D)	mm	930 x 1,745 x 760	930 x 1,745 x 760	930 x 1,745 x 760	
2111011310113	Shipping (W x H x D)	mm	965 x 1,919 x 802	965 x 1,919 x 802	965 x 1,919 x 802	
Weight	Net	kg	215	215	215	
	Shipping	kg	225	225	225	
	Туре		R32	R32	R32	
Refrigerant	Precharged Amount	kg	7.5	8.5	8.5	
3	t-CO <sub>2</sub> eq.		5.063	5.738	5.738	
	Control Type		EEV	EEV	EEV	
	Liquid	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø12.7 (1/2)	
	Gas	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø22.2 (7/8)	
Connecting Pipe	Low Pressure Gas (Heat Recovery) High Pressure Gas	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø22.2 (7/8)	
Sound Pressure	(Heat Recovery)	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø19.05 (3/4)	
Level*	Cooling	dB (A)	57	57.5	59	
(Outdoor Unit)	Heating	dB (A)	58	58.5	60	
Sound Power	Cooling	dB (A)	78	79	80	
(Outdoor Unit)	Heating	dB (A)	78	79	82	
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	
Connectable Indoor Units Number	Max. (Conditional)	EA	13 (20)	16 (25)	20 (30)	

## ZRUM140LTE6 / ZRUM160LTE6 ZRUM180LTE6







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

	MODEL	UNIT	ZRUM140LTE6	ZRUM160LTE6	ZRUM180LTE6
Classification	Chassis		UXB	UXB	UXB
Classification	Combination Unit		ZRUM140LTE6	ZRUM160LTE6	ZRUM180LTE6
Power Supply		V / Ø / Hz	380-400-415 / 3 / 50	380-400-415 / 3 / 50	380-400-415 / 3 / 50
Cooling Capacity	Rated	kW	39.2	44.8	50.4
Heating	Rated	kW	39.2	44.8	50.4
Capacity	Max	kW	44.1	50.4	56.7
Power Input (Cooling)	Rated	kW	11.88	15.45	14.39
Power Input (Heating)	Rated	kW	8.43	10.09	10.59
	EER (Rated)	W/W	3.30	2.90	3.50
Efficiency	COP (Rated)	W/W	4.65	4.44	4.76
Efficiency	SEER	Wh/Wh	8.55	7.97	8.65
	SCOP	Wh/Wh	5.17	5.46	4.81
	Туре		Propeller Fan	Propeller Fan	Propeller Fan
Outdoor Fan	Air Flow Rate (High)	m³/min x No.	320 x 1	320 x 1	320 x 1
	Discharge direction (Sid	e / Top)	Тор	Тор	Тор
Outdoor Fan	Drive		Direct	Direct	Direct
Motor	Output	W x No.	900 x 2	900 x 2	900 x 2
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1	62.1	62.1 x 2
Compressor	Number of Revolution	rev./min	3,600	3,600	3,600 x 2
	Motor Output	W x No.	5,300 x 1	5,300 x 1	5,300 x 2
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	1,240 x 1,745 x 760	1,240 x 1,745 x 760	1,240 x 1,745 x 760
Dimensions	Shipping (W x H x D)	mm	1,282 x 1,919 x 802	1,282 x 1,919 x 802	1,282 x 1,919 x 802
\\/-:-L+	Net	kg	255	255	300
Weight	Shipping	kg	265	265	310
	Туре		R32	R32 R32	
Defrieses	Precharged Amount	kg	11.4	11.4	14
Refrigerant	t-CO <sub>2</sub> eq.		7.695	7.695	9.450
	Control Type		EEV	EEV	EEV
	Liquid	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø12.7 (1/2)
	Gas	mm (inch)	Ø22.2 (7/8)	Ø22.2 (7/8)	Ø22.2 (7/8)
Connecting Pipe	(Heat Recovery)	mm (inch)	Ø22.2 (7/8)	Ø22.2 (7/8)	Ø22.2 (7/8)
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
Sound Pressure	Cooling	dB (A)	60	60.5	61
Level* (Outdoor Unit)	Heating	dB (A)	61	61.5	62
Sound Power	Cooling	dB (A)	81	85	85
Level (Outdoor Unit)	Heating	dB (A)	81	85	86
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	23 (35)	26 (40)	29 (45)

<sup>\*:</sup> Sound Pressure is not a value declared on Eurovent Program.

Note:

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

<sup>\*:</sup> Sound Pressure is not a value declared on Eurovent Program.

## ZRUM200LTE6 / ZRUM220LTE6 ZRUM240LTE6



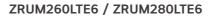






LG participates in the ECP programme
for EUROVENT VRF program.
Check ongoing validity of certification
: www.eurovent-certification.com

	MODEL	UNIT	ZRUM200LTE6	ZRUM220LTE6	ZRUM240LTE6
	Chassis		UXB	UXA + UXA	UXB + UXA
Classification	Combination Unit		ZRUM200LTE6	ZRUM120LTE6 ZRUM100LTE6	ZRUM140LTE6 ZRUM100LTE6
Power Supply		V / Ø / Hz	380-400-415 / 3 / 50	380-400-415 / 3 / 50	380-400-415 / 3 / 50
Cooling Capacity	Rated	kW	56.0	61.6	67.2
Heating	Rated	kW	56.0	61.6	67.2
Capacity	Max	kW	63.0	69.3	75.6
Power Input (Cooling)	Rated	kW	17.54	19.98	20.21
Power Input (Heating)	Rated	kW	12.64	13.99	14.65
	EER (Rated)	W/W	3.19	3.08	3,33
Efficiency	COP (Rated)	W/W	4.43	4.40	4.59
Linciency	SEER	Wh/Wh	8.42	8.03	8.33
	SCOP	Wh/Wh	5.13	4.76	4.85
Outdoor Fan	Type		Propeller Fan	Propeller Fan	Propeller Fan
	Air Flow Rate (High)	m³/min x No.	320 x 1	(220 × 1) + (220 × 1)	(320 × 1) + (220 × 1)
	Discharge direction (Side	/ Top)	Тор	Тор	Тор
Outdoor Fan	Drive		Direct	Direct	Direct
Motor	Output	W x No.	900 x 2	(1,200 × 1) + (1,200 × 1)	(900 × 2) + (1,200 × 1)
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1 x 2	62.1 x 2	62.1 x 2
Compressor	Number of Revolution	rev./min	3,600 x 2	3,600 x 2	3,600 x 2
	Motor Output	W x No.	5,300 x 2	5,300 x 2	5,300 x 2
	Oil Type		FW68L (PVE)	FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	1,240 x 1,745 x 760	(930 x 1,745 x 760) x 2	(1,240 x 1,745 x 760) x 1) + (930 x 1,745 x 760) x 1)
	Shipping (W x H x D)	mm	1,282 x 1,919 x 802	(965 x 1,919 x 802) x 2	(1,282 x 1,919 x 802) x 1) + (965 x 1,919 x 802) x 1)
Weight	Net	kg	300	215 × 2	(255 × 1) + (215 × 1)
weight	Shipping	kg	310	225 x 2	(265 x 1) + (225 x 1)
Refrigerant	Туре		R32	R32	R32
	Precharged Amount	kg	14	17	19.9
	t-CO <sub>2</sub> eq.		9.450	11.475	13.433
	Control Type		EEV	EEV	EEV
Connecting Pipe	Liquid	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø12.7 (1/2)
	Gas	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
	(Heat Recovery)	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø22.2 (7/8)	Ø22.2 (7/8)	Ø22.2 (7/8)
Sound Pressure Level*	Cooling	dB (A)	62	61.3	61.9
(Outdoor Unit)	Heating	dB (A)	63.5	62,3	62.9
Sound Power	Cooling	dB (A)	86	82.5	83.1
Level (Outdoor Unit)	Heating	dB (A)	89	83.8	83.1
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units	Max. (Conditional)	EA	32 (50)	35 (56)	39 (61)







	MODEL	UNIT	ZRUM260LTE6	ZRUM280LTE6
	Chassis		UXB + UXA	UXB + UXA
Classification			ZRUM140LTE6	ZRUM160LTE6
	Combination Unit		ZRUM120LTE6	ZRUM120LTE6
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50
Cooling Capacity	Rated	kW	72.8	78.4
Heating	Rated	kW	72.8	78.4
Capacity	Max	kW	81.9	88.2
Power Input (Cooling)	Rated	kW	23.53	27.10
Power Input (Heating)	Rated	kW	16.20	17.86
Efficiency	EER (Rated)	W/W	3.09	2.89
	COP (Rated)	W/W	4.49	4.39
	SEER	Wh/Wh	8.25	7.96
	SCOP	Wh/Wh	5.08	5.23
Outdoor Fan	Туре		Propeller Fan	Propeller Fan
	Air Flow Rate (High)	m³/min x No.	(320 × 1) + (220 × 1)	(320 × 1) + (220 × 1)
	Discharge direction (Side	e / Top)	Тор	Тор
Outdoor Fan Motor	Drive		Direct	Direct
	Output	W x No.	(900 × 2) + (1,200 × 1)	(900 × 2) + (1,200 × 1)
Compressor	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1 x 2	62.1 x 2
	Number of Revolution	rev./min	3,600 x 2	3,600 x 2
	Motor Output	W x No.	5,300 x 2	5,300 x 2
	Oil Type		FW68L (PVE)	FW68L (PVE)
Heat Exchanger	Fin Type		Wide Louver Plus	Wide Louver Plus
Dimensions	Net (W x H x D)	mm	(1,240 x 1,745 x 760) x 1) + (930 x 1,745 x 760) x 1)	(1,240 x 1,745 x 760) x 1) + (930 x 1,745 x 760) x 1)
	Shipping (W x H x D)	mm	(1,282 x 1,919 x 802) x 1) + (965 x 1,919 x 802) x 1)	(1,282 x 1,919 x 802) x 1) + (965 x 1,919 x 802) x 1)
Weight	Net	kg	(255 × 1) + (215 × 1)	(255 × 1) + (215 × 1)
	Shipping	kg	(265 x 1) + (225 x 1)	(265 x 1) + (225 x 1)
	Туре		R32	R32
Deficement	Precharged Amount	kg	19.9	19.9
Refrigerant	t-CO <sub>2</sub> eq.		13.433	13.433
	Control Type		EEV	EEV
Connecting Pipe	Liquid	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)
	Gas	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
	Low Pressure Gas (Heat Recovery)	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
	High Pressure Gas (Heat Recovery)	mm (inch)	Ø22.2 (7/8)	Ø22.2 (7/8)
Sound Pressure Level (Outdoor Unit)	Cooling	dB (A)	62.5	62.8
	Heating	dB (A)	63.5	63.8
Sound Power	Cooling	dB (A)	83.5	86.2
Level (Outdoor Unit)	Heating	dB (A)	84.5	86.8
Connecting Cable	Communication Cable (VCTF-SB)	mm² × cores	0.75 ~ 1.5 x 2C	0.75 ~ 1.5 x 2C
Connectable Indoor Units Number	Max. (Conditional)	EA	42 (64)	45 (56)

<sup>\*:</sup> Sound Pressure is not a value declared on Eurovent Program

1) Applying to 20HP outdoor units only.

Note:

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

# MULTI V<sub>m</sub> s



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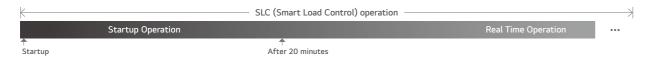
S

AVING

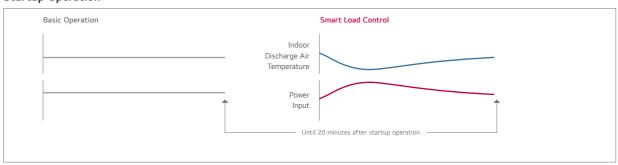
## **Smart Load Control Applied**

Enhanced comfort and up to 23% energy savings with MULTI V load control

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



#### **Startup Operation**



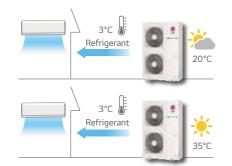
Max 10% Energy saving

- Energy efficiency increased by 3-step Smart Load Control during startup phase

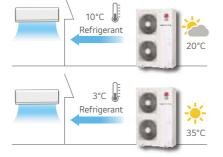
   Discharge air temperature adjusted according to outdoor and indoor temperature

   Comfort level in cooling / heating operations ensured

## Real Time Operation **Basic Operation**







Fixed refrigerant temperature

Max 13% Energy saving

- \*\* How to set up : By dip switch in outdoor unit (Referred to Product Data Book) Factory default setting is Off.

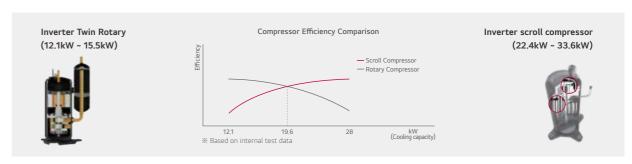
   Outdoor temperature condition : EER 100% / 75% / 50% / 25% = 35°C (DB) / 30°C (DB) / 25°C (DB) / 20°C (DB)

   Indoor temperature condition : 27°C (DB) / 19°C (WB)

  \*\* Dual sensing (Temperature & humidity) smart load control is possible with Remote controller PTEMTB100 (White) / PREMTBB11 (Black)

## **Inverter Twin Rotary & Inverter Scroll Compressor**

Adapted high efficiency compressor according to capacity



#### **Inverter Twin Rotary**

#### Concentrated Winding Motor

Oil path area is improved by over 50% by increasing the extra stator cavity. Due to this, caloric value of motor is reduced, improving the cooling function of stator coil.

Upper and lower part of the rotor offset imbalance in shaft rotor rotation. Vibration and noise is reduced. Max torque load decreased by 45% compared to single rotor.

#### Surface Coating

Twin Rotary Rotor

A surface coating with exceptional abrasion resistance properties is applied to the vane and crankshaft.

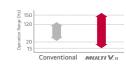
## Best-in-class Compressor Speed

#### Rapid response capability

- Compact core design (Concentrated motor)

Inverter scroll compressor

Down to 15Hz : Part load efficiency improvement



#### 6 Bypass Valve

Compressor reliability is maximized with 6 Bypass Valve Prevent compressor damage due to excessively compress refrigerant more efficiently than 4 Bypass valve



### Direct Oil Injection

- Eliminate suction refrigerant gas heat loss through direct oil injection into
- compression chamber (Efficiency increases)
- Increased reliability with regulated oil supply

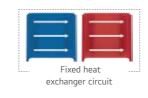
#### Scroll Profile

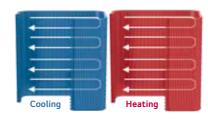
- Enhanced reliability with regulated oil supply
- Efficiency is enhanced through a 96% expansion of the bypass area and a 17% improvement in volume ratio achieved by incorporating non-uniform scroll thickness

## **Optimal Heat Exchanger**

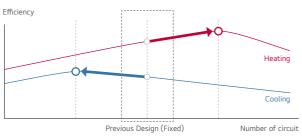
Maximize efficiency according to different heat exchanger paths by cooling and heating

Variable Heat Exchanger Circuit intelligently selects the optimal path. With this smart path selection technology, an average of 6% increase in the efficiency of both operations has been achieved.



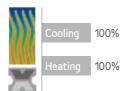


## Efficiency performance



## Efficiency up due to Fin shape

Up to 28% improved heat exchanger efficiency





RELIABILITY

077

## **High Efficiency**

The new MULTI V S has high SEER and SCOP values by applying the 5th generation inverter scroll compressor

\* Only for 8, 10, 12HP



#### Wider Frequency Range

The frequency range of the compressor is widened from 12 to 150 Hz.

ightarrow Partial load performance is improved.

Comparison of Compressor Frequency

## **Higher Performance**

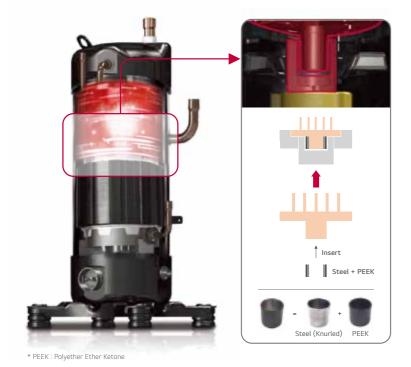
The partial load efficiency of the 5th Gen. Compressor is about 5% higher than that of the 4th Gen. Compressor.

Inverter So	4 <sup>th</sup> gen.	5 <sup>th</sup> gen.		
	CHEER	30 Hz	100%	105%
D (	Conditions	60 Hz	100%	105%
Performance	ARI	90 Hz	100%	104%
	Conditions	120 Hz	100%	108%

## **Reliable Inverter Compressor**

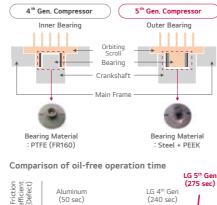
The new MULTI V S is equipped with the 5<sup>th</sup> generation compressor which has an outer bearing structure for high reliability. And the outer bearing is composed of steel and PEEK.

\* Only for 8, 10, 12HP



## **Enhanced Bearing Technology**

- · Reduced vibration and bearing loads : Outer bearing structure
- High heat tolerance & high stiffness material for bearing: Steel (Inside) + PEEK (Outside)
- Increased bearing performance in oil-free operation

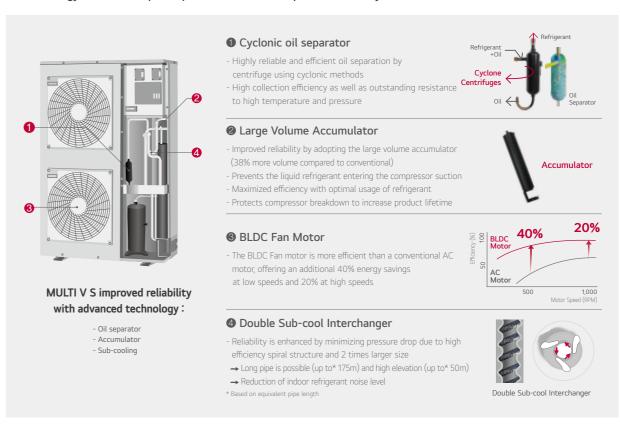




\*\* Internal test result.\*\* Bearing oil blocking test (Oil blocking at 60 Hz)

## **Reliable Refrigerant Components**

LG technology allows for superior performance and component durability

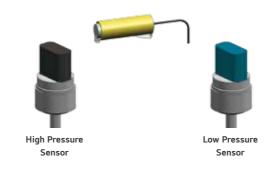


## **Smart Control**

Pressure control enables smart, quick and precise response to user's temperature request

### Temperature + Pressure Control

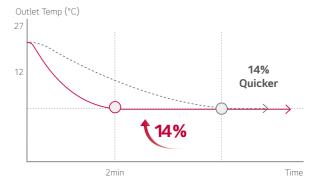
Senses and controls pressure directly using pressure sensor for faster and more precise response to load variation.



## **Quick Operating Response**

Desired temperature can be reached up to 14% faster in cooling mode with pressure control, allowing more accurate control of indoor environment for maximized comfort.

\* Specifications may vary for each model



O— Pressure +Temperature Control

O— Temperature Control

<sup>\*\*</sup> The PEEK is a semi-crystalline thermoplastic with excellent mechanical and chemical resistance properties that are retained to high temperatures

ELIABILITY

## **Corrosion Resistant Black Fin**

#### Strong durability against high salinity and heavily polluted air

Black Fin ensures continued operation of MULTI V S in highly corrosive environments such as salt laden atmospheres in coastal towns or severe air pollution in industrial cities. This improvement in durability prolongs the product's lifespan and lowers both the operational and maintenance costs

### Corrosion Resistance Proven by Certified Tests

LG Corrosion Resistance solution passed the ISO 21207 accelerated corrosion test conducted by an independent test organization and the result has been certified by prestigious global certification organization, TUV.

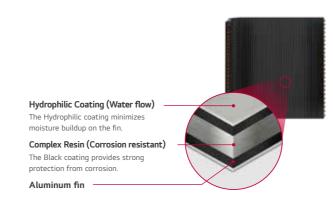
#### Certified protection



- \* Verification of corrosion resistance performance
- Test Method B of ISO 21207 - ASTM B117 / ISO 9227 (10,000 hours)

#### **Enhanced Coating Layers**

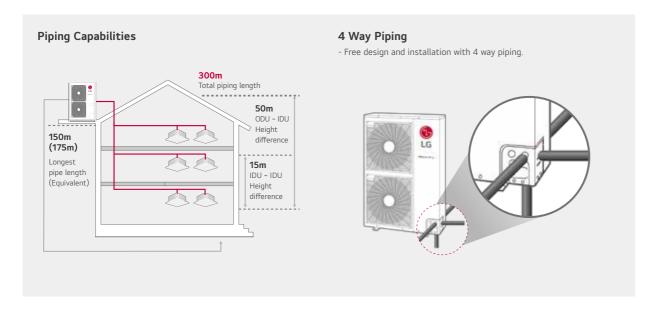
The black coating with enhanced epoxy resin is applied for strong protection from various corrosive external conditions such as salt contamination and air pollution. Moreover, the hydrophilic film keeps water from accumulating on the heat exchanger's fin, minimizing moisture buildup and making it even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



## **Sufficient Piping Length**

## Increased piping length allows for flexible design and installation

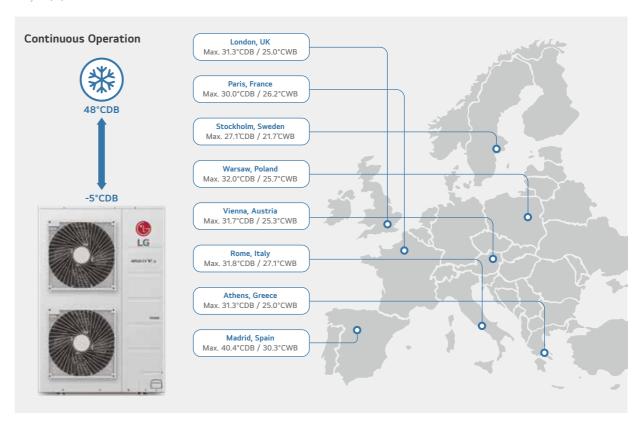
MULTI V S inverter technology and sub cooling control circuit technology allows greater piping length and outstanding elevation differences. A cooling system can be implemented more flexibly in a shop, office and even high-rise building, reducing the designer's work time and ensuing efficient designs.

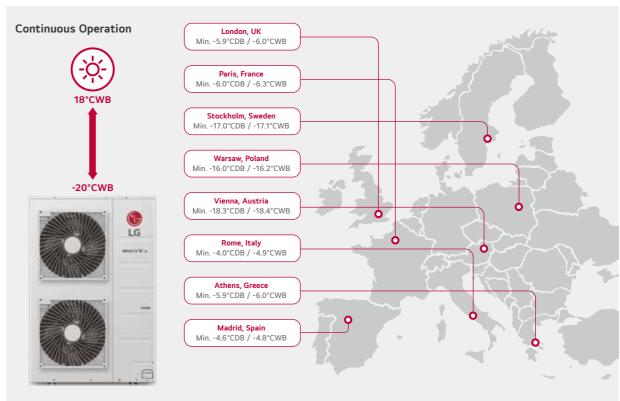


## **Wide Operation Ranges (Cooling & Heating)**

With wide operation ranges, MULTI V S can operate continuously in many European countries

\* Only for 8, 10, 12HP



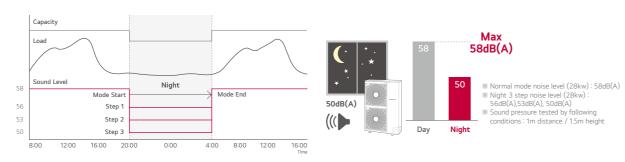


\*\* The source of weather data is TMY(Typical Meteorological Year) data.
The TMY data contains one year of hourly data that best represents weather conditions over many years.

## **Low Noise Operation**

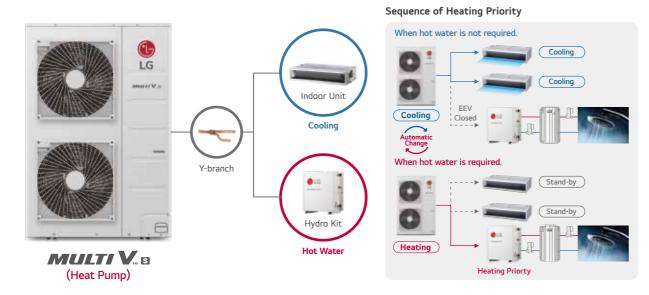
Decreased noise during operation with low noise functionality

At night low noise mode, the noise level can reduce up to 14% in comparison with normal operation mode.



## **Heating Priority**

MULTI V S provides hot water during the cooling season with a heating priority function which automatically changes operation modes when hot water is required.



## **Upgraded Fault Detection and Diagnosis**

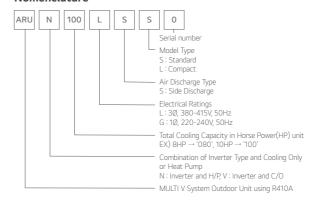
Easy and convenient maintenance with self-diagnosis

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
- FDD (Fault Detection and Diagnosis)



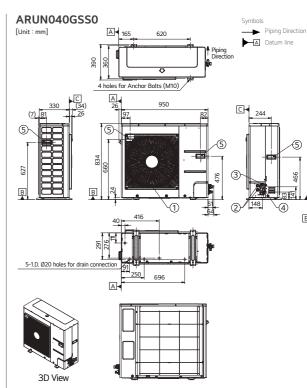
### Nomenclature

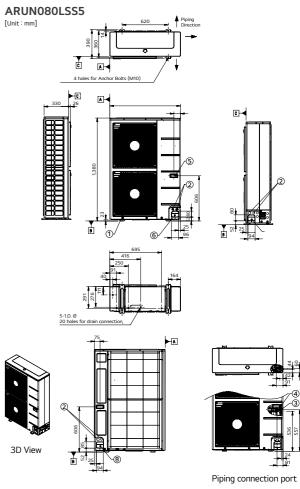


### **Outdoor Units Function**

Category	Functions	MULTI V S
	Variable Path of Outdoor Unit HEX	-
	HiPOR™ (High Pressure Oil Return)	-
Key Refrigerant Components	Humidity Sensor	ARUB060GSS4 or
	Corrosion Resistance Black Fin	0
	Oil Sensor	-
	Dual Sensing	ARUB060GSS4 on
	Low Noise Operation	0
	Hgih Static Mode of Outdoor Unit Fan	0
	Partial Defrosting	-
Special Function	Auto Dust Removal of Outdoor Unit (Fan reverse rotation)	-
	Indoor Cooling Comfort Mode	0
	Based Outdoor Temperature Smart Load Control (SLC)	
	(Changing indoor discharge air temperature according to load)	0
	Outdoor Unit Control Refer to Humidity	ARUB060GSS4 or
	Defrost / Deicing	0
	High Pressure Switch	0
	Phase Protection	0
Basic Function	Restart Delay (3-minutes)	0
	Self Diagnosis	0
	Soft Start	0
	Test Run Function	-
	AC Ez (Simple Controller)	PQCSZ250S0
	AC Ez Touch	PACEZA000
	AC Smart IV	PACS4B000
Central Controller	AC Smart 5	PACS5A000
	ACP (Advanced Control Platform) IV	PACP4B000
	ACP (Advanced Control Platform) 5	PACP5A000
	AC Manager 5	PACM5A000
BNU (Building	ACP5 (w U60FT)	0
Network Unit)	ACP BACnet	PQNFB17C0
IO Module (ODU Dr	y Contact)	PVDSMN000
PDI (Power	Standard	PPWRDB000
Distribution Indicator)	Premium	PQNUD1S40
Cool / Heat Selecto	r	PRDSBM
Cycle Monitoring	LGMV	PRCTIL0
Device	Mobile LGMV	PLGMVW100
Additional kit	Refrigerant Charging Kit	(Logical operation Not applied to ARUB060GSS4
, carcional Kit	Low Ambient Kit	-
	Variable Water Flow Valve Control	







Unit should be installed in compliance with the

installation manual in the product box.

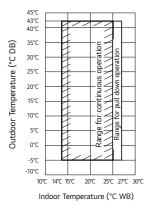
2. Unit should be grounded in accordance with the local regulation or applicable national codes.

All electrical components and materials to be supplied from the site must comply with the

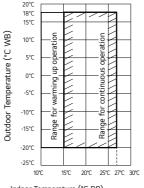
should be selected in accordance with that.

## Heat Pump

## Cooling



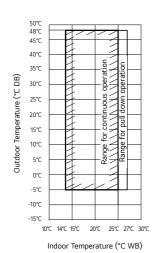
### Heating



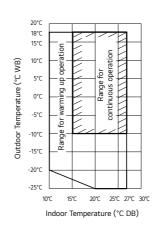
## Indoor Temperature (°C DB)

## **Heat Recovery**

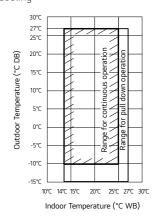
Cooling



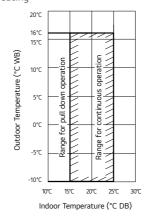
## Heating



#### Simultaneous Cooling

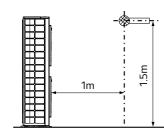


Simultaneous Heating



- Note
  1. These figures assume the following operating conditions: Equivalent piping length: 7.5m
- Level difference: Om
  2. Range of pull down operation: If the relative humidity is too high, cooling capacity can be decreased by the sensible

## Position of Sound Level Measuring



- 1. These figures assume the following operating conditions: Equivalent piping length: 7.5m Level difference: 0m

#### ARUN040GSS0





for EUROVENT VRF program. Check ongoing validity of certification : www.eurovent-certification.com

	HP		4
Model Name			ARUN040GSS0
· ·	Cooling (Rated)	kW	12.1
Capacity	Heating (Rated)	kW	12.5
	Cooling (Rated)	kW	4.03
Input	Heating (Rated)	kW	3.10
EER			3.00
SEER			5.63
СОР	Rated Capacity		4.03
SCOP			3.97
F	Color (General)		Warm Gray
Exterior	RAL Code (Classic)		RAL 7044
Heat Exchanger	Туре		Wide Louver Plus
	Туре		BLDC Inverter Twin Rotary
	Combination x No.		(Inverter) x 1
Compressor	Motor Output x Number	W x No.	4,000 x 1
	Oil Type		FW60L (PVE)
	Oil Charge	СС	1,300
	Туре		Axial Flow Fan
	Motor Output x Number	W x No.	124 x 1
Fan	Air Flow Rate (High)	m³/min x No.	60
	Drive		DC INVERTER
	Discharge	Side / Top	Side
Pipe	Liquid Pipe	mm (inch)	Ø9.52 (3/8)
Connection	Gas Pipe	mm (inch)	Ø15.88 (5/8)
Dimensions (V	W x H x D)	mm x No.	950 × 834 × 330
Dimensions (V	W x H x D) - Shipping	mm x No.	(1,065 x 918 x 461) x 1
Net Weight		kg x No.	70
Shipping Weig	jht	kg x No.	77 x 1
Sound	Cooling	dB(A)	50
Pressure Level*	Heating	dB(A)	52
Sound Power	Cooling	dB(A)	72
Level	Heating	dB(A)	75
Communication	on Cable	mm² x No. (VCTF-SB)	2C x 1.0 ~ 1.5
	Refrigerant Name		R410A
D-f-:	Precharged Amount in factory	kg	1.8
Refrigerant	t-CO <sub>2</sub> eq		3.758
	Control		Electronic Expansion Valve
			220-240 , 1 , 50
Power Supply		V, Ø, Hz	220, 1, 60
	aximum Connectable Indoo	u I luita	8

- \*: Sound Pressure is not a value declared on Eurovent Program.

- \*: Sound Pressure is not a value declared on Eurovent Program.

  Note

  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 27°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 pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

  Sound power level is measured on the rated condition in the anechoic rooms by ISO 9614 standard.

  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)

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#### ARUN050GSS0 / ARUN060GSS0





for EUROVENT VRF program. Check ongoing validity of certification www.eurovent-certification.com

	НР		5	6
Model Name			ARUN050GSS0	ARUN060GSS0
	Cooling (Rated)	kW	14.0	15.5
Capacity	Heating (Rated)	kW	16.0	18.0
Input	Cooling (Rated)	kW	4.59	5.17
	Heating (Rated)	kW	4.18	5.00
EER			3.05	3.00
SEER			7.40	7.53
COP	Rated Capacity		3.83	3.60
SCOP			4.16	4.35
Exterior	Color (General)		Warm Gray	Warm Gray
Exterior	RAL Code (Classic)		RAL 7044	RAL 7044
Heat Exchanger	Туре		Wide Louver Plus	Wide Louver Plus
	Туре		BLDC Inverter Twin Rotary	BLDC Inverter Twin Rotary
	Combination x No.		(Inverter) x 1	(Inverter) x 1
Compressor	Motor Output x Number	W x No.	4,000 x 1	4,000 x 1
	Oil Type		FW60L (PVE)	FW60L (PVE)
	Oil Charge	СС	1,300	1,300
	Туре		Axial Flow Fan	Axial Flow Fan
	Motor Output x Number	W x No.	124 x 2	124 x 2
Fan	Air Flow Rate (High)	m³/min x No.	110	110
	Drive		DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side
Pipe	Liquid Pipe	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)
Connection	Gas Pipe	mm (inch)	Ø15.88 (5/8)	Ø19.05 (3/4)
Dimensions (V	V x H x D)	mm x No.	950 × 1,380 × 330	950 × 1,380 × 330
Dimensions (V	V x H x D) - Shipping	mm x No.	(1,065 x 918 x 461) x 1	(1,065 x 918 x 461) x 1
Net Weight		kg x No.	94	94
Shipping Weig	ht	kg x No.	106	106
Sound	Cooling	dB(A)	51	52
Pressure Level*	Heating	dB(A)	53	54
Sound Power	Cooling	dB(A)	72	72
Level	Heating	dB(A)	76	77
Communication	n Cable	mm² x No. (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant Name		R410A	R410A
Refrigerant	Precharged Amount in factory	kg	3.0	3.0
Refrigerant	t-CO <sub>2</sub> eq		6.263	6.263
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Dower Coarle		V Ø L-	220-240 , 1 , 50	220-240 , 1 , 50
Power Supply		V, Ø, Hz	220, 1, 60	220, 1, 60
Number of Ma	ximum Connectable Indoo	r Units	10	13

<sup>\*:</sup> Sound Pressure is not a value declared on Eurovent Program.

\*: Sound Pressure is not a value declared on Eurovent Program.

Note

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 27°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 pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

Sound power level is measured on the rated condition in the anechoic rooms by ISO 9614 standard.

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)

## ARUN040LSS0 / ARUN050LSS0 ARUN060LSS0





for EUROVENT VRF program. Check ongoing validity of certification : www.eurovent-certification.com

	НР		4	5	6
Model Name			ARUN040LSS0	ARUN050LSS0	ARUN060LSS0
	Cooling (Rated)	kW	12.1	14.0	15.5
Capacity	Heating (Rated)	kW	12.5	16.0	18.0
lancot.	Cooling (Rated)	kW	3.39	4.59	5.17
Input	Heating (Rated)	kW	2.75	4.18	5.00
EER			3.57	3.05	3.00
SEER			7.42	7.40	7.53
COP	Rated Capacity		4.55	3.83	3.60
SCOP			4.30	4.16	4.35
Futanian	Color (General)		Warm Gray	Warm Gray	Warm Gray
Exterior	RAL Code (Classic)		RAL 7044	RAL 7044	RAL 7044
Heat Exchanger	Туре		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Туре		BLDC Inverter Twin Rotary	BLDC Inverter Twin Rotary	BLDC Inverter Twin Rotary
	Combination x No.		(Inverter) x 1	(Inverter) x 1	(Inverter) x 1
Compressor	Motor Output x Number	W x No.	4,000 x 1	4,000 x 1	4,000 x 1
	Oil Type		FW60L (PVE)	FW60L (PVE)	FW60L (PVE)
	Oil Charge cc		1,300	1,300	1,300
	Туре		Axial Flow Fan	Axial Flow Fan	Axial Flow Fan
	Motor Output x Number	W x No.	124 x 2	124 x 2	124 x 2
Fan	Air Flow Rate (High)	m³/min x No.	110	110	110
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side	Side
Pipe	Liquid Pipe	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)
Connection	Gas Pipe	mm (inch)	Ø15.883(5/8)	Ø15.88 (5/8)	Ø19.05 (3/4)
Dimensions (\	W x H x D)	mm x No.	950 × 1,380 × 330	950 × 1,380 × 330	950 × 1,380 × 330
Dimensions (\	W x H x D) - Shipping	mm x No.	(1,065 x 918 x 461) x 1	(1,065 x 918 x 461) x 1	(1,065 x 918 x 461) x 1
Net Weight		kg x No.	96	96	96
Shipping Weig	jht	kg x No.	108	108	108
Sound	Cooling	dB(A)	50	51	52
Pressure Level*	Heating	dB(A)	52	53	54
Sound Power	Cooling	dB(A)	72	72	72
Level	Heating	dB(A)	76	76	77
Communication	on Cable	mm² x No. (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant Name		R410A	R410A	R410A
Refrigerant	Precharged Amount in factory	kg	3.0	3.0	3.0
Kerrigerani	t-CO <sub>2</sub> eq		6.263	6.263	6.263
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
			380-415 , 3 , 50	380-415 , 3 , 50	380-415 , 3 , 50
Power Supply		V, Ø, Hz	380, 3, 60	380, 3, 60	380, 3, 60
Number of Ma	aximum Connectable Indoo	or Units	8	10	13

<sup>\*:</sup> Sound Pressure is not a value declared on Eurovent Program.

<sup>\*:</sup> Sound Pressure is not a value declared on Eurovent Program.

Note

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 pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

Sound power level is measured on the rated condition in the semi-anechoic rooms by ISO 9614 standard.

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)

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## ARUN080LSS5 / ARUN100LSS5 ARUN120LSS5





for EUROVENT VRF program. Check ongoing validity of certification www.eurovent-certification.com

	НР		8	10	12
Model Name			ARUN080LSS5	ARUN100LSS5	ARUN120LSS5
	Cooling (Rated)*	kW	22.4	28.0	33.5
Capacity	Heating (Rated)*	kW	22.4	28.0	33.5
.,,,	Heating (Max)*	kW	24.5	30.6	36.7
Input	Cooling (Rated)*	kW	7.83	9.69	12.01
input	Heating (Rated)*	kW	5.82	6.81	9.05
EER			2.86	2.89	2.79
SEER			7.49	6.59	6.83
СОР	Rated Capacity		3.85	4.11	3.70
SCOP			4.76	4.42	4.45
Exterior	Color (General)		Warm Gray	Warm Gray	Warm Gray
	RAL Code (Classic)		RAL 7044	RAL 7044	RAL 7044
Heat Exchanger	Туре		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 1	(Inverter) x 1	(Inverter) x 1
Compressor	Motor Output x Number	W x No.	4,200 x 1	5,300 x 1	5,300 x 1
	Oil Type		FW60L (PVE)	FW60L (PVE)	FW60L (PVE)
	Oil Charge	СС	1,200	1,200	1,200
	Туре		Propeller Fan	Propeller Fan	Propeller Fan
	Motor Output x Number	W x No.	124 x 2	250 x 2	250 x 2
Fan	Air Flow Rate (High)	m³/min x No.	140	210	210
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side	Side
Pipe	Liquid Pipe	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø12.7 (1/2)
Connection	Gas Pipe	mm (inch)	Ø19.05 (3/4)	Ø22.2 (7/8)	Ø28.58 (1-1/8)
Dimensions (\		mm x No.	950 x 1,380 x 330	1,090 × 1,625 × 380	1,090 x 1,625 x 380
	N x H x D) - Shipping	mm x No.	(1,140 x 1,549 x 466) x 1	(1,215 x 1,795 x 500) x 1	(1,215 x 1,795 x 500) x 1
Net Weight		kg x No.	114	139	152
Shipping Weig		kg x No.	126	154	166
Sound	Cooling	dB(A)	57	58	60
Pressure Level*		dB(A)	57	58	60
Sound Power Level	Cooling	dB(A)	73	75	77
	Heating	dB(A) mm² x No.	77	81	82
Communication		(VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant Name		R410A	R410A	R410A
Refrigerant	Precharged Amount in factory	kg	3.5	4.5	6.0
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	t-CO <sub>2</sub> eq		7.306	9.394	12.525
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V, Ø, Hz	380-415 , 3 , 50	380-415 , 3 , 50	380-415 , 3 , 50
. Otter Supply		1, 50, 112	380,3,60	380,3,60	380,3,60
Number of Ma	aximum Connectable Indoo	or Units	13	16	20

<sup>\*:</sup> Sound Pressure is not a value declared on Eurovent Program.

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### ARUB060GSS4





for EUROVENT VRF program. Check ongoing validity of certification : www.eurovent-certification.com

	НР		6
Model Name			ARUB060GSS4
Canasitu	Cooling (Rated)	kW	15.5
Capacity	Heating (Rated)	kW	18.0
	Cooling (Rated)	kW	5.74
Input	Heating (Rated)	kW	5.14
EER			2.70
SEER			5.92
СОР	Rated Capacity		3.50
SCOP			3.79
<b>.</b>	Color		Warm Gray
Exterior	RAL Code (Classic)		RAL 7044
Heat Exchanger	Туре		Wide Louver Plus
z.xe.iu.ige.	Туре		Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 1
Compressor	Motor Output x Number	W x No.	4,200 x 1
	Oil Type		FW60L (PVE)
	Oil Charge	СС	1,700
	Туре		Axial Flow Fan
	Motor Output x Number	W x No.	124 x 2
Fan	Air Flow Rate (High)	m³/min x No.	110
	Drive		DC INVERTER
	Discharge	Side / Top	Side
Pipe	Liquid Pipe	mm (inch)	Ø9.52 (3/8)
Connection	Low Pressure Gas Pipe	mm (inch)	Ø19.05 (3/4)
#1	High Pressure Gas Pipe	mm (inch)	Ø15.88 (5/8)
Dimensions (V	V x H x D)	mm x No.	950 × 1,380 × 330
Dimensions (V	V x H x D) - shipping	mm x No.	(1,140 x 1,549 x 466) x 1
Net Weight		kg x No.	118
Shipping Weig	ht	kg x No.	132
Sound	Cooling	dB(A)	56
Pressure Level*	Heating	dB(A)	58
Sound Power	Cooling	dB(A)	76
Level	Heating	dB(A)	78
Communication	on Cable	mm² x No. (VCTF-SB)	2C x 1.0 ~ 1.5
	Refrigerant Name		R410A
Refrigerant	Precharged Amount in factory	kg	3.5
Kerrigerant	t-CO <sub>2</sub> eq		7.306
	Control		Electronic Expansion Valve
Power Supply		V, Ø, Hz	220-230-240 , 1 , 50/60
Number of Ma	aximum Connectable Indoo	r Units	13

<sup>\*:</sup> Sound Pressure is not a value declared on Eurovent Program.

Note

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

2. Wiring cable size must comply with the applicable local and national codes. And "Electric characteristics" chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.

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

4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.

Therefore, these values can be increased owing to ambient conditions during operation.

5. Performances are based on the following conditions:

- \*Cooling: Indoor Ambient Temp. 27\*CDB / 19\*CWB, Outdoor Ambient Temp. 35\*CDB / 24\*CWB

- \*Heating: Indoor Ambient Temp. 20\*CDB / 15\*CWB, Outdoor Ambient Temp. 7\*CDB / 6\*CWB

- Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor ~ Indoor Unit) is Zero.

6. EUROVENT Test Condition:

<sup>6.</sup> EUROVENT Test Condition :

Performance values on the this PDB are based on Ceiling mounted cassette combination.
 Refer to EUROVENT web site (www.eurovent-certification.com) for other indoor unit combination and more detail test conditions.

7. The maximum combination ratio is 160%.

<sup>8.</sup> This product contains Fluorinated greenhouse gases. (R410A, GWP (Global warming potential) = 2,087.5)

<sup>\*:</sup> Sound Pressure is not a value declared on Eurovent Program.

Note

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 pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

Sound power level is measured on the rated condition in the semi-anechoic rooms by ISO 9614 standard.

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.

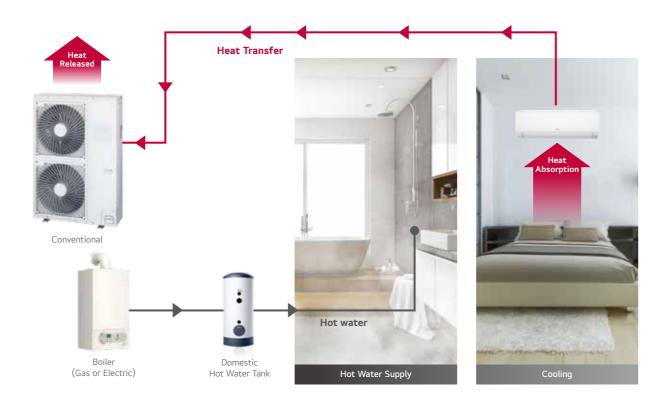
8. This product contains Fluorinated greenhouse gases. (R410A, GWP(Global warming potential) = 2087.5)

## **Energy Savings**

Energy consumption can be reduced as indoor heat is absorbed and transferred to hot water supply

## Conventional

Absorbed heat is released to outdoor air.

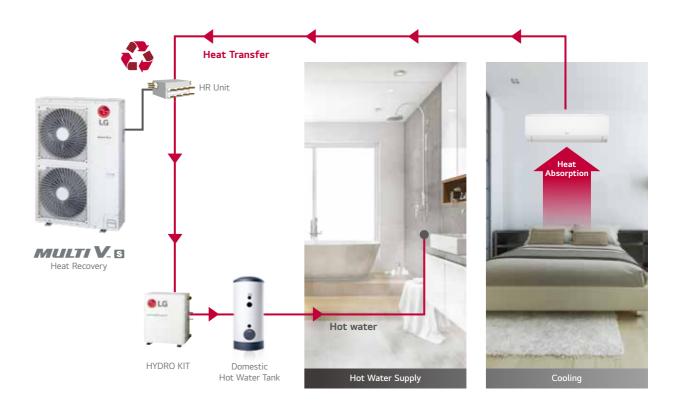


## **Energy Savings**

Energy consumption can be reduced as indoor heat is absorbed and transferred to hot water supply

## MULTI V S Heat Recovery with HYDRO KIT

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





## **Lower Global Warming Potential (GWP)**

#### What is GWP?

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Global Warming Potential is a measure that allows for an accurate comparison of the environmental impact of different gases. GWP measures how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO<sub>2</sub>).









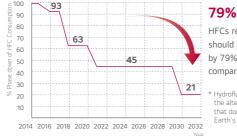


 $N_2O$ 

 $CH_4$ 

## Global Trend and EU Regulation for F-Gas

HFC\* Phase Down 79% by 2030.



HFCs refrigerants should be reduced by 79% by 2030 compared to 2013.

the alternative freon gas Earth's ozone layer

## **Cost Savings with R32**

#### **Higher Efficiency**

Savings on cost of energy consumption.



## **Reduced Equipment Sizes**

Savings on product purchase and labor cost for installation and maintenance.



## Less Refrigerant Charge

Savings on cost of injecting & replacing refrigerant.



## Reduced Refrigerant Volume

Savings on refrigerant purchase and recycling costs.



## **Compact Size & Light Weight**

Its compact size and light weight make it easy to install and optimize space. (5/6HP)





## **Less Refrigerant Charge**

LG reduces refrigerant charge by applying environment-conscious refrigerant R32.





- \*\* IDU (Wall Mounted Unit): 5 kBtu/h, 8 EA
  \*\* This result can be different depending on actual environment

## **Corrosion Resistant Black Fin**

#### **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. Moreover, the hydrophilic film keeps water from accumulating on the heat exchanger's fin, minimizing moisture buildup and making it even more corrosion resistant.



- Hydrophilic Coating (Water flow)

## Complex Resin (Corrosion resistant)

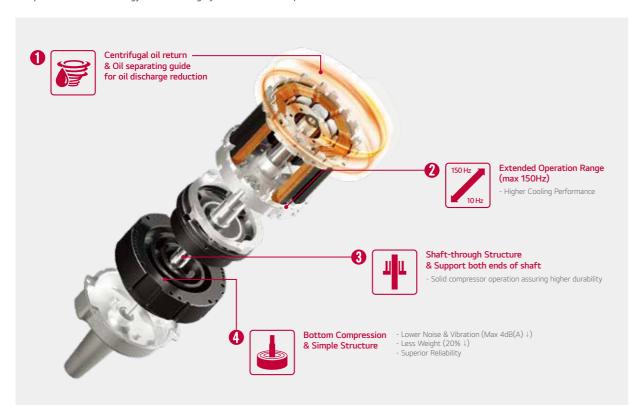
The Black coating provides strong protection from corrosion.

Test Method B of ISO 21207 ASTM B117 / ISO 9227 (10,000 hours)

NOTE

## $R1Compressor^{^{\!\top\!}}$

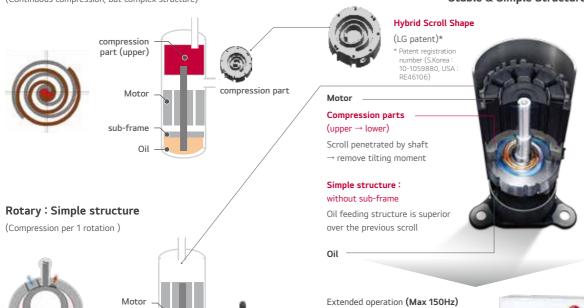
R1 Compressor combines the high-efficiency, low sound characteristics of the scroll and the simple compressing structure of the rotary compressor. This technology enables a highly efficient and compact model.



## **Conventional Compressor**

## Scroll: High efficiency / Low sound

(Continuous compression, but complex structure)



compression part

## R1Compressor™

Revolutionary Scroll: High efficiency / Stable & Simple Structure





## Compact model



Less weight (20%↓)



## ZRUN030GSS0 / ZRUN040GSS0 ZRUN050GSS0 / ZRUN060GSS0







for EUROVENT VRF program. Check ongoing validity of certification www.eurovent-certification.com

	HP	_	3	4	5	6
Model Name		_	ZRUN030GSS0	ZRUN040GSS0	ZRUN050GSS0	ZRUN060GSS0
	Cooling (Rated)	kW	9.0	12.1	14.0	15.5
Capacity	Heating (Rated)	kW	9.0	12.1	14.0	15.5
	Heating (Max)	kW	10.0	14.2	16.0	18.0
Input	Cooling (Rated)	kW	2.81	4.26	4.90	5.64
Input	Heating (Rated) kW		2.09	3.03	3.48	3.95
EER (Rated)			3.20 2.84		2.86	2.75
SEER			5.70	6.69	6.44	6.59
COP (Rated)			4.30	4.00	4.02	3.92
SCOP			3.90	4.00	3.81	4.07
Exterior	Color		Warm Gray	Warm Gray	Warm Gray	Warm Gray
Exterior	RAL Code		RAL 7044	RAL 7044	RAL 7044	RAL 7044
Heat Exchanger	Туре		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Туре		LG Inverter Scroll	LG Inverter Scroll	LG Inverter Scroll	LG Inverter Scroll
	Combination x No.		(Inverter) x 1	(Inverter) x 1	(Inverter) x 1	(Inverter) x 1
Compressor	Motor Output x Number W x No.		3,198 x 1	3,198 x 1	3,198 x 1	3,198 x 1
	Oil Type		FW60L (PVE)	FW60L (PVE)	FW60L (PVE)	FW60L (PVE)
	Oil Charge	СС	1,100	1,100	1,100	1,100
	Туре		Axial Flow Fan	Axial Flow Fan	Axial Flow Fan	Axial Flow Fan
	Motor Output x Number	W x No.	124 x 1	124 x 1	198 x 1	198 x 1
Fan	Air Flow Rate (High)	m³/min x No.	60	60	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side	Side	Side
Pipe Connection	Liquid Pipe	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)
. ipe comicetion	Gas Pipe	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø19.05 (3/4)
Dimensions (W x	H x D)	mm x No.	950 × 834 × 330	950 x 834 x 330	950 x 834 x 330	950 × 834 × 330
Dimensions (W x	H x D) - Shipping	mm x No.	1,147 x 919 x 461			
Net Weight		kg x No.	64.7	64.7	71.6	71.6
Shipping Weight		kg x No.	73.7	73.7	79.6	79.6
Sound	Cooling	dB(A)	51	51	57	57
Pressure Level*	Heating	dB(A)	55	55	60	60
Sound Power	Cooling	dB(A)	67	67	70	71
Level	Heating	dB(A)	70	71	74	75
Communication (	Cable	mm² x No. (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant name		R32	R32	R32	R32
Defeire	Precharged Amount	kg	1.5	1.5	2.0	2.0
Refrigerant	t-CO <sub>2</sub> eq		1.013	1.013	1.350	1.350
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V, Ø, Hz	220 - 230 - 240 , 1 , 50	220 - 230 - 240 , 1 , 50	220 - 230 - 240 , 1 , 50	220 - 230 - 240 , 1 , 50
Number of maxin	num connectable indoor un	its	6	8	10	13

#### \*: Sound Pressure is not a value declared on Eurovent Program.

## ZRUN030LSS0 / ZRUN040LSS0 ZRUN050LSS0 / ZRUN060LSS0





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	HP		3	4	5	6
Model Name			ZRUN030LSS0	ZRUN040LSS0	ZRUN050LSS0	ZRUN060LSS0
	Cooling (Rated)	kW	9.0	12.1	14.0	15.5
Capacity	Heating (Rated)	kW	9.0	12.1	14.0	15.5
	Heating (Max)	kW	10.0	14.2	16.0	18.0
l	Cooling (Rated)	kW	2.81	4.26	4.90	5.64
Input	Heating (Rated)	kW	2.09	3.03	3.48	3.95
EER (Rated)			3.20	2.84	2.86	2.75
SEER			5.70	6.69	6.44	6.59
COP (Rated)			4.30	4.00	4.02	3.92
SCOP			3.90	4.00	3.81	4.07
F	Color		Warm Gray	Warm Gray	Warm Gray	Warm Gray
Exterior	RAL Code		RAL 7044	RAL 7044	RAL 7044	RAL 7044
Heat Exchanger	Туре		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Туре		LG Inverter Scroll	LG Inverter Scroll	LG Inverter Scroll	LG Inverter Scroll
	Combination x No.		(Inverter) x 1	(Inverter) x 1	(Inverter) x 1	(Inverter) x 1
Compressor	Motor Output x Number	W x No.	3,198 x 1	3,198 x 1	3,198 x 1	3,198 x 1
	Oil Type		FW60L (PVE)	FW60L (PVE)	FW60L (PVE)	FW60L (PVE)
	Oil Charge	СС	1,100	1,100	1,100	1,100
	Туре		Axial Flow Fan	Axial Flow Fan	Axial Flow Fan	Axial Flow Fan
	Motor Output x Number	W x No.	124 x 1	124 x 1	198 x 1	198 x 1
Fan	Air Flow Rate (High)	m³/min x No.	60	60	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side	Side	Side
Pipe Connection	Liquid Pipe	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)
Pipe Connection	Gas Pipe	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø19.05 (3/4)
Dimensions (W x	H x D)	mm x No.	950 × 834 × 330	950 x 834 x 330	950 x 834 x 330	950 × 834 × 330
Dimensions (W x	H x D) - Shipping	mm x No.	1,147 x 919 x 461			
Net Weight		kg x No.	64.7	64.7	71.6	71.6
Shipping Weight		kg x No.	73.7	73.7	79.6	79.6
Sound	Cooling	dB(A)	51	51	57	57
Pressure Level*	Heating	dB(A)	55	55	60	60
Sound Power	Cooling	dB(A)	67	67	70	71
Level	Heating	dB(A)	70	71	74	75
Communication C	Cable	mm² x No. (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant name		R32	R32	R32	R32
	Precharged Amount	kg	1.5	1.5	2.0	2.0
Refrigerant	t-CO <sub>2</sub> eq		1.013	1.013	1.350	1.350
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V, Ø, Hz	380 - 400 - 415, 3, 50	380 - 400 - 415, 3, 50	380 - 400 - 415, 3, 50	380 - 400 - 415, 3, 50
Number of maxin	num connectable indoor ur	nits	6	8	10	13

Due to our policy of innovation some specifications may be changed without notification. Wiring cable size must comply with the applicable local and national codes. And "Electric characteristics" chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.

Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

Sound power level is measured on the rated condition in the anechoic rooms by ISO 9614 standard.

Therefore, these values can be increased owing to ambient conditions during operation.

<sup>4.</sup> Performances are based on the following conditions:

• Cooling: Indoor Ambient Temp 27°CDB / 19°CWB, Outdoor Ambient Temp 35°CDB / 24°CWB

• Heating: Indoor Ambient Temp 20°CDB / 15°CWB, Outdoor Ambient Temp 7°CDB / 6°CWB

• Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.

5. EUROVENT Test Condition:

• Performance values on the this PDB are based on Ceiling mounted cassette combination.

• Refer to EUROVENT web site(www.eurovent-certification.com) for other indoor unit combination and more detail test conditions.

6. The maximum combination ratio is 160%.

<sup>7.</sup> This product contains Fluorinated greenhouse gases. (R32, GWP (Global warming potential) = 675)

<sup>\*:</sup> Sound Pressure is not a value declared on Eurovent Program.

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

Wiring cable size must comply with the applicable local and national codes. And "Electric characteristics" chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.

<sup>3.</sup> Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

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Therefore, these values can be increased owing to ambient conditions during operation.

<sup>4.</sup> Performances are based on the following conditions:

Cooling: Indoor Ambient Temp 27°CDB / 19°CWB, Outdoor Ambient Temp 35°CDB / 24°CWB

Heating: Indoor Ambient Temp 20°CDB / 15°CWB, Outdoor Ambient Temp 7°CDB / 6°CWB

Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.

EUROVENT Test Condition:

Performance values on the this PDB are based on Ceiling mounted cassette combination.

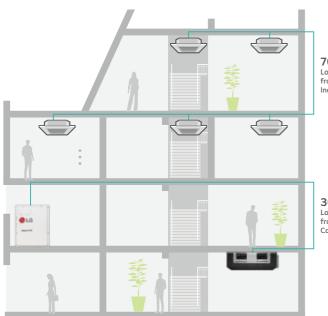
Refer to EUROVENT web site(www.eurovent-certification.com) for other indoor unit combination and more detail test conditions.

This product romatins Fluorinated repenbugse pases (R32 GWP (Global warming notential) = 675).

<sup>7.</sup> This product contains Fluorinated greenhouse gases. (R32, GWP (Global warming potential) = 675)







70m
Longest piping length
from Compressor Module to
Indoor unit

30m Longest piping length from Heat Exchanger Module to Compressor Module

## How does it work?

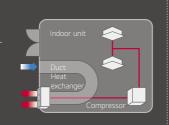
Direct Inlet / Outlet Case



- Air Cooled VRF Heat Pump

Highlights

- 14kW (based on cooling capacit
- 30, 380 ~ 415V, 50Hz (Compressor Modul
- 1Ø, 220 ~ 240V, 50Hz (Heat Exchanger Modul
- Outdoor unit is installed inside buildi



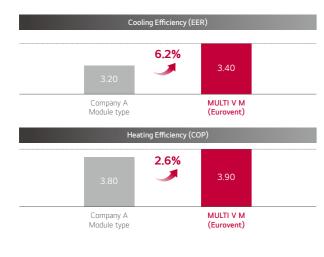


HIGH

CLASS

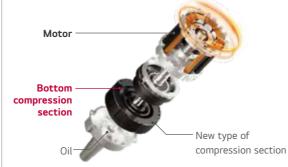
EFFICIENCY

## **Energy Efficiency**



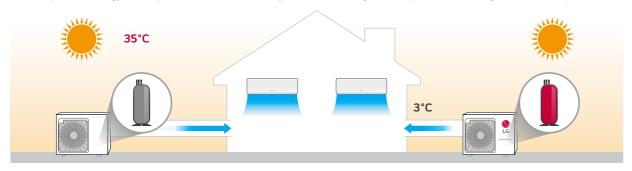
## $R1 Compressor^{^{\!\top\!}}$

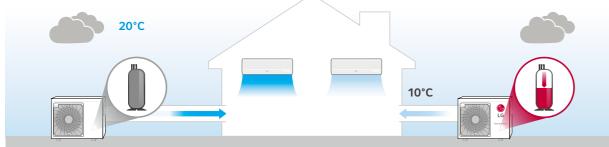
MULTI V M ensures world-class efficiency with innovative technology including the R1 Compressor.

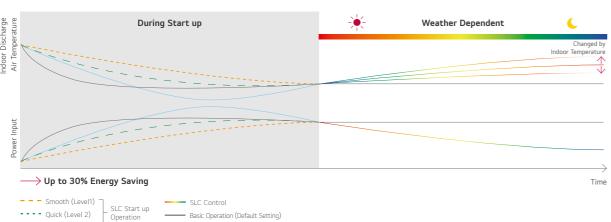


## **Smart Load Control**

To save operation energy consumption, the unit automatically controls the refrigerant temperature according to outdoor temperature.

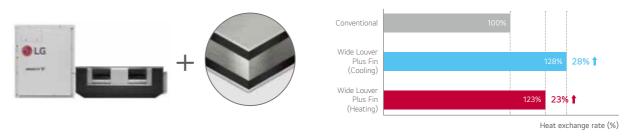






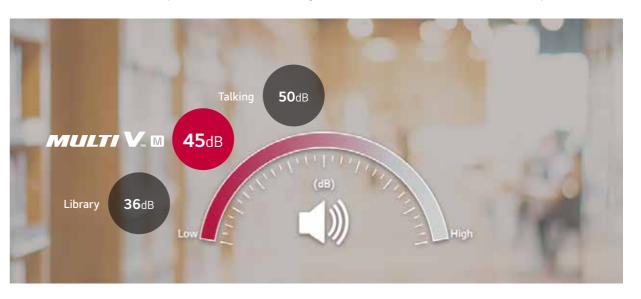
## Wide Louver Plus Fin + Corrosion Resistance

Wide Louver Plus fin technology increases efficiency and heating performance compared to a conventional fin.



## **Quiet Operation**

The low sound level of both the compressor module and heat exchanger module allows outdoor units to be installed and operated inside.



**FLEXIBLE** 

DESIGN

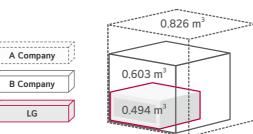
Qο

INSTALLATION

## Volume

## Compressor Module 0.233 m<sup>3</sup> A Company A Company $0.203 \text{ m}^3$

## Heat Exchanger Module



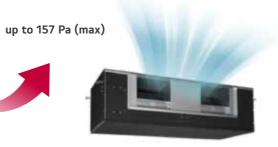
## **ESP Control**



up to 30 Pa





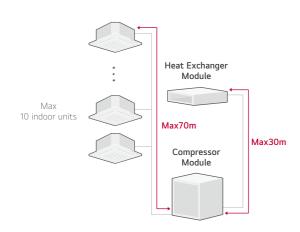


High Static Pressure Mode

## **Module Type**

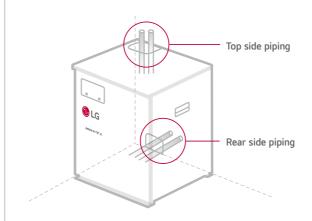
Increased design freedom

- Additional structure installation and ceiling construction not required
- Ease of service
- Compressor replacement
- Low noise with module
- Low noise by module (vs Integrated Type)



## **Flexible Piping Location**

Tidy & simple installation with flexible piping location.



## **Increased Design Freedom**

Additional structure installation or ceiling construction is not required, making compressor replacement and general maintenance easier. Split module provides low noise operation compared to an integrated type.



**Conventional Outdoor Unit** 



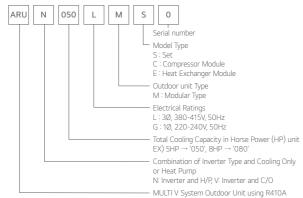
Heat exchanger module can be installed in false ceiling spaces



Compressor module can be installed anywhere indoors



#### Nomenclature

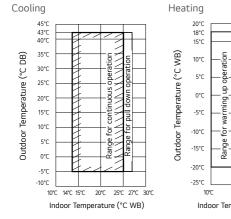


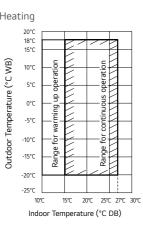
#### **Outdoor Units Function**

Outdoor Units Function					
Category	Functions	Modular			
	Variable Path of Outdoor Unit HEX	-			
	HiPOR™ (High Pressure Oil Return)	-			
Key Refrigerant	Humidity Sensor	-			
Components	Corrosion Resistance Black Fin	0			
	Oil Sensor	-			
	Dual Sensing	-			
	Low Noise Operation	0			
	Hgih Static Mode of Outdoor Unit				
	Fan	0			
	Partial Defrosting	-			
	Auto Dust Cleaning of Outdoor Unit				
Useful Function	(Fan reverse rotation)	-			
Oserut Function	Indoor Cooling Comfort Mode Based	0			
	Outdoor Temperature				
	Smart Load Control (SLC)				
	(Changing indoor discharge air	0			
	temperature according to load)				
	Outdoor Unit Control Refer to	-			
	Humidity				
	Defrost / Deicing	0			
	High Pressure Switch	0			
D 1: 1:1:	Phase Protection	0			
Reliability	Restart Delay (3-minutes)	0			
	Self Diagnosis Soft Start	0			
	Test Run Function	0			
		-			
	AC Ez (Simple Controller) AC Ez Touch	PQCSZ250S0 PACEZA000			
	AC EZ TOUCH AC Smart IV	PACS4B000			
Central Controller	AC Smart 1V AC Smart 5	PACS4B000 PACS5A000			
Central Controller	AC Smart 5 ACP (Advanced Control Platform) IV	PACSSAUUU PACP4B000			
	ACP (Advanced Control Platform) 5	PACP5A000			
	AC Manager 5	PACP5A000			
BNU (Building	AC Manager 5 ACP5 (w U60FT)	O			
Network Unit)	ACP BACnet	PONFB17C0			
receion onic)	Refrigerant Charging Kit	FUNFBI/CU			
Installation	Variable Water Flow Valve Control Kit				
PDI (Power	Standard	-			
PDI (Power Distribution Indicator		_			
Cool / Heat Selector	, i i cimuili	PRDSBM			
Low Ambient Kit		LUDODIAI			
IO Module		-			
(ODU Dry Contact)		PVDSMN000			
Cycle Monitoring	LGMV	PRCTIL0			
Device	Mobile LGMV	PLGMVW100			
	INIODIC ECIVIA	. LGIVIV VV IOO			

※ ○ : Applied, - : Not Applied

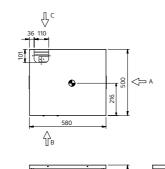
### Heat Pump

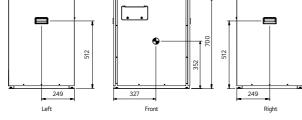


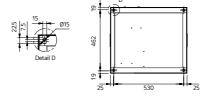


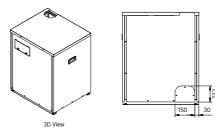
### Compressor Module

[Unit:mm]

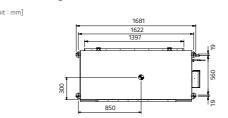


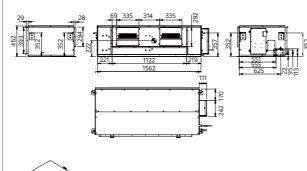


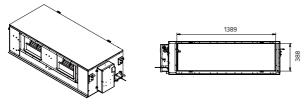




### Heat Exchanger Module

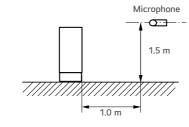






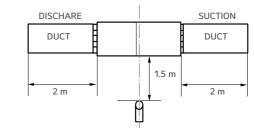
### Position of Sound Pressure Level Measuring

### Compressor Module



\* Measuring place : Anechoic chamber

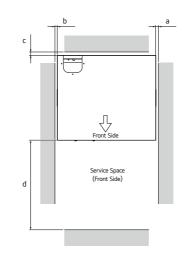
### Heat Exchanger Module

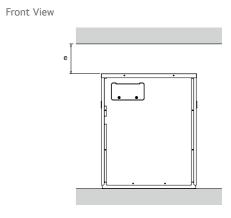


\* Measuring place : Anechoic chamber

## Installation Space for Compressor Module

Top View

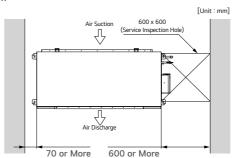


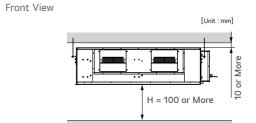


Category	Mark	Description	Installation Space (mm)
	a	Right	10 or More
6	b	Left	10 or More
Compressor	С	Rear	10 or More
Module —	d	Front	500 or More
	е	Тор	200 or More

### Installation Space for Compressor Module

Top View





## ARUN050LMC0 / ARUN050GME0





for EUROVENT VRF program. Check ongoing validity of certification

## System

	HP		5
	Set		ARUN050LMS0
Model Name	Compressor Module		ARUN050LMC0
	Heat Exchanger Module		ARUN050GME0
	Cooling (Rated)	kW	14.0
Capacity	Heating (Rated)	kW	14.0
	Heating (Max)	kW	16.0
	Cooling (Rated)	kW	5.07
Input	Heating (Rated)	kW	3.71
	Heating (Max)	kW	4.32
EER	Based on Rated Capacit	у	2.76
SEER			5.26
COP	Based on Rated Capacit	у	3.77
COP	Based on Max Capacity		3.70
SCOP	SCOP		3.85
Number of Max	imum Connectable Indoor I	Jnits	10

※ ○ : Applied, - : Not Applied

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Note

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

2. Wirring cable size must comply with the applicable local and national codes. And "Electric characteristics" chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.

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

4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

Sound power level is measured on the rated condition in the semi-anechoic rooms by ISO 9614 standard.

Therefore, these values can be increased owing to ambient conditions during operation.

5. Performances are based on the following conditions:

• Cooling: Indoor Ambient Temp 27°CDB / 19°CVMB, Outdoor Ambient Temp 35°CDB / 24°CWB

• Heating: Indoor Ambient Temp 20°CDB / 15°CVMB, Outdoor Ambient Temp 7°CDB / 6°CWB

• Interconnected Pipe Length and Difference of Elevation: — Heat Exchanger Module ~ Compressor Module = 5m

— Compressor Module - Indoor Unit = 7.5m

— Difference of Elevation (Heat Exchanger Moduler ~ Indoor Unit) is Zero

6. The maximum combination ratio is 130%.

7. This product contains Fluorinated greenhouse gases. (R410A, GWP(Global warming potential) = 2,087.5)

## ARUN050LMC0 / ARUN050GME0







for EUROVENT VRF program. Check ongoing validity of certification

#### Module

	HP		5	
Model Name			Compressor Module	Heat Exchanger Module
Model Name			ARUN050LMC0	ARUN050GME0
Exterior	Color		Morning Gray	Galvanized Steel Plate
Exterior	RAL Code (Classic)		RAL 7030	-
Dimensions	Net	mm x No.	580 × 700 × 500	1,562 × 460 × 688
(W x H x D)	Shipping	mm x No.	618 × 833 × 564	1,806 × 537 × 825
Mainha	Net	kg x No.	69.0	84
Weight	Shipping	kg x No.	76.0	95
Туре			Hermetic Motor Compressor	-
	Combination x No.		(Inverter) x 1	-
Compressor	Motor Output	W x No.	3,200	-
	Oil Type		FW68D (PVE)	-
	Oil Charge	CC	1,300	-
Heat Exchanger	Туре		-	Wide Louver Plus
	Туре		-	Sirocco Fan
Fan	Motor Output x Number	W x No.	-	400 × 2
	Air Flow Rate (Rated)	m³/min x No.	-	60
External Static	Nominal (Rated, Factory Set)	mmAq (Pa)	-	3 (29)
Pressure	Max	mmAq (Pa)	-	16 (157)
	Liquid	mm (inch)	Ø9.52 (3/8) to IDU	Ø12.7 (1/2) to Comp. Module
Pipe Connection	Gas	mm (inch)	Ø15.88 (5/8) to IDU	Ø19.05 (3/4) to Comp. Module
	Drain	mm (inch)	-	25 (1)
Sound Pressure	Cooling (Rated)	dB(A)	45	45
Level	Heating (Rated)	dB(A)	45	45
Sound Power Lev	rel*	dB(A)	-	-
Communication (	Cable	mm² x No. (VCTF-SB)	2C × 1.0 ~ 1.5 to IDU	$2C \times 1.0 \sim 1.5$ to Comp. Module
	Refrigerant Name		R410A	R410A
Defrieses	Precharged Amount	kg	2.0	-
Refrigerant	t-CO <sub>2</sub> eq		4.175	-
	Control		-	Electronic Expansion Valve
Power Supply		V, Ø, Hz	380-415 , 3 , 50	220-240, 1, 50

Note

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

2. Wiring cable size must comply with the applicable local and national codes. And "Electric characteristics" chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.

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Therefore, these values can be increased owing to ambient conditions during operation.

5. Performances are based on the following conditions:

• Cooling: Indoor Ambient Temp 27°CDB / 19°CWB, Outdoor Ambient Temp 35°CDB / 24°CWB

• Heating: Indoor Ambient Temp 27°CDB / 19°CWB, Outdoor Ambient Temp 7°CDB / 6°CWB

• Interconnected Pipe Length and Difference of Elevation: — Heat Exchanger Module — Compressor Module = 5m

— Compressor Module — Indoor Unit = 7.5m

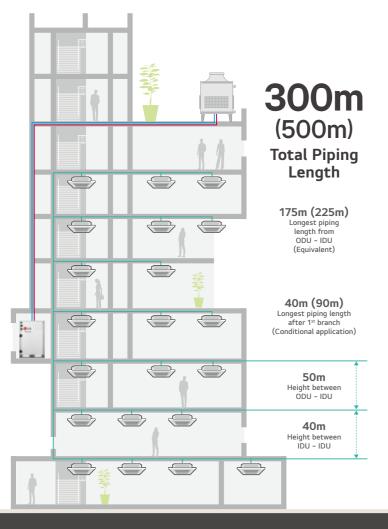
— Difference of Elevation (Heat Exchanger Module ~ Compressor Module = 5m

— Compressor Module — Indoor Unit = 7.5m

— Difference of Elevation (Heat Exchanger Module ~ Compressor Module = 2,087.5)

6. The maximum combination ratio is 130%.

7. This product contains Fluorinated greenhouse gases. (R410A, GWP(Global warming potential) = 2,087.5)





## Highlights

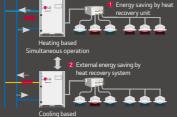






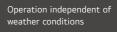
## How does it work?

Available in Heat Pump & Heat Recovery Configuration











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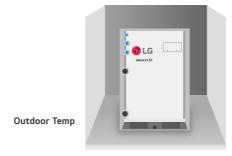
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AVING

## **High Efficiency System Regardless of External Conditions**

Regardless of outdoor temperature and other environmental conditions, MULTI V WATER 5 is the optimal solution.

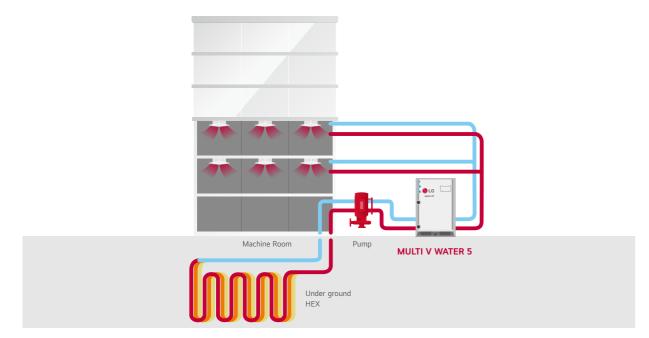


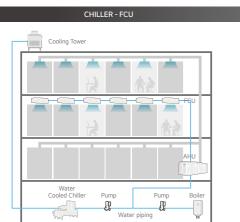
Wind

## **MULTI V WATER 5 System for Geothermal Applications**

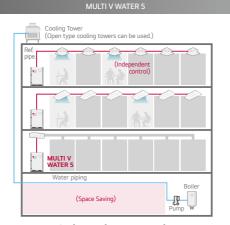
MULTI V WATER 5 System uses underground heat sources like soil, ground water, lakes, rivers and more as renewable energy for cooling and heating. Water or antifreeze solution is circulated through the closed loop HDPE (High Density Poly-Ethylene) pipes buried beneath the earth's surface.

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





Central control

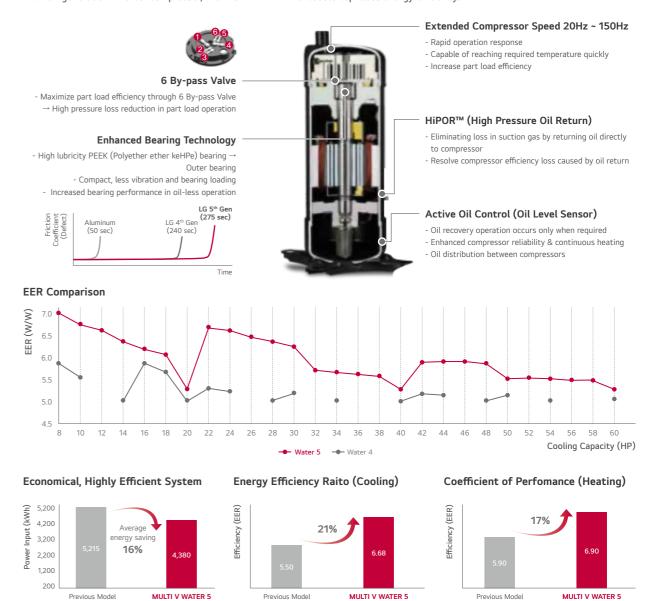


Independent control

## **Economical, Highly Efficient System**

LG's key technologies are integrated into the inverter compressor

With 5th generation inverter compressor, the MULTI V WATER 5 boasts top-class energy efficiency.



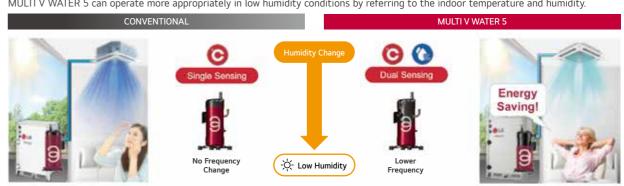
## % Comparison between 10HP (28kW)

**Dual Sensing Control** 

MULTI V WATER 5 can operate more appropriately in low humidity conditions by referring to the indoor temperature and humidity.

10% HEX Optimization

5% Cycle Composition



2% Inverter Control

2% Active Oil Control

10% HEX Optimization

4% Cycle Composition

1% Inverter Control

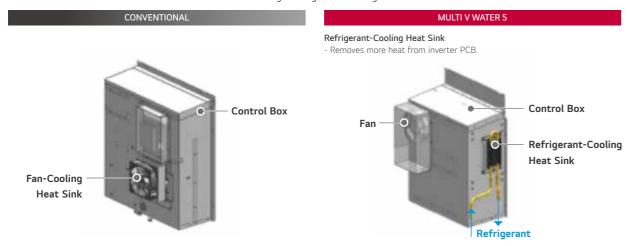
1% Active Oil Control

WATER

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## **Refrigerant Liquid-cooled Inverter Drive**

MULTI V WATER 5 can remove heat from inverter PCB through Refrigerant-Cooling Heat Sink



## **Largest Capacity**

Sufficient pipe length limitation provides flexible design and installation

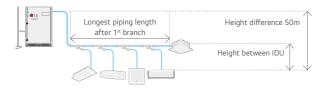
Providing 8 ~ 20HP (22.4 ~ 56kW) with single unit, and up to the world's largest capacity 60HP (168kW) by combination.

v	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
kW	22.4	28	33.6	39.2	44.8	50.4	56	61.6	67.2	72.8	78.4	84	89.6	95.2	100.8	106.4	112	117.6	123.2	128.8	134.4	140	145.6	151.2	156.8	162.4	
LG				• 0					e c e c				€ G € G														
				1 Unit				2 Units 3 Units					2 Units														

## **Longest Piping Length**

Sufficient pipe length limitation in design and installation for various buildings

Provides flexible installation up to 300m (500m) of total piping length. As water pipes are not connected to indoor units, users are free from water leakage problems.



Total Piping Length	300m (500m)
Actual longest piping length (Equivalent)	175m (225m)
Longest piping length after 1st branch (Conditional application)	40m (90m)
Height difference between ODU ~ IDU	50m
Height difference between IDU ~ IDU	40m

## **Compact Size**

Thanks to the compact size of product, it provides more space for commercial or public use.

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



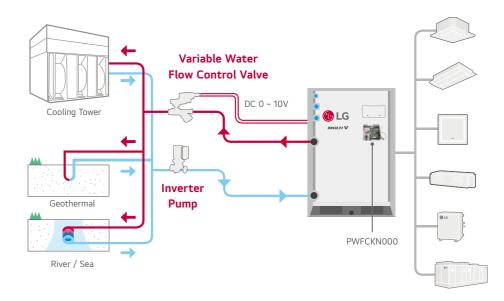
56kW x 2EA Per each 772 \* 547 mm

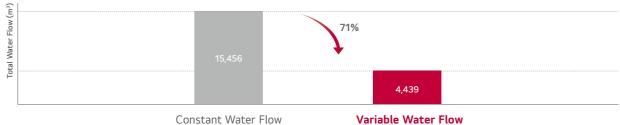
## **Variable Water Flow Control**

## (OPTION)

## Supporting green building initiatives

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





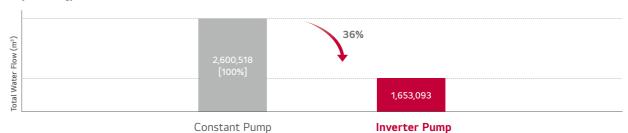
Note 1. Location : Paris, France 2. Office, 68,000m²

3. Operation time: 1,344 hours (Cooling period)

### Project Example: 63F (Pump: 20,064 LPM, 42.4mAq x 4ea)

- 1) Inverter pump with MULTI V Water and variable water flow control kit
- 2) Constant pump (Step control) with water cooled VRF

#### 10 years energy cost (\$)



Unit	5 ye	ears	10 y	ears
Unit	Energy Use (kWh)	Pump Running Cost (\$)	Energy Use (kWh)	Pump Running Cost (\$)
Constant pump	7,952,040	1,142,441	15,904,080	2,600,518
Inverter pump	5,054,940	726,225	10,109,880	1,653,093

- Power consumption rate : 0.13\$/kWh
- $\bullet$  Annual power consumption rate expected to increase by 5%

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## ARW | M | 100 | L | A | S | 5 Serial number - S:Standard - A : Basic Function - Flectrical Ratings L:3Ø, 380 ~ 415 V, 50Hz Total Cooling Capacity in Horse Power (HP) unit EX) 10HP → '100' Combination of Inverter Type and for both Heat Pump and Heat Recovery M : for both Heat Pump and Heat Recovery - MULTI V Water System with Outdoor unit using

R410A

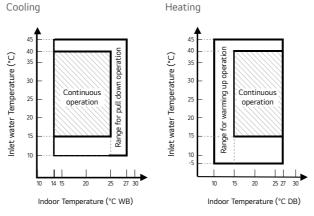
### **Outdoor Units Function**

Category

Key Refrigerant	HIPOK™ (High Pressure Oil Return)	0
Components	Oil Sensor	0
	High Pressure Switch	0
	Phase Protection	0
Reliability	Restart Delay (3-minutes)	0
	Self Diagnosis	0
	Soft Start	0
	AC Ez	PQCSZ250S0
	AC Ez Touch	PACEZA000
	AC Smart IV	PACS4B000
	AC Smart 5	PACS5A000
Central Controller	ACP IV	PACP4B000
	ACP 5	PACP5A000
	AC Manager IV	PACM4B000
	AC Manager 5	PACM5A000
	ACP BACnet	PQNFB17C0
Catanian	ACP5 (w U60FT)	0
Gateway	Cloud Gateway	PWFMDB200
	Modbus RTU	PMBUSB00A
	IO Module	PVDSMN000
	Variable Water Flow Control Kit	PWFCKN000
	Cool / Heat Selector	PRDSMB
	AUU aanna Kit	PAHCMR000
	AHU comm. Kit	PAHCMS000
	AHU Controller Module	PAHCMC000
	And Collabilet Module	PAHCMM000
Intergration Device	AHU Control Kit	PAHCNM000
		PRLK048A0
	EEV Kit	PRLK096A0
	LLY MIL	PRLK396A0
		PRLK594A0
	Water comm. Module	-
	PDI Standard	PPWRDB000
	PDI Premium	PQNUD1S40
ETC	DS (Data Saving) Module	PVADTN000

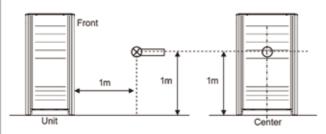
※ ○ : Applied, - : Not Applied

#### **Operation Limits**



- These figures assume the following operating conditions
   Equivalent piping length is standard condition, and level difference is 0m.
- If the relative humidity is too high, cooling capacity can be decreased by the sensible heat
- B. Warming up operation means that the outdoor (outside) unit operates to reach the range of continuous operating, however it may not operate continuously due to safety or protection logic

#### Position of Sound Pressure Level Measuring



### \* External Appearance of unit could be different by each model.

- Data is valid at diffuse field condition.
   Data is valid at nominal operating condition.
- Reference accoustic pressure 0 dB = 20μPa.
- Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Refer to the model specifications for nominal conditions. (Power source and Ambient temperature, etc)
- temperature, etc.)

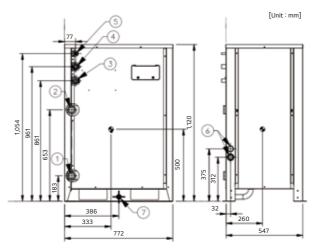
  Sound levels can be increased in accordance with installation and operating conditions. (Operating conditions include some functional condition like Static pressure mode, air guide use, Room target temperature setting, etc and these functions are different in accordance with each model.)
- Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of particular room in which the equipment in installed.

## **Optional Accessories**

No.	Na	me	Model	
			ARBLB01621	
		for	ARBLB03321	
		Heat Recovery	ARBLB07121	
1	V branch nine		ARBLB14521	
'	Y branch pipe		ARBLN01621	
		for	ARBLN03321	
		Heat Pump	ARBLN07121	
			ARBLN14521	
		4 branch	ARBL054	
		7 branch	ARBL057	
2	Header	4 branch	ARBL104	
2	неацег	7 branch	ARBL107	
		10 branch	ARBL1010	
		10 branch	ARBL2010	
3	Connection sine	of Outdoor Units	ARCNN21	
3	Connection pipe	Connection pipe of Outdoor Units		

#### Dimensions

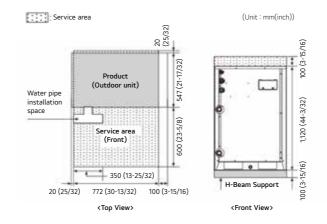
ARWM080LAS5 / ARWM100LAS5 / ARWM120LAS5 / ARWM140LAS5 / ARWM160LAS5 / ARWM180LAS5 / ARWM200LAS5



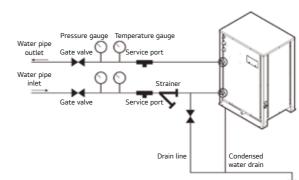
Center of Gravity

No.	Part Name	Description
1	Water inlet connection	PT 40 Female
2	Water outlet connection	PT 40 Female
3	High pressure pipe connection	-
4	Low pressure pipe connection	-
5	Liquid pipe connection	-
6	Power and comm. cable hole	-
7	Condensate drain pipe connection	PT 20 Male

#### Individual Installation



## Water Piping Installation



#### Precaution of Installation

- 1. Do not install the unit at the outdoors.
- Otherwise it may cause fire, electric shock and trouble.
- 2. Keep the water temperature between 10 ~ 45°C Other it may cause the breakdown.
- Standard water supply temperature is 30°C for Cooling and 20℃ for heating.
- 3. Establish an **anti-freeze plan** for the water supply when the product is stopped during the winter.
- 4. Be careful of the **Water Purity Control**. Otherwise it may cause the breakdown due to water pipe corrosion. (Refer to 'Standard Table for Water Purity Control' in Installation manual.)
- 5. The water pressure resistance of the water pipe system of this product is 1.98MPa.
- 6. Always install **a trap** so that the drained water does not back
- 7. Install a pressure gauge and temperature gauge at the inlet and outlet of the water pipe.
- 8. Flexible joints must be installed not to cause any leakage from the vibration of pipes.
- 9. Install a **service port** to clean the heat exchanger at the each end of the water inlet and outlet.
- 10. You must install the **flow switch** to the water collection pipe system connecting to the outdoor unit. (Flow switch acts as the 1st protection device when the heat water is not supplied. If a certain level of water does not flow after installing the **flow switch**, an error sign of CH 189 error will be displayed on the product and the product will stop operating.)
- 11. When setting the flow switch, it is recommended to use the product with default set value to satisfy the minimum flow rate of this product. (The minimum flow rate range of this product is 50 %. Reference flow rate: 10 HP - 96 LPM, 20 HP - 192 LPM)
- 12. To protect the water cooling type product, you must install a **strainer with 50 mesh** or more on the heat water supply pipe. (It is recommended to install both a magnetic filter and a strainer.) If not installed, it can result in damage of heat exchanger by the following situation.
  - 1) Heat water supply within the plate type heat exchanger is composed of multiple small paths.
  - 2) If you do not use a strainer with 50 mesh or more, alien particles can partially block the water paths.
  - 3) When running the heater, the plate type heat exchanger plays the role of the evaporator, and at this time, the temperature of coolant side drops to drop the temperature of the heat water supply, which can result in icing point in the water paths.
  - 4) And as the heating process progresses, the water paths can be partially frozen to lead to damage in plate type heat
  - 5) As a result of the damage of the heat exchanger from the freezing, the coolant side and the heat water source side will be mixed to make the product unusable.

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## **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-conscious 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.

## ARWM080LAS5 / ARWM100LAS5 ARWM120LAS5



	НР		8	10	12
	Combination Unit		ARWM080LAS5	ARWM100LAS5	ARWM120LAS5
	Independent Unit (1)		ARWM080LAS5	ARWM100LAS5	ARWM120LAS5
Model Name	Independent Unit (2)		-	-	-
	Independent Unit (3)		-	-	-
	Independent Unit (4)		-	-	-
	Cooling (Rated)	kW	22.4	28.0	33.6
Capacity	Heating (Rated)	kW	25.2	31.5	37.8
	Cooling (Rated)	kW	3.25	4.19	5.14
Input	Heating (Rated)	kW	3.50	4.57	5.56
EER	Rated		6.90	6.68	6.54
COP	Rated		7.20	6.90	6.80
	Color		Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray
Exterior	RAL (Classic)		RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
Heat Exchanger	Maximum Pressure Resistance	kgf/cm²	45	45	45
	Head Loss	kPa	10.6	15.9	22.1
	Rated Water Flow	LPM	77	96	115
Compressor	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 1	(Inverter) x 1	(Inverter) x 1
	Motor Output x Number	W x No.	5,300 x 1	5,300 x 1	5,300 x 1
	Oil Type		FVC68D (PVE)	FW68D (PVE)	FW68D (PVE)
	Oil Charge	СС	3,400	3,400	3,400
Refrigerant	Liquid Pipe	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø12.7 (1/2)
Connecting Pipes	Gas Pipe	mm (inch)	Ø19.05 (3/4)	Ø22.22 (7/8)	Ø28.58 (1-1/8)
	Inlet	mm	PT 40 (Internal Thread)	PT 40 (Internal Thread)	PT 40 (Internal Thread)
Water Connecting Pipes	Outlet	mm	PT 40 (Internal Thread)	PT 40 (Internal Thread)	PT 40 (Internal Thread)
	Drain Outlet	mm	PT 20 (External Thread)	PT 20 (External Thread)	PT 20 (External Thread)
Dimensions (W x H x D)	- Net	mm	772 x 1,120 x 547	772 x 1,120 x 547	772 x 1,120 x 547
Dimensions (W x H x D)	- Shipping	mm	820 x 1,245 x 645	820 x 1,245 x 645	820 x 1,245 x 645
Net Weight		kg	149 x 1	149 x 1	149 x 1
Shipping Weight		kg	157 x 1	157 x 1	157 x 1
Sound Pressure Level	Cooling / Heating	dB(A)	45.0 / 48.0	48.0 / 48.0	48.0 / 51.0
Sound Power Level	Cooling / Heating	dB(A)	57.0 / 60.0	60.0 / 60.0	60.0 / 63.0
Communication Cable		mm² x No. (VCTF-SB)	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
	Refrigerant Name	-	R410A	R410A	R410A
Refrigerant	Precharged Amount in Factory	kg	3.5	3.5	3.5
	t-CO <sub>2</sub> eq	-	7.306	7.306	7.306
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Number of Maximum Co	nnectable Indoor Units		13 (20)	16 (25)	20 (30)

- Note

  1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% 200%). The recommended ratio is 130%.

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

  3. Performances are based on the following conditions

   Cooling: Indoor temp 27°C (80.5°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)

   Heating: Indoor temp 27°C (68°F) DB, Water inlet temp 20°C (68°F)

   Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor Indoor Unit) is 0m.

  4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

  Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.

  Therefore, these values can be increased owing to ambient conditions during operation.

  5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)

  6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

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## ARWM140LAS5 / ARWM160LAS5 ARWM180LAS5



	HP		14	16	18
	Combination Unit		ARWM140LAS5	ARWM160LAS5	ARWM180LAS5
	Independent Unit (1)		ARWM140LAS5	ARWM160LAS5	ARWM180LAS5
Model Name	Independent Unit (2)		-	-	-
	Independent Unit (3)		-	-	-
	Independent Unit (4)		-	-	-
Compositore	Cooling (Rated)	kW	39.2	44.8	50.4
Capacity	Heating (Rated)	kW	44.1	50.4	56.7
la contra	Cooling (Rated)	kW	6.22	7.32	8.40
Input	Heating (Rated)	kW	6.78	8.06	8.72
EER	Rated		6.30	6.12	6.00
COP	Rated		6.50	6.25	6.50
Exterior	Color		Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray
Exterior	RAL (Classic)		RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
Heat Exchanger	Maximum Pressure Resistance	kgf/cm²	45	45	45
	Head Loss	kPa	29.6	37.7	24.6
	Rated Water Flow	LPM	135	154	173
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 1	(Inverter) x 1	(Inverter) x 1
Compressor	Motor Output x Number	W x No.	5,300 x 1	5,300 x 1	5,300 x 1
	Oil Type		FW68D (PVE)	FW68D (PVE)	FW68D (PVE)
	Oil Charge	СС	3,400	3,400	3,400
Refrigerant	Liquid Pipe	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø15.88 (5/8)
Connecting Pipes	Gas Pipe	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
	Inlet	mm	PT 40 (Internal Thread)	PT 40 (Internal Thread)	PT 40 (Internal Thread)
Water Connecting Pipes	Outlet	mm	PT 40 (Internal Thread)	PT 40 (Internal Thread)	PT 40 (Internal Thread)
	Drain Outlet	mm	PT 20 (External Thread)	PT 20 (External Thread)	PT 20 (External Thread)
Dimensions (W x H x D)	- Net	mm	772 x 1,120 x 547	772 x 1,120 x 547	772 x 1,120 x 547
Dimensions (W x H x D)	- Shipping	mm	820 x 1,245 x 645	820 x 1,245 x 645	820 x 1,245 x 645
Net Weight		kg	149 x 1	149 x 1	158 x 1
Shipping Weight		kg	157 x 1	157 x 1	166 x 1
Sound Pressure Level	Cooling / Heating	dB(A)	52.0 / 53.0	52.0 / 56.0	54.0 / 57.0
Sound Power Level	Cooling / Heating	dB(A)	64.0 / 65.0	64.0 / 68.0	66.0 / 69.0
Communication Cable		mm² x No. (VCTF-SB)	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
	Refrigerant Name	-	R410A	R410A	R410A
Refrigerant	Precharged Amount in Factory	kg	3.5	3.5	4.5
	t-CO <sub>2</sub> eq	-	7.306	7.306	9.394
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Number of Maximum Co	nnectable Indoor Units		23 (35)	26 (40)	29 (45)

- Note

  1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% 200%). The recommended ratio is 130%.

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

  3. Performances are based on the following conditions

   Cooling: Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)

   Heating: Indoor temp 27°C (68°F) DB, Water inlet temp 20°C (68°F)

   Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor Indoor Unit) is 0m.

  4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

  Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.

  Therefore, these values can be increased owing to ambient conditions during operation.

  5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)

  6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

## ARWM200LAS5



## ARWM220LAS5 ARWM240LAS5



	HP		20	22	24
	Combination Unit		ARWM200LAS5	ARWM220LAS5	ARWM240LAS5
	Independent Unit (1)		ARWM200LAS5	ARWM120LAS5	ARWM120LAS5
Model Name	Independent Unit (2)		-	ARWM100LAS5	ARWM120LAS5
	Independent Unit (3)		-		-
	Independent Unit (4)		-	-	-
C	Cooling (Rated)	kW	56.0	61.6	67.2
Capacity	Heating (Rated)	kW	63.0	69.3	75.6
la contract	Cooling (Rated)	kW	10.69	9.33	10.28
Input	Heating (Rated)	kW	11.05	10.13	11.12
EER	Rated		5.24	6.60	6.54
COP	Rated		5.70	6.84	6.80
F	Color		Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray
Exterior	RAL (Classic)		RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
Heat Exchanger	Maximum Pressure Resistance	kgf/cm²	45	45	45
Treat Exchanger	Head Loss	kPa	29.9	22.1 + 15.9	22.1 + 22.1
	Rated Water Flow	LPM	192	115 + 96	115 + 115
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 1	(Inverter) x 2	(Inverter) x 2
Compressor	Motor Output x Number	W x No.	5,300 x 1	5,300 x 2	5,300 x 2
	Oil Type		FW68D (PVE)	FW68D (PVE)	FW68D (PVE)
	Oil Charge	СС	3,400	6,800	6,800
Refrigerant	Liquid Pipe	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)
Connecting Pipes	Gas Pipe	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø34.9 (1-3/8)
	Inlet	mm	PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)
Water Connecting Pipes	Outlet	mm	PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)
	Drain Outlet	mm	PT 20 (External Thread)	PT 20 (External Thread)	PT 20 (External Thread)
Dimensions (W x H x D)	- Net	mm	772 x 1,120 x 547	(772 x 1,120 x 547) x 2	(772 x 1,120 x 547) x 2
Dimensions (W x H x D)	- Shipping	mm	820 x 1,245 x 645	(820 x 1,245 x 645) x 2	(820 x 1,245 x 645) x 2
Net Weight		kg	158 x 1	149 x 2	149 x 2
Shipping Weight		kg	166 x 1	157 x 2	157 x 2
Sound Pressure Level	Cooling / Heating	dB(A)	55.0 / 56.0	51.0 / 53.0	51.0 / 54.0
Sound Power Level	Cooling / Heating	dB(A)	67.0 / 68.0	64.0 / 66.0	64.0 / 67.0
Communication Cable		mm² x No. (VCTF-SB)	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
	Refrigerant Name	-	R410A	R410A	R410A
Refrigerant	Precharged Amount in Factory	kg	4.5	3.5 + 3.5	3.5 + 3.5
Remigeranc	t-CO <sub>2</sub> eq	-	9.394	14.613	14.613
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Number of Maximum Co	nnectable Indoor Units		32 (50)	35 (44)	39 (48)

- Note

  1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% 200%). The recommended ratio is 130%.

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

  3. Performances are based on the following conditions

   Cooling: Indoor temp 27°C (80.5°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)

   Heating: Indoor temp 27°C (68°F) DB, Water inlet temp 20°C (88°F)

   Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor Indoor Unit) is 0m.

  4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

  Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.

  Therefore, these values can be increased owing to ambient conditions during operation.

  5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)

  6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

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## ARWM260LAS5 / ARWM280LAS5 ARWM300LAS5



	НР		26	28	30
	Combination Unit		ARWM260LAS5	ARWM280LAS5	ARWM300LAS5
	Independent Unit (1)		ARWM140LAS5	ARWM160LAS5	ARWM180LAS5
Model Name	Independent Unit (2)		ARWM120LAS5	ARWM120LAS5	ARWM120LAS5
	Independent Unit (3)		-	-	-
	Independent Unit (4)		-	-	-
Compositors	Cooling (Rated)	kW	72.8	78.4	84.0
Capacity	Heating (Rated)	kW	81.9	88.2	94.5
la conte	Cooling (Rated)	kW	11.36	12.46	13.54
Input	Heating (Rated)	kW	12.34	13.62	14.28
EER	Rated		6.41	6.29	6.20
COP	Rated		6.64	6.48	6.62
Eutonion	Color		Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray
Exterior	RAL (Classic)		RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
Heat Exchanger	Maximum Pressure Resistance	kgf/cm²	45	45	45
	Head Loss	kPa	29.6 + 22.1	37.7 + 22.1	24.6 + 22.1
	Rated Water Flow	LPM	135 + 115	154 + 115	173 + 115
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 2	(Inverter) x 2	(Inverter) x 2
Compressor	Motor Output x Number	W x No.	5.300 x 2	5.300 x 2	5.300 x 2
	Oil Type		FW68D (PVE)	FW68D (PVE)	FW68D (PVE)
	Oil Charge	СС	6,800	6,800	6,800
Refrigerant	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
Connecting Pipes	Gas Pipe	mm (inch)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)
	Inlet	mm	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)
Water Connecting Pipes	Outlet	mm	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)
	Drain Outlet	mm	PT 20 (External Thread)	PT 20 (External Thread)	PT 20 (External Thread)
Dimensions (W x H x D)	- Net	mm	(772 x 1,120 x 547) x 2	(772 x 1,120 x 547) x 2	(772 x 1,120 x 547) x 2
Dimensions (W x H x D)	- Shipping	mm	(820 x 1,245 x 645) x 2	(820 x 1,245 x 645) x 2	(820 x 1,245 x 645) x 2
Net Weight		kg	149 x 2	149 x 2	(158 x 1) + (149 x 1)
Shipping Weight		kg	157 x 2	157 x 2	(166 x 1) + (157 x 1)
Sound Pressure Level	Cooling / Heating	dB(A)	53.0 / 55.0	53.0 / 57.0	55.0 / 58.0
Sound Power Level	Cooling / Heating	dB(A)	66.0 / 68.0	66.0 / 70.0	68.0 / 71.0
Communication Cable		mm² x No. (VCTF-SB)	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
	Refrigerant Name	-	R410A	R410A	R410A
Refrigerant	Precharged Amount in Factory	kg	3.5 + 3.5	3.5 + 3.5	4.5 + 3.5
	t-CO <sub>2</sub> eq	-	14.613	14.613	16.700
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Number of Maximum Co	nnectable Indoor Units		42 (52)	45 (56)	49 (60)

- Note

  1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% 200%). The recommended ratio is 130%.

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

  3. Performances are based on the following conditions

   Cooling: Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)

   Heating: Indoor temp 27°C (68°F) DB, Water inlet temp 20°C (68°F)

   Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor Indoor Unit) is 0m.

  4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

  Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.

  Therefore, these values can be increased owing to ambient conditions during operation.

  5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)

  6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

## ARWM320LAS5 / ARWM340LAS5 ARWM360LAS5



	HP		32	34	36
	Combination Unit		ARWM320LAS5	ARWM340LAS5	ARWM360LAS5
	Independent Unit (1)		ARWM200LAS5	ARWM200LAS5	ARWM200LAS5
Model Name	Independent Unit (2)		ARWM120LAS5	ARWM140LAS5	ARWM160LAS5
	Independent Unit (3)		-	-	-
	Independent Unit (4)		-	-	-
Canacitu	Cooling (Rated)	kW	89.6	95.2	100.8
Capacity	Heating (Rated)	kW	100.8	107.1	113.4
lancet.	Cooling (Rated)	kW	15.83	16.91	18.01
Input	Heating (Rated)	kW	16.61	17.83	19.11
EER	Rated		5.66	5.63	5.60
COP	Rated		6.07	6.01	5.93
F	Color		Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray
Exterior	RAL (Classic)		RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
Heat Exchanger	Maximum Pressure Resistance	kgf/cm²	45	45	45
	Head Loss	kPa	29.9 + 22.1	29.9 + 29.6	29.9 + 37.7
	Rated Water Flow	LPM	192 + 115	192 + 135	192 + 154
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 2	(Inverter) x 2	(Inverter) x 2
Compressor	Motor Output x Number	W x No.	5,300 x 2	5,300 x 2	5,300 x 2
	Oil Type		FW68D (PVE)	FW68D (PVE)	FW68D (PVE)
	Oil Charge	СС	6,800	6,800	6,800
Refrigerant	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
Connecting Pipes	Gas Pipe	mm (inch)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)	Ø41.3 (1-5/8)
	Inlet	mm	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)
Water Connecting Pipes	Outlet	mm	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)
	Drain Outlet	mm	PT 20 (External Thread)	PT 20 (External Thread)	PT 20 (External Thread)
Dimensions (W x H x D)	- Net	mm	(772 x 1,120 x 547) x 2	(772 x 1,120 x 547) x 2	(772 x 1,120 x 547) x 2
Dimensions (W x H x D)	- Shipping	mm	(820 x 1,245 x 645) x 2	(820 x 1,245 x 645) x 2	(820 x 1,245 x 645) x 2
Net Weight		kg	(158 x 1) + (149 x 1)	(158 x 1) + (149 x 1)	(158 x 1) + (149 x 1)
Shipping Weight		kg	(166 x 1) + (157 x 1)	(166 x 1) + (157 x 1)	(166 x 1) + (157 x 1)
Sound Pressure Level	Cooling / Heating	dB(A)	56.0 / 57.0	57.0 / 58.0	57.0 / 59.0
Sound Power Level	Cooling / Heating	dB(A)	69.0 / 70.0	70.0 / 71.0	70.0 / 72.0
Communication Cable		mm² x No. (VCTF-SB)	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
	Refrigerant Name	-	R410A	R410A	R410A
Refrigerant	Precharged Amount in Factory	kg	4.5 + 3.5	4.5 + 3.5	4.5 + 3.5
Remigerant	t-CO <sub>2</sub> eq	-	16.700	16.700	16.700
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Number of Maximum Cor			52 (64)	55 (64)	58 (64)

- Note

  1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% 200%). The recommended ratio is 130%.

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

  3. Performances are based on the following conditions

   Cooling: Indoor temp 27°C (80.5°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)

   Heating: Indoor temp 27°C (68°F) DB, Water inlet temp 20°C (88°F)

   Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor Indoor Unit) is 0m.

  4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

  Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.

  Therefore, these values can be increased owing to ambient conditions during operation.

  5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)

  6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

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## ARWM380LAS5 ARWM400LAS5





ARWM420LAS5

	НР		38	40	42
	Combination Unit		ARWM380LAS5	ARWM400LAS5	ARWM420LAS5
Model Name	Independent Unit (1)		ARWM200LAS5	ARWM200LAS5	ARWM200LAS5
	Independent Unit (2)		ARWM180LAS5	ARWM200LAS5	ARWM140LAS5
	Independent Unit (3)		-	-	ARWM080LAS5
	Independent Unit (4)		-	-	-
Compaite	Cooling (Rated)	kW	106.4	112.0	117.6
Capacity	Heating (Rated)	kW	119.7	126.0	132.3
la contra	Cooling (Rated)	kW	19.09	21.38	20.16
Input	Heating (Rated)	kW	19.77	22.10	21.33
EER	Rated		5.57	5.24	5.83
COP	Rated		6.05	5.70	6.20
Exterior	Color		Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray
Exterior	RAL (Classic)		RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
Heat Exchanger	Maximum Pressure Resistance	kgf/cm²	45	45	45
rieut Exchanger	Head Loss	kPa	29.9 + 24.6	29.9 + 29.9	29.9 + 29.6 + 10.6
	Rated Water Flow	LPM	192 + 173	192 + 192	192 + 135 + 77
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 2	(Inverter) x 2	(Inverter) x 3
Compressor	Motor Output x Number	W x No.	5,300 x 2	5,300 x 2	5,300 x 3
	Oil Type		FW68D (PVE)	FW68D (PVE)	FW68D (PVE)
	Oil Charge	СС	6,800	6,800	10,200
Refrigerant	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
Connecting Pipes	Gas Pipe	mm (inch)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)
	Inlet	mm	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)
Water Connecting Pipes	Outlet	mm	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)
	Drain Outlet	mm	PT 20 (External Thread)	PT 20 (External Thread)	PT 20 (External Thread)
Dimensions (W x H x D)	- Net	mm	(772 x 1,120 x 547) x 2	(772 x 1,120 x 547) x 2	(772 x 1,120 x 547) x 3
Dimensions (W x H x D)	- Shipping	mm	(820 x 1,245 x 645) x 2	(820 x 1,245 x 645) x 2	(820 x 1,245 x 645) x 3
Net Weight		kg	158 x 2	158 x 2	(158 x 1) + (149 x 2)
Shipping Weight		kg	166 x 2	166 x 2	(166 x 1) + (157 x 2)
Sound Pressure Level	Cooling / Heating	dB(A)	58.0 / 60.0	58.0 / 59.0	57.0 / 58.0
Sound Power Level	Cooling / Heating	dB(A)	71.0 / 73.0	71.0 / 72.0	71.0 / 72.0
Communication Cable		mm² x No. (VCTF-SB)	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
	Refrigerant Name	-	R410A	R410A	R410A
Refrigerant	Precharged Amount in Factory	kg	4.5 + 4.5	4.5 + 4.5	4.5 + 3.5 + 3.5
	t-CO <sub>2</sub> eq	-	18.788	18.788	24.006
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Number of Maximum Co	nnectable Indoor Units		61 (64)	64	64

- Note

  1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% 200%). The recommended ratio is 130%.

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

  3. Performances are based on the following conditions

   Cooling: Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)

   Heating: Indoor temp 27°C (68°F) DB, Water inlet temp 20°C (68°F)

   Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor Indoor Unit) is 0m.

  4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

  Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.

  Therefore, these values can be increased owing to ambient conditions during operation.

  5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)

  6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

## ARWM440LAS5 / ARWM460LAS5 ARWM480LAS5



	HP		44	46	48
	Combination Unit		ARWM440LAS5	ARWM460LAS5	ARWM480LAS5
Model Name	Independent Unit (1)		ARWM200LAS5	ARWM200LAS5	ARWM200LAS5
	Independent Unit (2)		ARWM140LAS5	ARWM140LAS5	ARWM140LAS5
	Independent Unit (3)		ARWM100LAS5	ARWM120LAS5	ARWM140LAS5
	Independent Unit (4)		-	-	-
Canacitu	Cooling (Rated)	kW	123.2	128.8	134.4
Capacity	Heating (Rated)	kW	138.6	144.9	151.2
la a cata	Cooling (Rated)	kW	21.10	22.05	23.13
Input	Heating (Rated)	kW	22.40	23.39	24.61
EER	Rated		5.84	5.84	5.81
COP	Rated		6.19	6.19	6.14
<b>.</b>	Color		Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray
Exterior	RAL (Classic)		RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
Heat Exchanger	Maximum Pressure Resistance	kgf/cm²	45	45	45
ricat Exchanger	Head Loss	kPa	29.9 + 29.6 + 15.9	29.9 + 29.6 + 22.1	29.9 + 29.6 + 29.6
	Rated Water Flow	LPM	192 + 135 + 96	192 + 135 + 115	192 + 135 + 135
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 3	(Inverter) x 3	(Inverter) x 3
Compressor	Motor Output x Number	W x No.	5,300 x 3	5,300 x 3	5,300 x 3
	Oil Type		FW68D (PVE)	FW68D (PVE)	FW68D (PVE)
	Oil Charge	СС	10,200	10,200	10,200
Refrigerant	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
Connecting Pipes	Gas Pipe	mm (inch)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)
	Inlet	mm	PT 40 + PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)
Water Connecting Pipes	Outlet	mm	PT 40 + PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)
	Drain Outlet	mm	PT 20 (External Thread)	PT 20 (External Thread)	PT 20 (External Thread)
Dimensions (W x H x D)	- Net	mm	(772 x 1,120 x 547) x 3	(772 x 1,120 x 547) x 3	(772 x 1,120 x 547) x 3
Dimensions (W x H x D)	- Shipping	mm	(820 x 1,245 x 645) x 3	(820 x 1,245 x 645) x 3	(820 x 1,245 x 645) x 3
Net Weight		kg	(158 x 1) + (149 x 2)	(158 x 1) + (149 x 2)	(158 x 1) + (149 x 2)
Shipping Weight		kg	(166 x 1) + (157 x 2)	(166 x 1) + (157 x 2)	(166 x 1) + (157 x 2)
Sound Pressure Level	Cooling / Heating	dB(A)	57.0 / 58.0	57.0 / 59.0	58.0 / 59.0
Sound Power Level	Cooling / Heating	dB(A)	71.0 / 72.0	71.0 / 73.0	72.0 / 73.0
Communication Cable		mm² x No. (VCTF-SB)	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
	Refrigerant Name	-	R410A	R410A	R410A
Refrigerant	Precharged Amount in Factory	kg	4.5 + 3.5 + 3.5	4.5 + 3.5 + 3.5	4.5 + 3.5 + 3.5
nerrigerant.	t-CO <sub>2</sub> eq	-	24.006	24.006	24.006
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Number of Maximum Cor	and a stable lands and laster		64	64	64

- Note

  1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% 200%). The recommended ratio is 130%.

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

  3. Performances are based on the following conditions

   Cooling: Indoor temp 27°C (80.5°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)

   Heating: Indoor temp 27°C (68°F) DB, Water inlet temp 20°C (88°F)

   Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor Indoor Unit) is 0m.

  4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

  Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.

  Therefore, these values can be increased owing to ambient conditions during operation.

  5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)

  6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

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## ARWM500LAS5 / ARWM520LAS5 ARWM540LAS5



	НР		50	52	54
	Combination Unit		ARWM500LAS5	ARWM520LAS5	ARWM540LAS5
Model Name	Independent Unit (1)		ARWM200LAS5	ARWM200LAS5	ARWM200LAS5
	Independent Unit (2)		ARWM200LAS5	ARWM200LAS5	ARWM200LAS5
	Independent Unit (3)		ARWM100LAS5	ARWM120LAS5	ARWM140LAS5
	Independent Unit (4)		-	-	-
	Cooling (Rated)	kW	140.0	145.6	151.2
Capacity	Heating (Rated)	kW	157.5	164	170.1
	Cooling (Rated)	kW	25.57	27	27.60
Input	Heating (Rated)	kW	26.67	27.66	28.88
EER	Rated		5.48	5.49	5.48
COP	Rated		5.91	5.92	5.89
<b>.</b>	Color		Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray
Exterior	RAL (Classic)		RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
Heat Exchanger	Maximum Pressure Resistance	kgf/cm²	45	45	45
	Head Loss kPa		29.9 + 29.9 + 15.9	29.9 + 29.9 + 22.1	29.9 + 29.9 + 29.6
	Rated Water Flow	LPM	192 + 192 + 96	192 + 192 + 115	192 + 192 + 135
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 3	(Inverter) x 3	(Inverter) x 3
Compressor	Motor Output x Number	W x No.	5,300 x 3	5,300 x 3	5,300 x 3
	Oil Type		FW68D (PVE)	FW68D (PVE)	FW68D (PVE)
	Oil Charge	сс	10,200	10,200	10,200
Refrigerant	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
Connecting Pipes	Gas Pipe	mm (inch)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)
	Inlet	mm	PT 40 + PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)
Water Connecting Pipes	Outlet	mm	PT 40 + PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)
	Drain Outlet	mm	PT 20 (External Thread)	PT 20 (External Thread)	PT 20 (External Thread)
Dimensions (W x H x D)	- Net	mm	(772 x 1,120 x 547) x 3	(772 x 1,120 x 547) x 3	(772 x 1,120 x 547) x 3
Dimensions (W x H x D)	- Shipping	mm	(820 x 1,245 x 645) x 3	(820 x 1,245 x 645) x 3	(820 x 1,245 x 645) x 3
Net Weight		kg	(158 x 2) + (149 x 1)	(158 x 2) + (149 x 1)	(158 x 2) + (149 x 1)
Shipping Weight		kg	(166 x 2) + (157 x 1)	(166 x 2) + (157 x 1)	(166 x 2) + (157 x 1)
Sound Pressure Level	Cooling / Heating	dB(A)	59.0 / 59.0	59.0 / 60.0	59.0 / 60.0
Sound Power Level	Cooling / Heating	dB(A)	73.0 / 73.0	73.0 / 74.0	73.0 / 74.0
Communication Cable		mm² x No. (VCTF-SB)	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
	Refrigerant Name	-	R410A	R410A	R410A
Refrigerant	Precharged Amount in Factory	kg	4.5 + 4.5 + 3.5	4.5 + 4.5 + 3.5	4.5 + 4.5 + 3.5
· ·	t-CO <sub>2</sub> eq	-	26.094	26.094	26.094
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Number of Maximum Co	nnectable Indoor Units		64	64	64

- Note

  1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% 200%). The recommended ratio is 130%.

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

  3. Performances are based on the following conditions

   Cooling: Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)

   Heating: Indoor temp 27°C (68°F) DB, Water inlet temp 20°C (68°F)

   Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor Indoor Unit) is 0m.

  4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

  Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.

  Therefore, these values can be increased owing to ambient conditions during operation.

  5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)

  6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

## ARWM560LAS5 / ARWM580LAS5 ARWM600LAS5



	HP		56	58	60
	Combination Unit		ARWM560LAS5	ARWM580LAS5	ARWM600LAS5
Model Name	Independent Unit (1)		ARWM200LAS5	ARWM200LAS5	ARWM200LAS5
	Independent Unit (2)		ARWM200LAS5	ARWM200LAS5	ARWM200LAS5
	Independent Unit (3)		ARWM160LAS5	ARWM180LAS5	ARWM200LAS5
	Independent Unit (4)		-	-	-
o :	Cooling (Rated)	kW	156.8	162.4	168.0
Capacity	Heating (Rated)	kW	176.4	182.7	189.0
	Cooling (Rated)	kW	28.70	29.78	32.07
Input	Heating (Rated)	kW	30.16	30.82	33.15
EER	Rated		5.46	5.45	5.24
COP	Rated		5.85	5.93	5.70
	Color		Morning Gray / Dawn Gray	Morning Gray / Dawn Gray	Morning Gray / Dawn Gray
Exterior	RAL (Classic)		RAL 7038 / RAL 7037	RAL 7038 / RAL 7037	RAL 7038 / RAL 7037
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
Heat Exchanger	Maximum Pressure Resistance	kgf/cm²	45	45	45
rieat Excilariger	Head Loss	kPa	29.9 + 29.9 + 37.7	29.9 + 29.9 + 24.6	29.9 + 29.9 + 29.9
	Rated Water Flow	LPM	192 + 192 + 154	192 + 192 + 173	192 + 192+ 192
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 3	(Inverter) x 3	(Inverter) x 3
Compressor	Motor Output x Number	W x No.	5,300 x 3	5,300 x 3	5,300 x 3
	Oil Type		FW68D (PVE)	FW68D (PVE)	FW68D (PVE)
	Oil Charge	СС	10,200	10,200	10,200
Refrigerant	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
Connecting Pipes	Gas Pipe	mm (inch)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)
	Inlet	mm	PT 40 + PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)
Water Connecting Pipes	Outlet	mm	PT 40 + PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)	PT 40 + PT 40 + PT 40 (Internal Thread)
	Drain Outlet	mm	PT 20 (External Thread)	PT 20 (External Thread)	PT 20 (External Thread)
Dimensions (W x H x D)	- Net	mm	(772 x 1,120 x 547) x 3	(772 x 1,120 x 547) x 3	(772 x 1,120 x 547) x 3
Dimensions (W x H x D)	- Shipping	mm	(820 x 1,245 x 645) x 3	(820 x 1,245 x 645) x 3	(820 x 1,245 x 645) x 3
Net Weight		kg	(158 x 2) + (149 x 1)	158 x 3	158 x 3
Shipping Weight		kg	(166 x 2) + (157 x 1)	166 x 3	166 x 3
Sound Pressure Level	Cooling / Heating	dB(A)	59.0 / 61.0	60.0 / 61.0	60.0 / 61.0
Sound Power Level	Cooling / Heating	dB(A)	73.0 / 75.0	74.0 / 75.0	74.0 / 75.0
Communication Cable		mm² x No. (VCTF-SB)	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
	Refrigerant Name	-	R410A	R410A	R410A
Refrigerant	Precharged Amount in Factory	kg	4.5 + 4.5 + 3.5	4.5 + 4.5 + 4.5	4.5 + 4.5 + 4.5
gerune	t-CO <sub>2</sub> eq	-	26.094	28.181	28.181
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valv
Power Supply		V / Ø / Hz	380-415 / 3 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Number of Maximum Co	anastable Indeed Heite		64	64	64

- Note

  1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% 200%). The recommended ratio is 130%.

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

  3. Performances are based on the following conditions

   Cooling: Indoor temp 27°C (80.5°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)

   Heating: Indoor temp 27°C (68°F) DB, Water inlet temp 20°C (88°F)

   Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor Indoor Unit) is 0m.

  4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.

  Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.

  Therefore, these values can be increased owing to ambient conditions during operation.

  5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)

  6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

124 ~ 201

# INDOOR UNITS

WALL MOUNTED

CEILING MOUNTED CASSETTE

CEILING MOUNTED ROUND CASSETTE

CEILING CONCEALED DUCT

FRESH AIR INTAKE

CEILING & FLOOR CONVERTIBLE CEILING SUSPENDED

CONSOLE & FLOOR STANDING

FLOOR STANDING (PAC)

COMPATIBILITY & FEATURE FUNCTIONS



SMART



## Features & Benefits

- 6 Different discharge angles can be programmed via the remote controller.
- Easily detachable full surface cover helps to clean the air conditioner.
- Drain pipe can be easily hidden from sight.

## **Key Applications**

- Retail Hotel
- Multi-family Residence Restaurant
- Office

W	ALL MOUNTED	ARTCOOL MIRROR	ARTCOOL GALLERY	STANDARD
Smart	Wi-Fi	0	0	0
Energy Efficiency	Energy Display	0	0	0
Fast Cooling &	Jet Cool	0	0	0
Heating	Auto Swing (Up & Down)	0	0	0
	Ionizer	0	-	○ ~7.1kW Only
Health	Pre Filter	0	0	0
	Auto Cleaning	0	0	0
	Sleep Mode	0	0	0
	Timer (On / Off)	0	0	0
Comfort	Timer (Weekly)	0	0	0
	Two Thermistor Control	0	0	0
	Group Control	0	0	0

※ ○: Applied, - : Not applied

## Wi-Fi Control

Anytime, anywhere access to the unit with Android & iOS-based smartphones.

### ThinQ

Search "ThinQ" on Google market or the App Store to download the app.

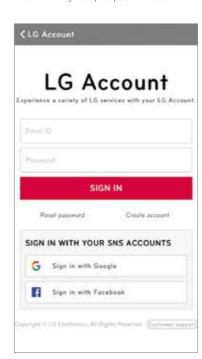
## Integrated Home Appliances Control

Control / Monitor all your LG appliances from one place.



## Easy Registration and Log-in

Follow the easy set-up steps that will activate ThinQ's user-friendly features.



## Simple operation for various functions







### Straight forward Management







71 St. 10-60

\*\* For our policy of continuous ThinQ App improvement, specification, design and features are subject to change without prior notice.

## Wi-Fi Control

Anytime, anywhere access to the unit with Android & iOS-based smartphones.

#### ThinQ

Search "ThinQ" on Google market or the App Store to download the app.

### Access your air conditioner anytime and from anywhere

with a Wi-Fi equipped device and LG's exclusive control app, ThinQ.



## Wi-Fi Connectivity

Each user can set and save temperature and fan speed preferences in the ThinQ app. If a household has more than one indoor unit, separate temperature settings can be set for each.

#### **Multiple Devices**



#### Multi-Control



\* For our policy of continuous ThinQ App improvement, specification, design and features are subject to change without prior notice.

## **Ionizer**PLUS

The powerful Ionizer protects you from bad odors and Escherichia coli and Staphylococcus in the surface with over 8 million ions that ensure a safer, and cleaner environment.

Specifications may vary for each model.Depending on the experimental conditions.

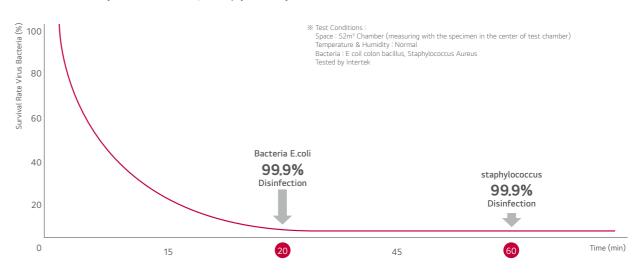
### Reduction and Deodorization (Utilizes Over 8 Million Ions)

Ionizer+ reduces E.coli and Staphylococcus in the surface with over 8 million ions.



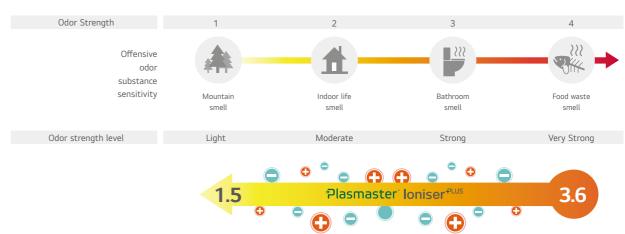
#### **Reduction Performance Evaluations**

Reduce Bacteria E.coli by over 99.9% in 20 min, and staphylococcus by over 99.9% in 60min.



### 2.1 odor strength decrease in 60 minutes

An odor measured as 2 European odor units (ouE/m³) or less indicates that the level of odor falls within permissible limits.



Odor strength reduce 3.6  $\Rightarrow$  1.5 / The Odor floating in the room as well as curtains and clothes.

130

## **Auto Cleaning**

The unit has a self-cleaning function that dries the heat exchanger before cleaning the interior.

#### Pain Point

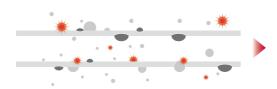
The main cause of odor within air conditioners is mold and bacteria growing on the heat exchanger. These germs can spread when the heat exchanger is wet.



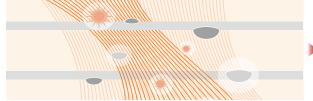
### Cleans Filter with Regular Airflow

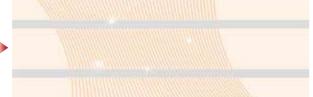
The comprehensive auto cleaning function prevents the formation of bacteria and mold on the heat exchanger.





By dehumidifying, (+ionizing with some models), the auto cleaning function prevents potentially harmful substances from forming on the surface of the heat exchanger.



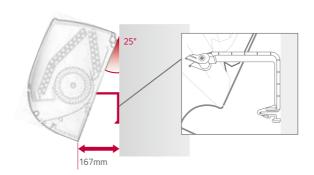


The indoor environment remains odorless with the advanced deodorizing function.

By preventing pollution of the heat exchanger caused by various germs and bacteria, performance and lifespan of the air conditioner can be increased by 10 years.

## **Installation Support Clip**

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



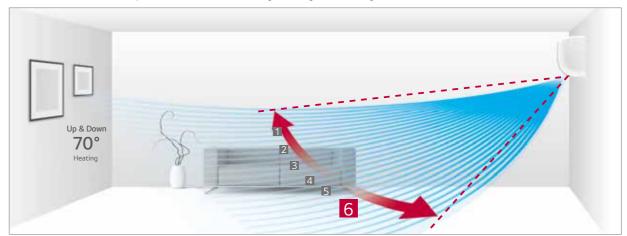
## **Auto Swing**

Cool air extends to the entire room regardless of where the unit is situated.

\* Specifications may vary for each model.

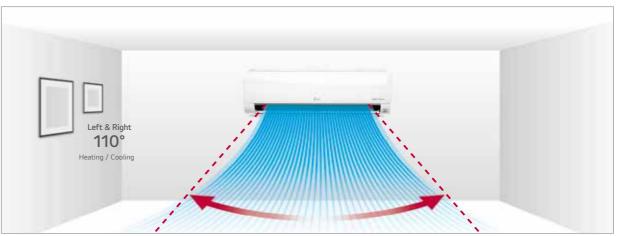
## 6-Step Vane Control up to 70°

The vertical vane, which moves up and down, has 6 different settings including full-auto swing.



## Control up to 110°

Louver can be adjusted manually to extend left and right swing to 110 degrees.



 $\ensuremath{\mathbb{X}}$  Angle can be different from each model and working mode.

## **Easy and Simple Control**

Airflow direction can be changed by ThinQ Wi-Fi app.

\* For our policy of continuous ThinQ App improvement, specification, design and features are subject to change without prior notice.



Up / Down Swing

COMFORT

# LL MOUNTED

## **Jet Cool**

LG air conditioners provide optimized high-speed airflow, which can cool rooms faster while delivering cool air evenly in every direction.

% Specifications may vary for each model.% Depending on the experimental conditions.

#### One Click "Jet Mode"

Reduces the temperature of outflowing air to 18°C for 30 minutes with just one click.



#### More Powerful Performance

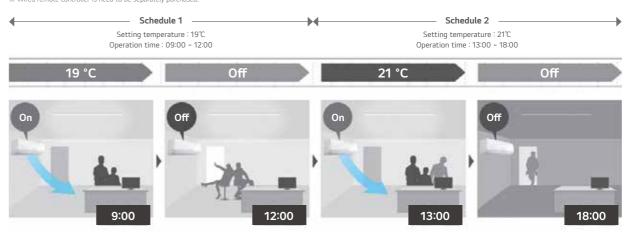
By reducing the second vortex, which decreases airflow within the air outlet, and enlarging the fan size, the amount of air flow is increased to 13 CMM.



## **Scheduled Operation**

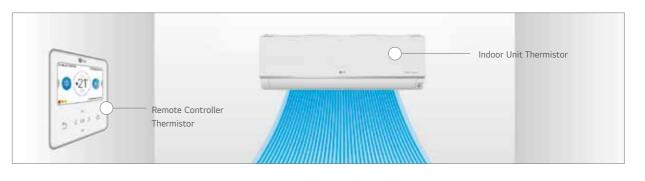
You can set the daily temperature, fan speed, the operation mode and automatic On / Off time for two weeks. It will keep running on that time until cancelled by the user.

\*\* This function is for wired remote controller only.\*\* Wired remote controller is need to be separately purchased.



## **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.



## **Group Control**

The group control from the remote controller (PREMTB101 / PREMTBB11) has more functions than the previous model.



ARTCOOL

MIRRO

## ARNU05GSJR4 / ARNU07GSJR4 ARNU09GSJR4 / ARNU12GSJR4 ARNU15GSJR4



	MODEL	UNIT	ARNU05GSJR4	ARNU07GSJR4	ARNU09GSJR4	ARNU12GSJR4	ARNU15GSJR4
Cooling Capa	city	kW	1.6	2.2	2.8	3.6	4.5
Heating Capa	city	kW	1.8	2.5	3.2	4.0	5.0
Power Input (H / M / L)	Nominal	W	11 / 10 / 9	12 / 11 / 9	13 / 12 / 9	15 / 13 / 11	23 / 18 / 11
Exterior Colo	r		Mirror (Black)				
RAL Code			RAL 9005				
Dimensions	Body	mm	837 x 308 x 192				
(W x H x D)	Shipping	mm	892 x 381 x 249				
	Туре		Cross Flow Fan				
Fan	Motor Output x Number	W x No.	30 x 1				
ran	Air Flow Rate (H / M / L)	m³/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
	Motor Type		BLDC	BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter				
D:	Liquid Side	mm (inch)	Ø6.35 (1/4)				
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)				
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø16 (5/8)				
Weight	Body	kg	9.2	9.2	9.2	9.2	9.2
Sound Pressu	re Levels (H / M / L)	dB(A)	30 / 29 / 28	32 / 30 / 28	34 / 32 / 28	37 / 34 / 30	42 / 39 / 32
Sound Power	Levels (H / M / L)	dB(A)	45 / 43 / 42	46 / 45 / 42	48 / 46 / 42	51 / 48 / 45	55 / 52 / 44
Power Supply		V / Ø / Hz	220-230-240 / 1 / 50-60				
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 x 2C				

Note:

1. Performance tested under EN14511

2. 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

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

## Accessories

CHASSIS	ARNU05GSJR4	ARNU07GSJR4	ARNU09GSJR4	ARNU12GSJR4	ARNU15GSJR4	
Drain Pump			-			
Cassette Cover	-					
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDRNV1S (R32)					
EEV Kit			PRGK024A0			
Multi-tenant Power Module			PINPMB001			
Robot Cleaner	-					
Pre Filter (Washable)			0			
Ion Generator			0			
CO <sub>2</sub> Sensor			-			
Ventilation Kit			-			
IR Receiver			-			
Zone Controller			-			
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)					
External Input (1 point)			0			
Wi-Fi			0			

<sup>※ ○ :</sup> Applied, - : Not applied
Option : Refer to model name in table

## ARNU18GSKR4 / ARNU24GSKR4



	MODEL	UNIT	ARNU18GSKR4	ARNU24GSKR4
Cooling Capac	city	kW	5.6	7.1
Heating Capa	city	kW	6.3	7.5
Power Input (H / M / L)	Nominal	W	32 / 26 / 16	39 / 26 / 16
Exterior Colo	r		Mirror (Black)	Mirror (Black)
RAL Code			RAL 9005	RAL 9005
Dimensions	Body	mm	998 x 345 x 212	998 x 345 x 212
(W x H x D)	Shipping	mm	1,063 x 420 x 274	1,063 x 420 x 274
	Туре		Cross Flow Fan	Cross Flow Fan
Fan	Motor Output x Number	W x No.	58 x 1	58 x 1
ran	Air Flow Rate (H / M / L)	m³/min	14.0 / 12.0 / 10.5	15.2 / 12.7 / 10.5
	Motor Type		BLDC	BLDC
Air Filter			Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø15.88 (5/8)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø16 (5/8)	Ø16 (5/8)
Weight	Body	kg	13.4	13.4
Sound Pressu	re Levels (H / M / L)	dB(A)	43 / 39 / 34	46 / 41 / 34
Sound Power	Levels (H / M / L)	dB(A)	59 / 56 / 52	63 / 58 / 52
Power Supply		V/Ø/Hz	220-230-240 / 1 / 50-60	220-230-240 / 1 / 50-60
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

Note:
1. Performance tested under EN14511
2. Capacities are based on the following conditions
- Cooling: Indoor temp. 27C (80.6°T) DB / 19C (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 / 19°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
3. Due to our policy of innovation, some specifications may be changed without notification

## Accessories

CHASSIS	ARNU18GSKR4	ARNU24GSKR4
Drain Pump		-
Cassette Cover		-
Refrigerant Leak Detector	PRLDNVSO (R410A	A), PLDRNV1S (R32)
EEV Kit	PRGK	024A0
Multi-tenant Power Module	PINP	MB001
Robot Cleaner		-
Pre Filter (Washable)		0
Ion Generator		0
CO <sub>2</sub> Sensor		-
Ventilation Kit		-
IR Receiver		-
Zone Controller		-
Dry Contact (with additional accessory)		contact), PDRYCB320, ut), PDRYCB500 (Modbus)
External Input (1 point)		0
Wi-Fi		0
※ ○ : Applied : Not applied		

<sup>(</sup>C): Applied, -: Not applied
Option: Refer to model name in table

TANDARD

## ARNU07GSF14 / ARNU09GSF14 ARNU12GSF14



	MODEL	UNIT	ARNU07GSF14	ARNU09GSF14	ARNU12GSF14
Cooling Capacity		kW	2.2	2.8	3.6
Heating Capacity		kW	2.5	3.2	4.0
Power Input (H / M / L)	Nominal	W	28 / 16 / 10	28 / 16 / 10	32 / 20 / 12
Dimensions	Body	mm	600 x 600 x 146	600 x 600 x 146	600 x 600 x 146
(W x H x D)	Shipping	mm	685 x 670 x 215	685 x 670 x 215	685 x 670 x 215
	Туре		Turbo Fan	Turbo Fan	Turbo Fan
Fam	Motor Output x Number	W x No.	30 x 1	30 x 1	30 x 1
Fan	Air Flow Rate (H / M / L)	m³/min	8.1 / 6.3 / 4.2	8.1 / 6.3 / 4.2	9.3 / 7.7 / 6.0
	Motor Type		BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter	Pre Filter
р.	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø6.35 (1/4)	Ø6.35 (1/4)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø12.7 (1/2)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø12.2 (15/32)	Ø12.2 (15/32)	Ø12.2 (15/32)
Weight	Body	kg	15.4	15.4	15.4
Sound Pressu	re Levels (H / M / L)	dB(A)	38 / 32 / 27	38 / 32 / 27	44 / 38 / 32
Sound Power	Levels (H / M / L)	dB(A)	48 / 46 / 41	48 / 46 / 41	54 / 48 / 42
Power Supply		V / Ø / Hz	220-230-240 / 1 / 50-60	220-230-240 / 1 / 50-60	220-230-240 / 1 / 50-60
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

Note:

1. Performance tested under EN14511
2. Capacities are based on the following conditions
- Cooling: Indoor temp. 27C (80.6°F) DB / 19C (66.2°F) WB, Outdoor temp. 35C (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
3. Due to our policy of innovation, some specifications may be changed without notification

## Accessories

CHASSIS	ARNU07GSF14	ARNU09GSF14	ARNU12GSF14			
Drain Pump		-				
Cassette Cover	-					
Refrigerant Leak Detector		PRLDNVSO (R410A), PLDRNV1S (R32	2)			
EEV Kit		PRGK024A0				
Multi-tenant Power Module		PINPMB001				
Robot Cleaner		-				
Pre Filter (Washable)		0				
Ion Generator		-				
CO <sub>2</sub> Sensor		-				
Ventilation Kit		-				
IR Receiver		-				
Zone Controller		-				
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)					
External Input (1 point)		0				
Wi-Fi		PWFMDD200 <sup>1)</sup>				

Applied, -: Not applied
 Option: Refer to model name in table
 External installation only

## ARNU05GSJ\*4 / ARNU07GSJ\*4 / ARNU09GSJ\*4 ARNU12GSJ\*4 / ARNU15GSJ\*4



	MODEL	UNIT	ARNU05GSJ*4	ARNU07GSJ*4	ARNU09GSJ*4	ARNU12GSJ*4	ARNU15GSJ*4
Cooling Capac	city	kW	1.6	2.2	2.8	3.6	4.5
Heating Capa	city	kW	1.8	2.5	3.2	4.0	5.0
Power Input (H / M / L)	Nominal	W	11 / 10 / 9	12 / 11 / 9	13 / 12 / 9	15 / 13 / 11	23 / 18 / 11
Exterior Color	r		White	White	White	White	White
RAL Code			RAL 9016	RAL 9016	RAL 9016	RAL 9016	RAL 9016
Dimensions	Body	mm	818 x 316 x 189	818 x 316 x 189			
$(W \times H \times D)$	Shipping	mm	892 x 381 x 249	892 x 381 x 249			
	Туре		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
_	Motor Output x Number	W x No.	30 x 1	30 x 1	30 x 1	30 x 1	30 x 1
Fan	Air Flow Rate (H / M / L)	m³/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
	Motor Type		BLDC	BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter	Pre Filter	Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø6.35 (1/4)	Ø6.35 (1/4)	Ø6.35 (1/4)	Ø6.35 (1/4)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø12.7 (1/2)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø16 (5/8)	Ø16 (5/8)	Ø16 (5/8)	Ø16 (5/8)	Ø16 (5/8)
Weight	Body	kg	8.4	8.4	8.4	8.4	8.4
Sound Pressu	re Levels (H / M / L)	dB(A)	30 / 29 / 28	32 / 30 / 28	34 / 32 / 28	37 / 34 / 30	42 / 39 / 32
Sound Power	Levels (H / M / L)	dB(A)	45 / 43 / 42	46 / 45 / 42	48 / 46 / 42	51 / 48 / 45	55 / 52 / 45
Power Supply		V / Ø / Hz	220-230-240 / 1 / 50-60	220-230-240 / 1 50-60			
Transmission	Cable	mm²	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C			

 $<sup>\</sup>star$  : N or C can be applied which has little bit different shape of panel.

\*: N or C can be applied white 1 has a second to the State 2.

Note:

1. Performance tested under EN14511

2. 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

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

## Accessories

CHASSIS	ARNU05GSJ*4	ARNU07GSJ*4	ARNU09GSJ*4	ARNU12GSJ*4	ARNU15GSJ*4
Drain Pump			-		
Cassette Cover	-				
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDRNV1S (R32)				
EEV Kit	PRGK024A0				
Multi-tenant Power Module	PINPMB001				
Robot Cleaner	-				
Pre Filter (Washable)	0				
Ion Generator	0				
CO <sub>2</sub> Sensor					
Ventilation Kit	•				
IR Receiver	·				
Zone Controller	-				
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)				
External Input (1 point)	0				
Wi-Fi	0				

※ ○ : Applied, - : Not applied Option : Refer to model name in table

TANDARD

## ARNU30GSVA4 / ARNU36GSVA4



	MODEL	UNIT	ARNU30GSVA4	ARNU36GSVA4
Cooling Capac	city	kW	8.8	10.4
Heating Capa	city	kW	9.4	10.8
Power Input (H / M / L)	Nominal	W	54 / 43 / 31	85 / 51 / 36
Exterior Color	r		White	White
RAL Code			RAL 9016	RAL 9016
Dimensions	Body	mm	1,190 x 346 x 265	1,190 x 346 x 265
(W x H x D)	Shipping	mm	1,265 x 432 x 335	1,265 x 432 x 335
	Туре		Cross Flow Fan	Cross Flow Fan
_	Motor Output x Number	W x No.	113 x 1	113 x 1
Fan	Air Flow Rate (H / M / L)	m³/min	23.0 / 20.0 / 17.0	26.0 / 23.0 / 19.0
	Motor Type		BLDC	BLDC
Air Filter			Pre Filter	Pre Filter
D:	Liquid Side	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø16 (5/8)	Ø16 (5/8)
Weight	Body	kg	16.6	16.6
Sound Pressu	re Levels (H / M / L)	dB(A)	49 / 44 / 42	52 / 47 / 43
Sound Power	Levels (H / M / L)	dB(A)	60 / 60 / 56	63 / 60 / 58
Power Supply		V / Ø / Hz	220-230-240 / 1 / 50-60	220-230-240 / 1 / 50-60
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C

- Note:

  1. Performance tested under EN14511
  2. Capacities are based on the following conditions
   Cooling: Indoor temp. 27t (80.6°t) DB / 19°t (66.2°t) WB, Outdoor temp. 35°t (95°t) DB / 24°t (75.2°t) WB, Interconnecting piping length 7.5m, Level difference of zero
   Heating: Indoor temp. 20°t (68°t) DB / 15°t (59°t) WB, Outdoor temp. 7c (44.6°t) DB / 6°t (42.8°t) WB, Interconnecting piping length 7.5m, Level difference of zero
  3. Due to our policy of innovation, some specifications may be changed without notification

ARNU18GSK\*4 / ARNU24GSK\*4

	MODEL	UNIT	ARNU18GSK*4	ARNU24GSK*4	
Cooling Capacity kW		kW	5.6	7.1	
Heating Capa	city	kW	6.3	7.5	
Power Input (H / M / L)	Nominal	W	32 / 26 / 16	39 / 26 / 16	
Exterior Color	r		White	White	
RAL Code			RAL 9016	RAL 9016	
Dimensions	Body	mm	975 x 354 x 209	975 x 354 x 209	
$(W \times H \times D)$	Shipping	mm	1,063 x 420 x 274	1,063 x 420 x 274	
	Туре		Cross Flow Fan	Cross Flow Fan	
Fan-	Motor Output x Number	W x No.	58 x 1	58 x 1	
Fan	Air Flow Rate (H / M / L)	m³/min	14.0 / 12.0 / 10.5	15.2 / 12.7 / 10.5	
	Motor Type		BLDC	BLDC	
Air Filter			Pre Filter	Pre Filter	
ъ.	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø9.52 (3/8)	
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø15.88 (5/8)	
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø16 (5/8)	Ø16 (5/8)	
Weight	Body	kg	12.2	12,2	
Sound Pressure Levels (H / M / L) dB(A)		dB(A)	43 / 39 / 34	46 / 41 / 34	
Sound Power	Sound Power Levels (H / M / L) dB(A)		59 / 56 / 52	63 / 56 / 52	
Power Supply	Power Supply V / Ø / Hz		220-230-240 / 1 / 50-60	220-230-240 / 1 / 50-60	
Transmission Cable mm <sup>2</sup>		mm <sup>2</sup>	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C	

<sup>\*:</sup> N or C can be applied which has little bit different shape of panel.

\*: Nor C can be applied which has little bit difference shape on particular Note:

Note:

1. Performance tested under EN14511

2. 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

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

## Accessories

CHASSIS	ARNU18GSK*4	ARNU24GSK*4	
Drain Pump	-	-	
Cassette Cover	-		
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDRNV1S (R32)		
EEV Kit	PRGK024A0		
Multi-tenant Power Module	PINPMB001		
Robot Cleaner	-		
Pre Filter (Washable)	0		
Ion Generator	0		
CO <sub>2</sub> Sensor			
Ventilation Kit	-		
IR Receiver			
Zone Controller	-		
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)		
External Input (1 point)	0		
Wi-Fi	0		

<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table

## Accessories

CHASSIS	ARNU30GSVA4	ARNU36GSVA4	
Drain Pump	-		
Cassette Cover	-		
Refrigerant Leak Detector	PRLDNVS0 (R410A), PLDRNV1S (R32)		
EEV Kit	-		
Multi-tenant Power Module	PINPMB001		
Robot Cleaner	-		
Pre Filter (Washable)	C	)	
Ion Generator	-		
CO <sub>2</sub> Sensor	-		
Ventilation Kit	-		
IR Receiver	-		
Zone Controller	-		
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)		
External Input (1 point)	0		
Wi-Fi	PWFMD	D200 <sup>1)</sup>	

\*\* O : Applied, - : Not applied Option : Refer to model name in table 1) External installation only

NEW

DESIGN



### Features & Benefits

- New dual vane 4 way cassette allows comfortable air flow
- Full 3D Turbo fan decreases air resistance, providing high air flow and low sound levels.

## **Key Applications**

- Retail Hotel Dormitory School
- Office • Restaurant

	CASSETTE	4 WAY	2 WAY	1 WAY
Smart	Wi-Fi	0	0	0
Energy Efficiency	Human Detect Sensor	0	-	-
Comfort	Drain Pump	0	0	0
	Sleep Mode	0	0	0
	Timer (On / Off)	0	0	0
	Timer (Weekly)	0	0	0
	Two Thermistor Control	0	0	0
	Group Control	0	0	0

※ ○: Applied, - : Not applied

## 4 Way Air Flow with New Design

New Excellent Technology (NET) certifies the new 4 way dual vane design that promotes comfortable and convenient airflow.







\*6 Airflow mode





Auto Vane Control Smart Mode

Fast and Quick

Indirect Wind





## **Brighter Color**

Color enhancement allows the cassette to blend in to most interior ceiling spaces.





Dual Vane White

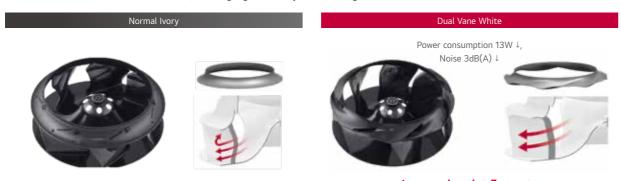
## Wide Design

Bigger inlet and outlet allows for faster cooling / heating airflow.



## Full 3D Turbo Fan

Full 3D Turbo fan decreases air resistance, creating high efficiency and reducing noise level.



Improved outlet flow rate

## **High Efficiency Heat Exchanger (HEX)**

Ø5 High Density Heat Exchanger increases cooling / heating efficiency by 10%.



## **Ceiling to Floor Temperature Sensing**

With a special sensor that senses both ceiling and floor temperature, dual vane 4 way cassette provides comfortable air.



## **Human Detection Air Flow**

Human detection provides users with direct or indirect air flow preferences.

#### Indirect comfort

Provides air flow that blows away from user for comfort.



## Direct cooling

Provides air flow that blows directly onto user for cooling



## **Human Detection for Optimized Efficiency**

The indoor unit senses human presence to switch on or off for maximum power savings of 54%.



Smart Dual Vane Indoor Unit '19 Line up.

<sup>※</sup> Data Based on actual test of LG, single product 2 hours measurement result. (Cooling 26 ℃, strong wind)

### **High-performance Air Cleaning**

Air cleaning function provides fresh, filtered air.



### **Convenient & Powerful 5-Step Air Purification**

Easy-to-manage Air Purification system with one-touch Air Purification filter.



_			
Cvc	le M	anad	ement

Pre-filter	PM1.0 Filter	Deodorization Filter
Washable	6 months / Washable	6 months / Dry in sunlight

### **Air Quality Level Display**

Wi-Fi functionality for anytime, anywhere indoor unit control and air quality level display.

### Real-time indoor air quality level displayed on Air quality level displayed on remote controller indoor unit

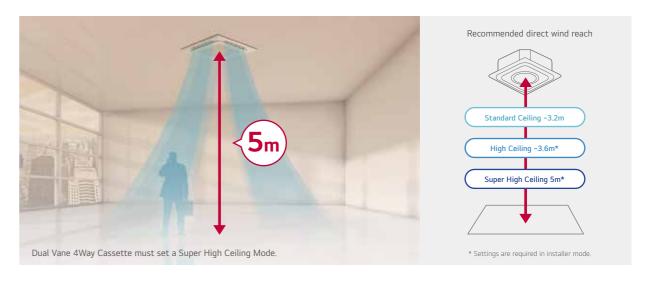


Anytime, anywhere access to check & control air status via mobile



### **Direct Wind**

Wind can reach up to 5m with significant air volume. (@ 0.5ms)



### **ThinQ Connectivity**

Connect to IDU with LG ThinQ regardless time and place



- ① Monitoring Air status : Easy to check indoor air status
- Ultra Fine / Extra Fine / Fine Dust
- Day / Week /Month / Yearly

② Mobile Remote Control: Remote control by using mobile phone

• Control Mode / Temperature / Air flow etc.

③ Display Power Consumption: Check power consumption of A/C

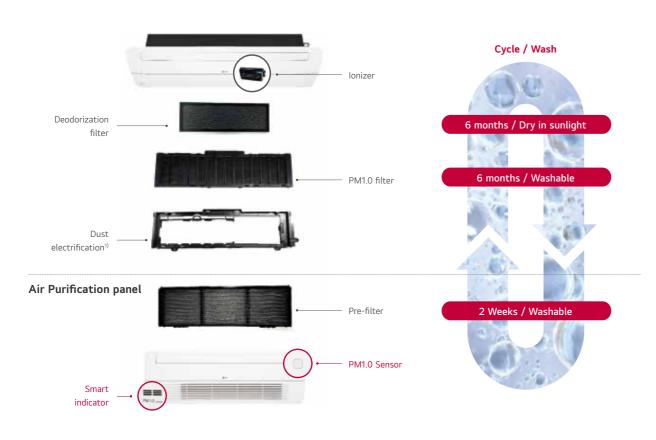
- Check energy display
- Set target energy consumption level

INSTALLATION

### **Easy Filter Cleaning for Air Purification**

Air Purification Kit filters do NOT need replacement and can be used semi-permanently. Also, thanks to easy maintenance, users can use air purification conveniently without any worries regarding their filter's cleanliness.

#### Air Purification kit



1) It increases the electrostatic force of particle to improve collection efficiency \*\* Normally HEPA filter type must be replaced regularly. It means that it costs expensive for maintenance

### **Direct & Indirect Wind**

Provides users with direct or indirect air flow preferences.

#### Comfort indirect wind

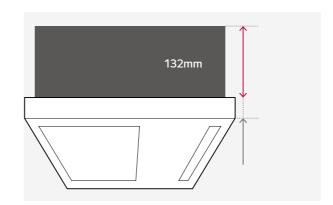
Without touching the skin directly. This ensures large spaces remain comfortable. Cooler on a hot day.





### Minimized Height (1 Way)

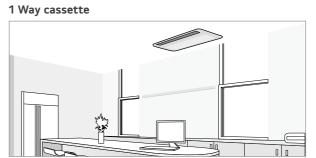
With a height of 132mm, the LG 1 Way cassette is the ideal solution for limited-space installations.

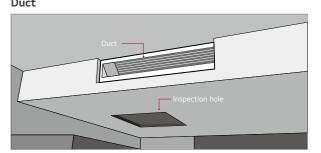


Size Comparis	(Unit:mm)		
	A Company	B company	LG
1 Way Cassette	215	230	132

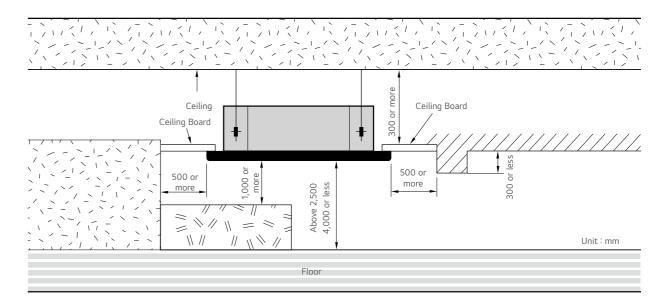
# Flexible Installation (1 Way)

1 Way cassette doesn't require the inspection access hole, enabling simple installation.





# **Installation Standard (1 Way)**



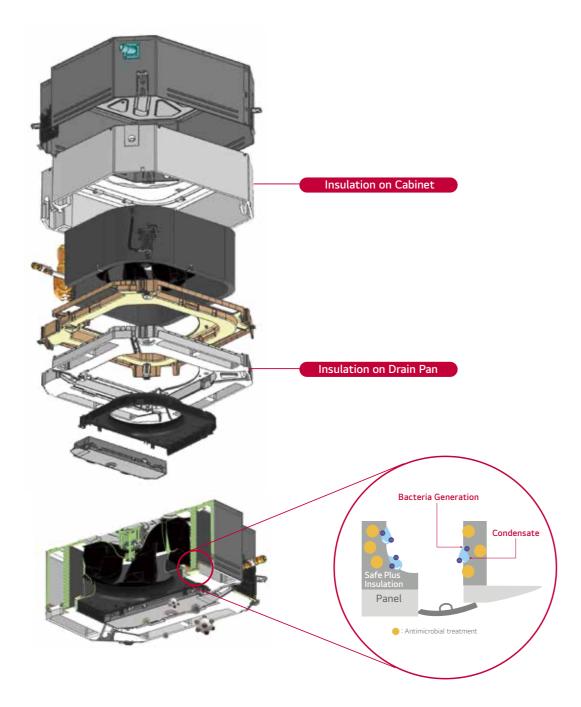
CLEAN

AIR

### Safe Plus Insulation

#### Why LG Safe Plus Insulation?

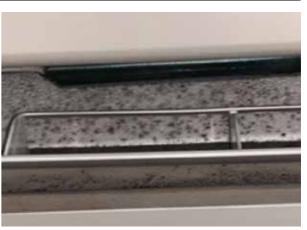
Safe Plus Insulation is an antimicrobial treatment that is applied to LG MULTI V Indoor unit internal insulation components to resist bacterial growth, providing cleaner and fresher airflow to customers.





### What's the hygiene inside of your air conditioner?





Example of EPS Pollution case.

Today's air conditioners all generally provide fast cooling and energy saving features, as well as the ability to filter bacteria, dust and mold for purified air. However, how hygienic is the inside of the air conditioner? If the inside of the air conditioner is contaminated, what can you do?

Antimicrobial treatment on \*EPS (Cabinet, Drain Pan, Air Guide, Insulator, Supporter) for Air Conditioners is the first applied technology in the world, which only LG has access to.

### EPS for Resistant to Bacterial Growth applied product











1/10

**DUAL VANE** 

4

WAY

CASSETTE

(840

×

840)

### ARNU24GTBB4 / ARNU28GTBB4 ARNU30GTBB4



	MODEL	UNIT	ARNU24GTBB4	ARNU28GTBB4	ARNU30GTBB4
Cooling Capacit	poling Capacity kW		7.1	8.2	9.0
Heating Capaci	Heating Capacity kW		8.0	9.2	10.0
Power Input (H / M / L)	Nominal	W	32 / 27 / 20	37 / 30 / 22	48 / 36 / 25
Dimensions	Body	mm	840 x 204 x 840	840 x 204 x 840	840 x 204 x 840
$(W \times H \times D)$	Shipping	mm	922 x 276 x 917	922 x 276 x 917	922 x 276 x 917
	Туре		Full 3D Turbo Fan	Full 3D Turbo Fan	Full 3D Turbo Fan
	Motor Output x Number	W	51 x 1	51 x 1	51 x 1
Fan	Air Flow Rate (H / M / L)	m³/min	18 / 17 / 15	19 / 17 / 15	21 / 19 / 16
	Motor Type		BLDC	BLDC	BLDC
Air Filter	Filter		Pre Filter Pre Filter		Pre Filter
	Liquid Side	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)
Pipe	Gas Side	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	(h) Ø25 (1) Ø25 (1)		Ø25 (1)
Weight	Body	kg	21	21	21
Sound Pressure	Level (H / M / L)	dB(A)	39 / 37 / 35	40 / 38 / 35	43 / 40 / 36
Sound Power Le	evel (H / M / L)	dB(A)	46 / 44 / 42	50 / 46 / 43	53 / 50 / 45
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Communication	Cable (VCTF-SB)	mm² x cores	1.0 ~ 1.5 x 2	1.0 ~ 1.5 x 2	1.0 ~ 1.5 x 2
	Model Name		PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0
Decoration	Exterior Color		White	White	White
Panel	RAL Code		RAL 9003	RAL 9003	RAL 9003
(Accessory)	Net Dimensions (W x H x D)	mm	950 x 35 x 950	950 x 35 x 950	950 x 35 x 950
	Net Weight	kg	7.1 / 7.5	7.1 / 7.5	7.1 / 7.5

- Note:

  1. Performance tested under EN14511

  2. Capacities are based on the following conditions

   Cooling: Indoor temp. 27℃ (80.6°F) DB / 19℃ (66.2°F) WB, Outdoor temp. 35℃ (95°F) DB / 24℃ (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero

   Heating: Indoor temp. 20℃ (68°F) DB / 15℃ (59°F) WB, Outdoor temp. 7℃ (44.6°F) DB / 6℃ (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero

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

### Accessories

CHASSIS	ARNU24GTBB4 ARNU28GTBB4 ARNU30GTBB4					
Drain Pump	0					
Cassette Cover	PTDCA					
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDRNV1S (R32)					
EEV Kit	-					
Multi-tenant Power Module	PINPMB001					
Robot Cleaner	-					
Pre Filter (Washable)	0					
Ion Generator	PAS-NATDR2					
CO <sub>2</sub> Sensor	· ·					
Ventilation Kit	-					
IR Receiver	-					
Zone Controller	-					
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)					
External Input (1 Point)	0					
Wi-Fi	PWFMDD200					
Human Detection Sensor	PTVSAAO					
Floor Temperature Sensor	PTFSMAO					
Air Purification Kit	PTAHMPO (PT-AFGWO panel required)					
Elevation Grille	PT-AEGWO.ENCXLEU (Panel), PTVK440.ENCXLEU (Kit)					

### ARNU36GTAB4 / ARNU42GTAB4 ARNU48GTAB4



	MODEL	UNIT	ARNU36GTAB4	ARNU42GTAB4	ARNU48GTAB4
Cooling Capaci	ty	kW	10.6	12.3	14.1
Heating Capacity kW		kW	11.9	13.8	15.9
Power Input (H / M / L)			69 / 49 / 37	97 / 69 / 49	110 / 76 / 61
Dimensions	Body	mm	840 x 288 x 840	840 x 288 x 840	840 x 288 x 840
(W x H x D)	Shipping	mm	922 x 360 x 917	922 x 360 x 917	922 x 360 x 917
	Туре		Full 3D Turbo Fan	Full 3D Turbo Fan	Full 3D Turbo Fan
	Motor Output x Number	W	135 x 1	135 x 1	135 x 1
Fan	Air Flow Rate (H / M / L)	m³/min	29 / 26 / 22	33 / 29 / 26	34 / 30 / 28
	Motor Type		BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)
Pipe	Gas Side	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	26	26	26
Sound Pressure	e Level (H / M / L)	dB(A)	43 / 40 / 37	47 / 43 / 40	48 / 44 / 42
Sound Power L	.evel (H / M / L)	dB(A)	54 / 51 / 47	56 / 53 / 49	58 / 54 / 53
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Communication	n Cable (VCTF-SB)	mm² x cores	1.0 ~ 1.5 x 2	1.0 ~ 1.5 x 2	1.0 ~ 1.5 x 2
	Model Name		PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0
Decoration	Exterior Color		White	White	White
Panel	RAL Code		RAL 9003	RAL 9003	RAL 9003
(Accessory)	Net Dimensions (W x H x D)	mm	950 x 35 x 950	950 x 35 x 950	950 x 35 x 950
	Net Weight	kg	7.1 / 7.5	7.1 / 7.5	7.1 / 7.5

- Note: 1. Performance tested under EN14511
  2. 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
  3. Due to our policy of innovation, some specifications may be changed without notification

### Accessories

CHASSIS	ARNU36GTAB4	ARNU42GTAB4	ARNU48GTAB4			
Drain Pump		0				
Cassette Cover	PTDCA					
Refrigerant Leak Detector		PRLDNVS0 (R410A), PLDRNV1S (R32	)			
EEV Kit		-				
Multi-tenant Power Module		PINPMB001				
Robot Cleaner	-					
Pre Filter (Washable)	0					
Ion Generator	PAS-NATDR2					
CO <sub>2</sub> Sensor	·					
Ventilation Kit	·					
IR Receiver		-				
Zone Controller		-				
Dry Contact (with additional accessory)		RYCB000 (1 point contact), PDRYCB3 B400 (2 points input), PDRYCB500 (N				
External Input (1 Point)		0				
Wi-Fi		PWFMDD200				
Human Detection Sensor	PTVSAA0					
Floor Temperature Sensor	PTFSMA0					
Air Purification Kit		PTAHMPO (PT-AFGWO panel required	)			
Elevation Grille	PT-AEG\	VO.ENCXLEU (Panel), PTVK440.ENCX	ILEU (Kit)			

**DUAL VANE** 

4

WAY

CASSETTE

(840

×

840)

#### High sensible

### ARNU05GTAA4 / ARNU07GTAA4 / ARNU09GTAA4 ARNU12GTAA4 / ARNU15GTAA4 / ARNU18GTAA4



	MODEL	UNIT	ARNU05GTAA4	ARNU07GTAA4	ARNU09GTAA4	ARNU12GTAA4	ARNU15GTAA4	ARNU18GTAA4
Cooling Capacity kV		kW	1.6	2.2	2.8	3.6	4.5	5.6
Heating Capaci	Heating Capacity		1.8	2.5	3.2	4.0	5.0	6.3
Power Input (H / M / L)	Nominal	W	20 / 15 / 11	23 / 16 / 11	25 / 18 / 11	26 / 19 / 13	29 / 20 / 15	31 / 23 / 16
Dimensions	Body	mm	840 x 288 x 840					
(W x H x D)	Shipping	mm	922 x 360 x 917					
	Туре		Full 3D Turbo Fan					
	Motor Output x Number	W	166 x 1					
Fan	Running Current	Α	0.21	0.23	0.25	0.25	0.27	0.28
	Air Flow Rate (H / M / L)	m³/min	18 / 15 / 13	19 / 16 / 13	19 / 16 / 13	20 / 17 / 15	20 / 17 / 15	21 / 19 / 16
	Motor Type		BLDC	BLDC	BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter					
	Liquid Side	mm (inch)	Ø9.52 (3/8)					
Pipe	Gas Side	mm (inch)	Ø15.88 (5/8)					
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)					
Weight	Body	kg	26	27	27	27	27	27
Sound Pressure	e Level (H / M / L)	dB(A)	32 / 29 / 26	32 / 30 / 26	33 / 30 / 26	34 / 31 / 27	34 / 32 / 29	35 / 32 / 30
Sound Power L	evel (H / M / L)	dB(A)	40 / 37 / 36	41 / 38 / 36	42 / 39 / 36	42 / 40 / 37	43 / 40 / 38	44 / 41 / 38
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Communication	n Cable (VCTF-SB)	mm² x cores	1.0 ~ 1.5 x 2	1.0~1.5 x 2	1.0 ~ 1.5 x 2			
	Model Name		PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0
Decoration	Exterior Color		White	White	White	White	White	White
Panel	RAL Code		RAL 9003					
(Accessory)	Net Dimensions (W x H x D)	mm	950 x 35 x 950					
	Net Weight	kg	7.1 / 7.5	7.1 / 7.5	7.1 / 7.5	7.1 / 7.5	7.1 / 7.5	7.1 / 7.5

Note:

1. Performance tested under EN14511
2. 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
3. Due to our policy of innovation, some specifications may be changed without notification

### Accessories

CHASSIS	ARNU05GTAA4 ARNU07GTAA4 ARNU09GTAA4 ARNU12GTAA4 ARNU15GTAA4 ARNU18GTAA4				
Drain Pump	0				
Cassette Cover	PTDCA				
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDRNV1S (R32)				
EEV Kit	· ·				
Multi-tenant Power Module	PINPMB001				
Robot Cleaner	-				
Pre Filter (Washable)	0				
Ion Generator	PAS-NATDR2				
CO <sub>2</sub> Sensor	·				
Ventilation Kit	-				
IR Receiver	· ·				
Zone Controller	•				
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)				
External Input (1 Point)	0				
Wi-Fi	PWFMDD200				
Human Detection Sensor	PTVSAA0				
Floor Temperature Sensor	PTFSMA0				
Air Purification Kit	PTAHMPO (PT-AFGWO panel required)				
Elevation Grille					

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### ARNU24GTAA4 / ARNU28GTAA4 / ARNU36GTAA4 ARNU42GTAA4 / ARNU48GTAA4



	MODEL	UNIT	ARNU24GTAA4	ARNU28GTAA4	ARNU36GTAA4	ARNU42GTAA4	ARNU48GTAA4
Cooling Capaci	ty	kW	7.1	8.2	10.6	12.3	14.1
Heating Capac	ity	kW	8.0	9.2	11.9	13.8	15.9
Power Input (H / M / L)	Nominal	W	40 / 31 / 25	46 / 35 / 26	65 / 43 / 31	86 / 65 / 43	100 / 67 / 53
Dimensions	Body	mm	840 x 288 x 840				
(W x H x D)	Shipping	mm	922 x 360 x 917				
	Туре		Full 3D Turbo Fan				
	Motor Output x Number	W	166 x 1				
Fan	Running Current	Α	0.38	0.46	0.60	0.80	0.88
	Air Flow Rate (H / M / L)	m³/min	23 / 21 / 19	24 / 22 / 20	28 / 24 / 21	31 / 28 / 24	33 / 28 / 26
	Motor Type		BLDC	BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter				
	Liquid Side	mm (inch)	Ø9.52 (3/8)				
Pipe	Gas Side	mm (inch)	Ø15.88 (5/8)				
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)				
Weight	Body	kg	27	27	27	27	27
Sound Pressur	e Level (H / M / L)	dB(A)	39 / 36 / 33	40 / 37 / 34	42 / 39 / 35	46 / 42 / 39	47 / 43 / 41
Sound Power L	evel (H / M / L)	dB(A)	47 / 45 / 42	48 / 46 / 42	51 / 48 / 44	54 / 51 / 48	56 / 52 / 50
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Communication	n Cable (VCTF-SB)	mm² x cores	1.0 ~ 1.5 x 2	1.0 ~ 1.5 x 2	1.0 ~ 1.5 x 2	1.0~1.5 x 2	1.0 ~ 1.5 x 2
	Model Name		PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0	PT-AAGW0 PT-AFGW0
Decoration	Exterior Color		White	White	White	White	White
Panel	RAL Code		RAL 9003				
(Accessory)	Net Dimensions (W x H x D)	mm	950 x 35 x 950				
	Net Weight	kg	7.1 / 7.5	7.1 / 7.5	7.1 / 7.5	7.1 / 7.5	7.1 / 7.5

Note:

1. Performance tested under EN14511

2. 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

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

### Accessories

CHASSIS	ARNU24GTAA4 ARNU28GTAA4 ARNU36GTAA4 ARNU42GTAA4 ARNU48GTAA					
Drain Pump	0					
Cassette Cover	PTDCA					
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDRNV1S (R32)					
EEV Kit	-					
Multi-tenant Power Module	PINPMB001					
Robot Cleaner	-					
Pre Filter (Washable)	0					
Ion Generator	PAS-NATDR2					
CO <sub>2</sub> Sensor	·					
Ventilation Kit						
IR Receiver	-					
Zone Controller	-					
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)					
External Input (1 Point)	0					
Wi-Fi	PWFMDD200					
Human Detection Sensor	PTVSAA0					
Floor Temperature Sensor	PTFSMA0					
Air Purification Kit	PTAHMPO (PT-AFGWO panel required)					
Elevation Grille	PT-AEGW0.ENCXLEU (Panel), PTVK440.ENCXLEU (Kit)					

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# ARNU21GTQB4



	MODEL	UNIT	ARNU05GTRB4	ARNU07GTRB4	ARNU09GTRB4	ARNU12GTRB4
Cooling Capa	Cooling Capacity		1.6	2.2	2.8	3.6
Heating Capa	city	kW	1.8	2.5	3.2	4.0
Power Input (H / M / L)	Nominal	W	13 / 12 / 11	13 / 12 / 11	14 / 13 / 12	17 / 15 / 13
Dimensions	Body	mm	570 x 214 x 570			
(W x H x D)	Shipping	mm	667 x 285 x 646			
	Туре		Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
Fan	Motor Output x Number	W	43 x 1	43 x 1	43 x 1	43 x 1
гап	Air Flow Rate (H / M / L)	m³/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
	Motor Type		BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter	Pre Filter	Pre Filter
D:	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø6.35 (1/4)	Ø6.35 (1/4)	Ø6.35 (1/4)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø12.7 (1/2)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	12.6	12.6	13.7	13.7
Sound Pressu	re Levels (H / M / L)	dB(A)	29 / 27 / 26	29 / 27 / 26	30 / 29 / 27	32 / 30 / 27
Sound Power	Levels (H / M / L)	dB(A)	47 / 46 / 45	47 / 46 / 45	48 / 46 / 45	51 / 48 / 45
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm²	1.0 ~ 1.5 x 2C			
	Model Name		PT-QAGW0	PT-QAGW0	PT-QAGW0	PT-QAGW0
Decoration	Exterior Color		White	White	White	White
Panel	RAL Code		RAL 9001	RAL 9001	RAL 9001	RAL 9001
(Accessory)	Net Dimensions (W x H x D)	mm	620 x 35 x 620			
	Net Weight	kg	3.2 / 3.0 / 2.9	3.2 / 3.0 / 2.9	3.2 / 3.0 / 2.9	3.2 / 3.0 / 2.9

- Note:

  1. Performance tested under EN14511

  2. 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

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

### Accessories

CHASSIS	ARNU05GTRB4	ARNU07GTRB4	ARNU09GTRB4	ARNU12GTRB4
Drain Pump	0			
Cassette Cover				
Refrigerant Leak Detector		PRLDNVS0 (R410A	), PLDRNV1S (R32)	
EEV Kit		PRGK024A	0 (~4.5kW)	
Multi-tenant Power Module		PINPN	1B001	
Robot Cleaner				
Pre Filter (Washable)	0			
Ion Generator	PAS-NATDR2			
CO <sub>2</sub> Sensor	·			
Ventilation Kit	PTVK430			
IR Receiver				
Zone Controller				
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)			
External Input (1 point)	0			
Wi-Fi		PWFM	DD200	

※ ○ : Applied, - : Not applied Option : Refer to model name in table



ARNU15GTQB4 / ARNU18GTQB4

	MODEL	UNIT	ARNU15GTQB4	ARNU18GTQB4	ARNU21GTQB4
Cooling Capa	city	kW	4.5	5.6	6.0
Heating Capa	icity	kW	5.0	6.3	6.8
Power Input (H / M / L)	Nominal	W	24 / 21 / 18	25 / 22 / 19	28 / 23 / 20
Dimensions	Body	mm	570 x 256 x 570	570 x 256 x 570	570 x 256 x 570
(W x H x D)	Shipping	mm	667 x 327 x 646	667 x 327 x 646	667 x 327 x 646
	Туре		Turbo Fan	Turbo Fan	Turbo Fan
Fan	Motor Output x Number	W	43 x 1	43 x 1	43 x 1
FdII	Air Flow Rate (H / M / L)	m³/min	11.0 / 10.0 / 9.3	11.2 / 11.0 / 10.0	12.0 / 11.1 / 9.4
	Motor Type		BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø6.35 (1/4)	Ø9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø15.88 (5/8)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	15.0	15.0	15.0
Sound Pressu	re Levels (H / M / L)	dB(A)	36 / 34 / 32	37 / 35 / 34	40 / 38 / 34
Sound Power	Levels (H / M / L)	dB(A)	52 / 50 / 46	52 / 50 / 46	54 / 52 / 46
Power Supply	1	V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
	Model Name		PT-QAGW0	PT-QAGW0	PT-QAGW0
Decoration	Exterior Color		White	White	White
Panel	RAL Code		RAL 9001	RAL 9001	RAL 9001
(Accessory)	Net Dimensions (W x H x D)	mm	620 x 35 x 620	620 x 35 x 620	620 x 35 x 620
	Net Weight	kg	3.2 / 3.0 / 2.9	3.2 / 3.0 / 2.9	3.2 / 3.0 / 2.9

- Note:

  1. Performance tested under EN14511
  2. 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
  3. Due to our policy of innovation, some specifications may be changed without notification

### Accessories

CHASSIS	ARNU15GTQB4	ARNU18GTQB4	ARNU21GTQB4
Drain Pump		0	
Cassette Cover		-	
Refrigerant Leak Detector		PRLDNVSO (R410A), PLDRNV1S (R32	)
EEV Kit		PRGK024A0 (~4.5kW)	
Multi-tenant Power Module		PINPMB001	
Robot Cleaner			
Pre Filter (Washable)	0		
Ion Generator	PAS-NATDR2		
CO <sub>2</sub> Sensor			
Ventilation Kit	PTVK430		
IR Receiver		-	
Zone Controller			
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)		
External Input (1 point)	0		
Wi-Fi		PWFMDD200	

※ ○ : Applied, - : Not applied Option : Refer to model name in table

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#### ARNU09GTSC4 / ARNU12GTSC4



	MODEL	UNIT	ARNU09GTSC4	ARNU12GTSC4
Cooling Capac	city	kW	2.8	3.6
Heating Capa	city	kW	3.2	4.0
Power Input (H / M / L)	Nominal	W	16 / 14 / 11	18 / 14 / 11
Dimensions	Body	mm	830 x 225 x 600	830 x 225 x 600
(W x H x D)	Shipping	mm	1,055 × 290 × 682	1,055 × 290 × 682
	Туре		Turbo Fan	Turbo Fan
Fan	Motor Output x Number	W x No.	37 x 1	37 x 1
Ган	Air Flow Rate (H / M / L)	m³/min	10.8 / 9.8 / 9.1	11.1 / 10.3 / 9.1
	Motor Type		BLDC	BLDC
Air Filter			Pre Filter	Pre Filter
р:	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø6.35 (1/4)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	18.1	18.1
Sound Pressu	re Levels (H / M / L)	dB(A)	33 / 31 / 29	34 / 32 / 29
Sound Power	Levels (H / M / L)	dB(A)	44 / 41 / 40	44 / 42 / 40
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50
Communication	on Cable	mm²	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
	Model Name		PT-USC	PT-USC
Decoration	Exterior Color		Morning Fog	Morning Fog
Panel	RAL Code		RAL 9001	RAL 9001
(Accessory)	Net Dimensions (W x H x D)	mm	1,100 x 28 x 690	1,100 x 28 x 690
	Net Weight	kg	4.7	4.7

Note:

1. Performance tested under EN14511
2. Capacities are abased on the following conditions
- Cooling: Indoor temp. 27C (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
3. Due to our policy of innovation, some specifications may be changed without notification

#### Accessories

CHASSIS	ARNU09GTSC4	ARNU12GTSC4
Drain Pump	0	
Cassette Cover		-
Refrigerant Leak Detector	PRLDNVS0 (R410A	), PLDRNV1S (R32)
EEV Kit	PRGK024A	0 (~5.6kW)
Multi-tenant Power Module	PINPN	MB001
Robot Cleaner	·	
Pre Filter (Washable)	0	
Ion Generator	-	
CO <sub>2</sub> Sensor	and the second s	
Ventilation Kit		-
IR Receiver	-	-
Zone Controller		-
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)	
External Input (1 point)	0	
Wi-Fi	PWFM	DD200

※ ○ : Applied, - : Not applied Option : Refer to model name in table



ARNU18GTSC4 / ARNU24GTSC4

	MODEL	UNIT	ARNU18GTSC4	ARNU24GTSC4
Cooling Capac	city	kW	5.6	7.1
Heating Capa	city	kW	6.3	8.0
Power Input (H / M / L)	Nominal	W	19 / 16 / 14	31 / 22 / 14
Dimensions	Body	mm	830 x 225 x 600	830 x 225 x 600
(W x H x D)	Shipping	mm	1,055 × 290 × 682	1,055 × 290 × 682
	Туре		Turbo Fan	Turbo Fan
Fan	Motor Output x Number	W x No.	37 x 1	37 x 1
FdII	Air Flow Rate (H / M / L)	m³/min	11.8 / 10.8 / 9.8	14.5 / 12.4 / 10.3
	Motor Type		BLDC	BLDC
Air Filter			Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø15.88 (5/8)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	18.1	18.1
Sound Pressu	re Levels (H / M / L)	dB(A)	35 / 33 / 31	40 / 37 / 33
Sound Power	Levels (H / M / L)	dB(A)	45 / 44 / 41	51 / 48 / 42
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50
Communication	on Cable	mm²	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
	Model Name		PT-USC	PT-USC
Decoration	Exterior Color		Morning Fog	Morning Fog
Panel	RAL Code		RAL 9001	RAL 9001
(Accessory)	Net Dimensions (W x H x D)	mm	1,100 x 28 x 690	1,100 x 28 x 690
	Net Weight	kg	4.7	4.7

Note:

1. Performance tested under EN14511
2. Capacities are based on the following conditions
- Cooling: Indoor temp. 27℃ (80.6°F) DB / 19℃ (66.2°F) WB, Outdoor temp. 35℃ (95°F) DB / 24℃ (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating: Indoor temp. 20℃ (68°F) DB / 15℃ (59°F) WB, Outdoor temp. 7℃ (44.6°F) DB / 6℃ (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
3. Due to our policy of innovation, some specifications may be changed without notification

#### Accessories

CHASSIS	ARNU18GTSC4	ARNU24GTSC4
Drain Pump	0	
Cassette Cover	-	
Refrigerant Leak Detector	PRLDNVS0 (R410A),	PLDRNV1S (R32)
EEV Kit	PRGK024A0	(~5.6kW)
Multi-tenant Power Module	PINPMB	001
Robot Cleaner	-	
Pre Filter (Washable)	0	
Ion Generator	-	
CO <sub>2</sub> Sensor		
Ventilation Kit	•	
IR Receiver	-	
Zone Controller	-	
Dry Contact (with additional accessory)	PDRYCB000 (1 point co PDRYCB400 (2 points input)	
External Input (1 point)	0	
Wi-Fi	PWFMDD200	

※ ○ : Applied, - : Not applied Option : Refer to model name in table

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	MODEL	UNIT	ARNU07GTUB4	ARNU09GTUB4	ARNU12GTUB4
Cooling Capac	city	kW	2.2	2.8	3.6
Heating Capa	city	kW	2.5	3.2	4.0
Power Input (H / M / L)	Nominal	W	20 / 18 / 16	22 / 20 / 18	24 / 22 / 20
Dimensions	Body	mm	860 x 132 x 450	860 x 132 x 450	860 x 132 x 450
(W x H x D)	Shipping	mm	1,129 x 259 x 538	1,129 x 259 x 538	1,129 x 259 x 538
	Туре		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
Fan	Motor Output x Number	W x No.	30 x 1	30 x 1	30 x 1
rall	Air Flow Rate (H / M / L)	m³/min	8.2 / 7.3 / 6.4	9.2 / 8.6 / 8.2	10.0 / 9.2 / 8.2
	Motor Type		BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø6.35 (1/4)	Ø6.35 (1/4)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø12.7 (1/2)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	12.2	12.2	12.2
Sound Pressu	re Levels (H / M / L)	dB(A)	32 / 29 / 25	35 / 34 / 32	38 / 35 / 32
Sound Power	Levels (H / M / L)	dB(A)	47 / 44 / 41	51 / 49 / 47	52 / 51 / 47
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm²	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
	Model Name		PT-UAHGO, PT-UAHWO, PT-UPHGO	PT-UAHGO, PT-UAHWO, PT-UPHGO	PT-UAHGO, PT-UAHWO, PT-UPHGO
	Exterior Color		Noble White	Noble White	Noble White
Decoration	RAL Code		RAL 9003	RAL 9003	RAL 9003
Panel (Accessory)	Net Dimensions (W x H x D)	mm	1,160 x 34 x 500 1,100 x 34 x 500 1,160 x 34 x 500	1,160 x 34 x 500 1,100 x 34 x 500 1,160 x 34 x 500	1,160 x 34 x 500 1,100 x 34 x 500 1,160 x 34 x 500
	Net Weight	kg	3.9 / 3.3 / 4.1	3.9 / 3.3 / 4.1	3.9 / 3.3 / 4.1

Note:
1. Performance tested under EN14511
2. 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
3. Due to our policy of innovation, some specifications may be changed without notification

### Accessories

CHASSIS	ARNU07GTUB4	ARNU09GTUB4	ARNU12GTUB4
Drain Pump		0	
Cassette Cover		-	
Refrigerant Leak Detector		RLDNVSO (R410A), PLDRNV1S (R32	2)
EEV Kit		PRGK024A0	
Multi-tenant Power Module		PINPMB001	
Robot Cleaner		-	
Pre Filter (Washable)	0		
Ion Generator			
CO <sub>2</sub> Sensor			
Ventilation Kit	·		
IR Receiver	· ·		
Zone Controller		-	
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)		
External Input (1 point)	0		
Air Purification Kit	PTAHTP0		
Wi-Fi		PWFMDD200	

※ ○ : Applied, - : Not applied Option : Refer to model name in table



	MODEL	UNIT	ARNU18GTTB4	ARNU24GTTB4
Cooling Capa	city	kW	5.6	7.1
Heating Capa	city	kW	6.3	7.1
Power Input (H / M / L)	Nominal	W	38 / 28 / 24	51 / 33 / 26
Dimensions	Body	mm	1,180 x 132 x 450	1,180 x 132 x 450
(W x H x D)	Shipping	mm	1,499 x 259 x 538	1,499 x 259 x 538
	Туре		Cross Flow Fan	Cross Flow Fan
Fan	Motor Output x Number	W x No.	30 x 1	30 x 1
Fdil	Air Flow Rate (H / M / L)	m³/min	13.3 / 12.1 / 10.9	14.6 / 13.3 / 11.5
	Motor Type		BLDC	BLDC
Air Filter			Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø15.88 (5/8)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	15.3	15.3
Sound Pressu	re Levels (H / M / L)	dB(A)	40 / 37 / 35	43 / 40 / 36
Sound Power	Levels (H / M / L)	dB(A)	55 / 51 / 47	58 / 53 / 49
Power Supply	,	V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
	Model Name		PT-TAHG0, PT-TAHW0, PT-TPHG0	PT-TAHGO, PT-TAHWO, PT-TPHGO
	Exterior Color		Noble White	Noble White
Decoration	RAL Code		RAL 9003	RAL 9003
Panel (Accessory)	Net Dimensions (W x H x D)	mm	1,480 x 34 x 500 1,420 x 34 x 500 1,480 x 34 x 500	1,480 x 34 x 500 1,420 x 34 x 500 1,480 x 34 x 500
	Net Weight	kg	4.8 / 4.5 / 4.9	4.8 / 4.5 / 4.9

Note:

1. Performance tested under EN14511

2. 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

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

### Accessories

CHASSIS	ARNU18GTTB4	ARNU24GTTB4
Drain Pump	0	
Cassette Cover	-	
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDR	NV1S (R32)
EEV Kit	-	
Multi-tenant Power Module	PINPMB001	
Robot Cleaner	-	
Pre Filter (Washable)	0	
Ion Generator	-	
CO <sub>2</sub> Sensor	-	
Ventilation Kit	•	
IR Receiver		
Zone Controller	-	
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)	
External Input (1 point)	0	
Air Purification Kit	PTAHTP0	
Wi-Fi	PWFMDD200	

※ ○ : Applied, - : Not applied Option : Refer to model name in table

NEW

DESIGN



#### Features & Benefits

 Luxury round design can make a luxurious space with a round design considering side view.

 $\bullet$  Perfect round air flow without blind spots.

#### **Key Applications**

RetailRestaurantHotel

	CASSETTE	ROUND
Smart	Wi-Fi	0
Energy Efficiency	Human Detect Sensor	
	Drain Pump	0
	Sleep Mode	0
Comfort	Timer (On / Off)	0
Comfort	Timer (Weekly)	0
	Two Thermistor Control	0
	Group Control	0

 $\mathscr{X}$   $\bigcirc$ : Applied, - : Not applied

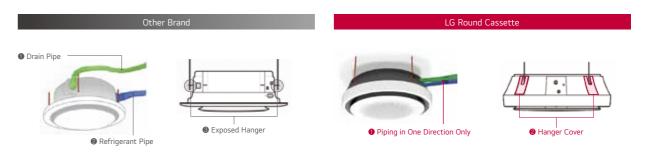
### **Slim and Compact Design**

The hight of the body has been reduced by 15%, saving space and maximizing the openness of the interior space.



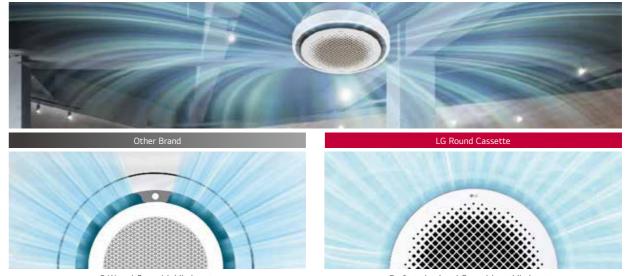
# **Minimal Exposure Design**

Pipes are brought together in one place to minimize exposure. Hanger covers hide installations to add a clean look.



### **Perfect Round Air Flow**

Perfect round flow without blind spots.



3 Way airflow with blind spot.

Perfect circular airflow without blind spots.

### **Visible Air Flow**

With crystal vein for 6-step precision control, you can send cool / heated air wherever you want.

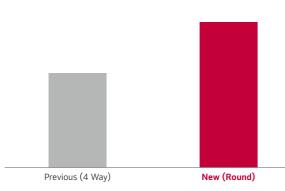




### **Powerful and Quiet Air Flow**

3D fan increases airflow by 5% and noise reduction technology makes a quieter, more comfortable space.



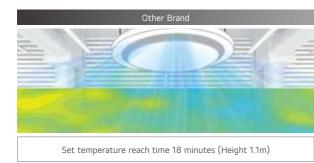






### 30% Faster in Cooling

With a larger airflow rate, cooling rate is faster than 30%.





<sup>\*\*</sup> Based on test results from LG chamber, this image is designed to help customers understand. Experimental environment: height 3.2m. 48 kBtu. cooling mode, high flow rate, horizontal air flow direction

### ARNU24GTYA4 / ARNU36GTYA4 / ARNU48GTYA4



	MODEL	UNIT	ARNU24GTYA4	ARNU36GTYA4	ARNU48GTYA4
Cooling Capacity		kW	7.1	10.6	14.1
Heating Capacity		kW	8.0	11.9	15.9
Power Input (H / M / L)	Nominal	W	44 / 36 / 29	63 / 47 / 36	98 / 70 / 44
Dimensions	Body	mm	1,050 x 330 x 1,050	1,050 x 330 x 1,050	1,050 x 330 x 1,050
$(W \times H \times D)$	Shipping	mm	1,137 x 395 x 1,132	1,137 x 395 x 1,132	1,137 x 395 x 1,132
	Туре		3D Turbo Fan	3D Turbo Fan	3D Turbo Fan
Fan	Motor Output x Number	W	157 x 1	157 x 1	157 x 1
FdII	Air Flow Rate (H / M / L)	m3/min	22 / 21 / 19	27 / 24 / 21	32 / 28 / 23
	Motor Type		BLDC	BLDC	BLDC
Air Filter			Long Life	Long Life	Long Life
	Liquid Side	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)
Connections	Drain Pipe(Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	30	30	30
Sound Pressu	re Level (H / M / L)	dB(A)	39 / 37 / 34	43 / 39 / 37	47 / 44 / 39
Sound Power	Level (H / M / L)	dB(A)	48 / 46 / 43	52 / 48 / 46	56 / 53 / 48
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50 220-240 / 1 / 50	
Communication	on Cable (VCTF-SB)	mm² x cores	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

- Note:

  1. Performance tested under EN14511

  2. Capacities are based on the following conditions

  2. Capacities are based on the following conditions

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

#### Accessories

CHASSIS	ARNU24GTYA4	ARNU36GTYA4	ARNU48GTYA4			
Drain Pump		0				
Cassette Cover		-				
Refrigerant Leak Detector		PRLDNVSO (R410A), PLDRNV1S (R32)				
EEV Kit		-				
Multi-tenant Power Module		PINPMB001				
Robot Cleaner		-				
Pre Filter (Washable)		0				
Ion Generator		-				
CO <sub>2</sub> Sensor		-				
Ventilation Kit		-				
IR Receiver		-				
Zone Controller						
Dry Contact (with additional accessory)		PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)				
External Input (1 Point)		0				
Wi-Fi		PWFMDD200				
Human Detection Sensor		-				
Floor Temperature Sensor		-				
Air Purification Kit	PTAHYP0					
Elevation Grille		-				

SMART





#### Features & Benefits

- Easy and flexible duct adjusts air volume with External Static Pressure (ESP) control function.
- Minimalist visibility (Hidden within ceiling) to blend seamlessly into any interior

### **Key Applications**

- Office Retail
- Hotel Residential building

	DUCT	HIGH	MIDDLE	LOW
Smart	Wi-Fi	0	0	0
Energy Efficiency	E.S.P Control	0	0	0
	Drain Pump	0	0	0
	Timer (On / Off)	0	0	0
Comfort	Timer (Weekly)	0	0	0
	Two Thermistor Control	0	0	0
	Group Control	0	0	0

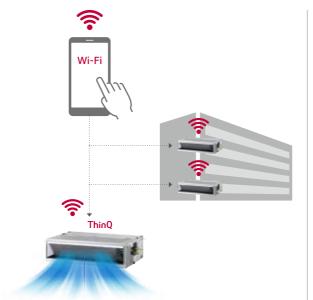
<sup>※ ○:</sup> Applied, - : Not applied

### Wi-Fi Control

Anytime, anywhere access to the unit with Android & iOS-based smartphones.

#### ThinQ

Search "ThinQ" on Google market or the App Store to download the app.



### Easy Registration and Log-in

Follow the easy set-up steps that will activate ThinQ's user-friendly features.



Simple operation for various functions

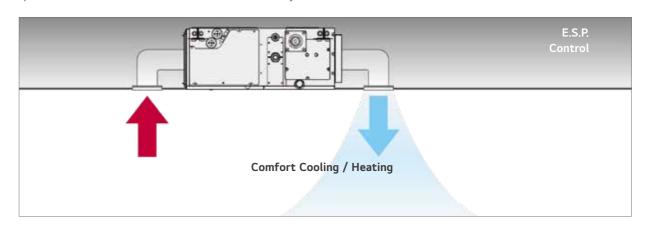


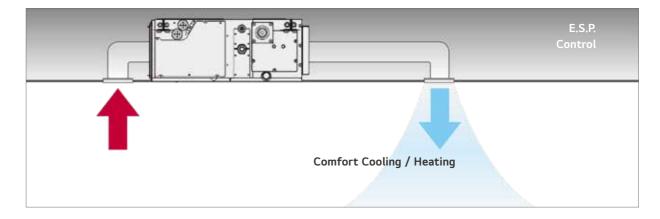


 $\ensuremath{\mathbb{X}}$  For our policy of continuous ThinQ App improvement, specification, design and features are subject to change without prior notice.

# External Static Pressure (ESP) Control

Users have easy access to air volume selection via remote controller using the ESP control function. The BLDC motor can control fan speed and air volume. No additional accessories are necessary to control air flow.



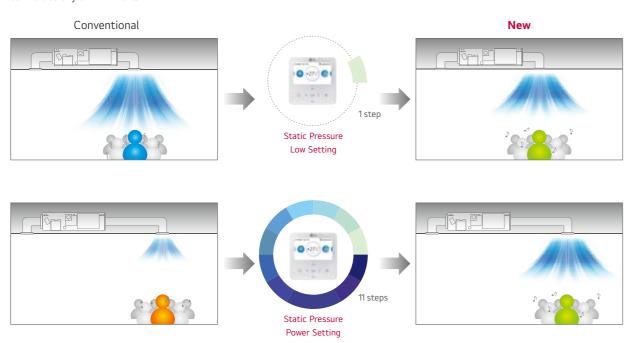


LEAN

AIR

### **Static Pressure 11-Step Control**

Depending on the installation environment, LG's ceiling concealed duct controls the static pressure with 11 steps to provide maximized comfort to any environment.



# **Energy Monitoring**

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

#### Install Scene







Total accumulated electric energy 595kWh



remote controller



Standard wired remote controller

Total accumulated electric energy 3,977kWh

#### Multistory building application



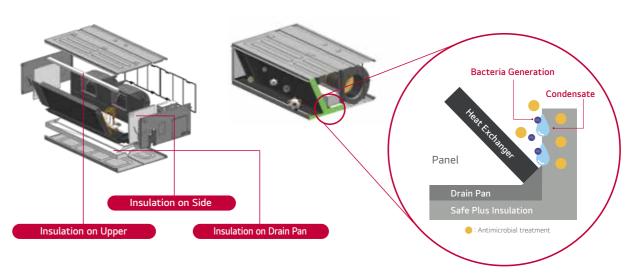


<sup>\*\*</sup> Outdoor unit's accumulated electric energy / using rate of individual indoor unit + indoor unit's accumulated electric energy is displayed in wired remote controller, only when central controller, digital integrating electricity meter and PDI are installed and PDI, outdoor unit and indoor 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.

### Safe Plus Insulation

#### Why LG Safe Plus Insulation?

Safe Plus Insulation is an antimicrobial treatment that is applied to LG MULTI V Indoor unit internal insulation components to resist bacterial growth, providing cleaner and fresher airflow to customers.





### What's the hygiene inside of your air conditioner?



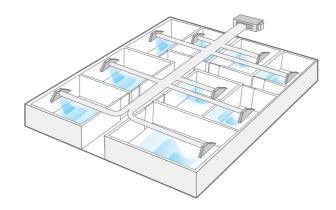
Example of EPS Pollution case.

Today's air conditioners all generally provide fast cooling and energy saving features, as well as the ability to filter bacteria, dust and mold for purified air. However, how hygienic is the inside of the air conditioner? If the inside of the air conditioner is contaminated, what can you do?

Antimicrobial treatment on \*EPS (Cabinet, Drain Pan, Air Guide, Insulator, Supporter) for Air Conditioners is the first applied technology in the world, which only LG has access to.

### **Multiple Room Operation**

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



### **Filter Alert**

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

#### Remain Time for Indoor Filter Cleaning + Alarm





Remain time for indoor filter cleaning 2,400hr.



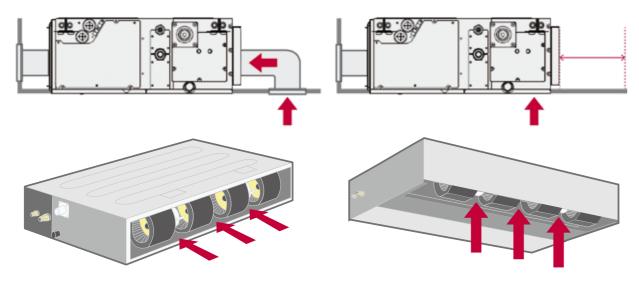
Remain time for indoor filter cleaning 1,729hr.

### **Flexible Installation**

(Low Static Duct Slim Only)

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

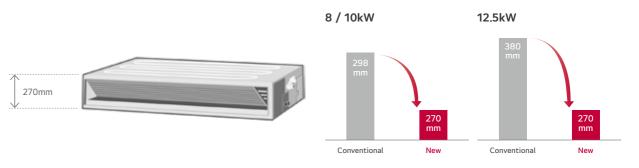
#### Air intake at the rear or bottom



### **Minimized Height**

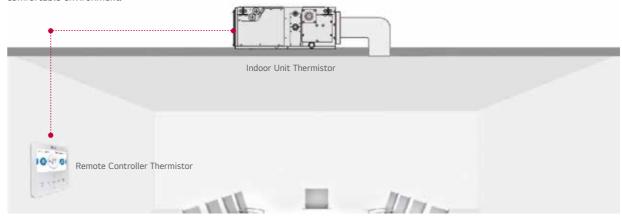
(For Mid Static Duct)

Mid Static Ducts provide the ideal solution for installations in limited spaces.



### **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.

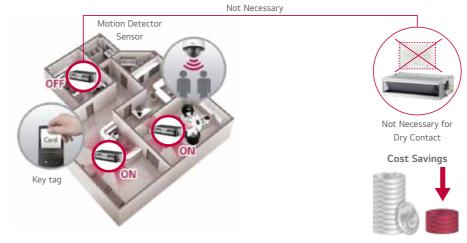


## 1 Point External Input

(On / Off Control)

The indoor unit can be controlled by external devices without dry contact, saving customers on the cost of installation.

### Connection between an indoor unit and external devices directly



### ARNU07GM1A4 / ARNU09GM1A4 ARNU12GM1A4 / ARNU15GM1A4 ARNU18GM1A4 / ARNU24GM1A4



	MODEL	UNIT	ARNU07GM1A4	ARNU09GM1A4	ARNU12GM1A4	ARNU15GM1A4	ARNU18GM1A4	ARNU24GM1A4
Cooling Capa	city	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating Capa	city	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power Input (H / M / L)	Nominal	W	39 / 30 / 25	40 / 32 / 26	46 / 38 / 31	67 / 53 / 46	85 / 63 / 55	91 / 74 / 58
Dimensions	Body	mm	900 x 270 x 700	900 x 270 x 700				
(W x H x D)	Shipping	mm	1,100 x 338 x 773	1,100 x 338 x 773				
	Туре		Sirocco Fan	Sirocco Fan				
	Motor Output x Number	W x No.	136 x 1	136 x 1				
	Air Flow Rate (H / M / L)	m³/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
Fan	External Static Pressure (High Mode)	mmAq (Pa)	6 (59)	6 (59)	6 (59)	6 (59)	6 (59)	6 (59)
	Air Flow Rate (H / M / L) (Standard Mode)	m³/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 (Standard Mode)	mmAq (Pa)	2.5 (25)	2.5 (25)	2.5 (25)	2.5 (25)	2.5 (25)	2.5 (25)
	Motor Type		BLDC	BLDC	BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter				
	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø9.52 (3/8)				
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø15.88 (5/8)				
Connections	Drain Pipe (Internal Dia.)	mm (inch)	25 (1)	25 (1)	Ø25 (1)	Ø25 (1)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	25.0	25.0	25.0	25.0	25.0	25.9
Sound Pressu	re Levels (H / M / L)	dB(A)	26 / 24 / 23	27 / 25 / 23	27 / 25 / 23	30 / 27 / 23	31 / 28 / 25	32 / 29 / 26
Sound Power	Levels (H / M / L)	dB(A)	55 / 54 / 51	55 / 54 / 52	56 / 54 / 52	59 / 57 / 55	59 / 57 / 55	59 / 58 / 56
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0~1.5 x 2C				

Note:

1. Performance tested under EN14511
2. 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
3. Due to our policy of innovation, some specifications may be changed without notification

### Accessories

CHASSIS	ARNU07GM1A4 ARNU09GM1A4 ARNU12GM1A4 ARNU15GM1A4 ARNU18GM1A4 ARNU24GM1A4					
Drain Pump	0					
Cassette Cover	-					
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDRNV1S (R32)					
EEV Kit	PRGK024A0 (~5.6kW)					
Multi-tenant Power Module	PINPMB001					
Robot Cleaner	-					
Pre Filter (Washable)	0					
Ion Generator	-					
CO <sub>2</sub> Sensor	-					
Ventilation Kit	-					
IR Receiver	PWLRVN000					
Zone Controller	ABZCA					
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)					
External Input (1 point)	0					
Wi-Fi	PWFMDD200					

※ ○ : Applied, - : Not applied Option : Refer to model name in table

### ARNU28GM2A4 / ARNU36GM2A4 ARNU42GM2A4 / ARNU48GM3A4 ARNU54GM3A4



	MODEL	UNIT	ARNU28GM2A4	ARNU36GM2A4	ARNU42GM2A4	ARNU48GM3A4	ARNU54GM3A4
Cooling Capac	city	kW	8.2	10.6	12.3	14.1	15.8
Heating Capa	city	kW	9.2	11.9	13.8	15.9	18.0
Power Input (H / M / L)	Nominal	W	123 / 81 / 57	184 / 123 / 81	231 / 162 / 111	172 / 105 / 65	260 / 215 / 172
Dimensions	Body	mm	1,250 x 270 x 700	1,250 x 270 x 700	1,250 x 270 x 700	1,250 x 360 x 700	1,250 x 360 x 700
(W x H x D)	Shipping	mm	1,450 x 338 x 773	1,450 x 338 x 773	1,450 x 338 x 773	1,450 x 428 x 773	1,450 x 428 x 773
	Туре		Sirocco Fan				
	Motor Output x Number	W x No.	350 x 1	350 x 1	350 x 1	400 x 1	400 x 1
	Air Flow Rate (H / M / L)	m³/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
Fan	External Static Pressure (High Mode)	mmAq (Pa)	6 (59)	6 (59)	6 (59)	6 (59)	6 (59)
	Air Flow Rate (H / M / L) (Standard Mode)	m³/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
	External Static Pressure (Standard Mode)	mmAq (Pa)	5 (49)	5 (49)	5 (49)	5 (49)	5 (49)
	Motor Type		BLDC	BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter				
	Liquid Side	mm (inch)	Ø9.52 (3/8)				
Pipe Connections	Gas Side	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø19.05 (3/4)
	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)				
Weight	Body	kg	36.0	36.0	37.2	42.2	42.2
Sound Pressu	re Levels (H / M / L)	dB(A)	38 / 36 / 35	40 / 38 / 36	42 / 41 / 39	41 / 38 / 37	42 / 41 / 40
Sound Power	Levels (H / M / L)	dB(A)	59 / 57 / 55	60 / 59 / 57	62 / 61 / 60	63 / 60 / 59	65 / 64 / 62
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm²	1.0 ~ 1.5 x 2C				

Note:

1. Performance tested under EN14511

2. 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

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

#### Accessories

CHASSIS	ARNU28GM2A4	ARNU36GM2A4	ARNU42GM2A4	ARNU48GM3A4	ARNU54GM3A4	
Drain Pump			0			
Cassette Cover	-					
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDRNV1S (R32)					
EEV Kit			-			
Multi-tenant Power Module			PINPMB001			
Robot Cleaner						
Pre Filter (Washable)			0			
Ion Generator			-			
CO <sub>2</sub> Sensor			-			
Ventilation Kit			-			
IR Receiver			PWLRVN000			
Zone Controller			ABZCA			
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)					
External Input (1 point)	0					
Wi-Fi			PWFMDD200			

※ ○ : Applied, - : Not applied Option : Refer to model name in table

### ARNU05GL4G4 / ARNU07GL4G4 ARNU09GL4G4 / ARNU12GL5G4



	MODEL	UNIT	ARNU05GL4G4	ARNU07GL4G4	ARNU09GL4G4	ARNU12GL5G4
Cooling Capac	city	kW	1.8	2.2	2.8	3.6
Heating Capa	city	kW	2.2	2.5	3.2	4
Power Input (H / M / L)	Nominal	W	15 / 13 / 11	28 / 24 / 21	28 / 24 / 21	43 / 38 / 35
Dimensions	Body	mm	700 x 190 x 460	700 x 190 x 460	700 x 190 x 460	900 x 190 x 460
(W x H x D)	Shipping	mm	925 x 255 x 561	925 x 255 x 561	925 x 255 x 561	1,125 x 255 x 561
	Туре		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output x Number	W x No.	19 x 1	19 x 1	19 x 1	19 x 1+5x 1
	Air Flow Rate (H / M / L) (High Mode-Factory Set)	m³/min	7.0 / 6.5 / 5.5	7.5 / 6.5 / 5.5	9.0 / 7.0 / 5.5	10.0 / 8.5 / 7.0
Fan	External Static Pressure (High Mode)	mmAq (Pa)	1 (10)	1 (10)	1 (10)	1 (10)
	Air Flow Rate (H / M / L) (Standard Mode)	m³/min	7.0 / 6.5 / 5.5	7.5 / 6.5 / 5.5	9.0 / 7.0 / 5.5	10.0 / 8.5 / 7.0
	External Static Pressure (Standard Mode)	mmAq (Pa)	0 (0)	0 (0)	0 (0)	0 (0)
	Motor Type		BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter	Pre Filter	Pre Filter
	Liquid Side	mm (inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)
Pipe Connections	Gas Side	mm (inch)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)
	Drain Pipe (Internal Dia.)	mm (inch)	Ø25.4 (1)	Ø25.4 (1)	Ø25.4 (1)	Ø25.4 (1)
Weight	Body	kg	14.6	14.6	14.6	20
Sound Pressu	re Levels (H / M / L)	dB(A)	25 / 24 / 22	26 / 24 / 22	28 / 25 / 22	29 / 27 / 25
Sound Power	Levels (H / M / L)	dB(A)	32.5 / 31.4 / 29.6	34 / 31.4 / 29.6	36.1 / 32.5 / 29.6	35.1 / 32.7 / 30.7
Power Supply		V / Ø / Hz	220-230-240 / 1 / 50-60	220-230-240 / 1 / 50-60	220-230-240 / 1 / 50-60	220-230-240 / 1 / 50-6
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

- Note:

  1. Performance tested under EN14511

  2. 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

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

#### Accessories

CHASSIS	ARNU05GL4G4	ARNU07GL4G4	ARNU09GL4G4	ARNU12GL5G4			
Drain Pump			)				
Cassette Cover		-					
Refrigerant Leak Detector		PRLDNVS0 (R410A	), PLDRNV1S (R32)				
EEV Kit		PRGK024A0 (ARI	NU**GL4G4 Only)				
Multi-tenant Power Module		PINPN	1B001				
Robot Cleaner							
Pre Filter (Washable)							
Ion Generator							
CO <sub>2</sub> Sensor							
Ventilation Kit							
IR Receiver		PWLR	/N000				
Zone Controller							
Dry Contact (with additional accessory)		PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)					
External Input (1 point)		0					
Wi-Fi		PWFMDD200					

<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table

ARNU76GB8A4 / ARNU96GB8A4

	MODEL	UNIT	ARNU76GB8A4	ARNU96GB8A4
Cooling Capac	city	kW	22.4	28.0
Heating Capa	city	kW	25.2	31.5
Power Input (H / M / L)			765 / 500 / 500	800 / 750 / 750
Dimensions	Body	mm	1,562 x 460 x 688	1,562 x 460 x 688
(W x H x D)	Shipping	mm	1,806 x 537 x 825	1,806 x 537 x 825
	Туре		Sirocco Fan	Sirocco Fan
	Motor Output x Number	W x No.	375 x 2	375 x 2
	Air Flow Rate (H / M / L) (High Mode-Factory Set)	m³/min	60.0 / 50.0 / 50.0	72.0 / 64.0 / 64.0
Fan	External Static Pressure (High Mode)	mmAq (Pa)	22 (216)	22 (216)
	Air Flow Rate (H / M / L) (Standard Mode)	m³/min	64.0 / 50.0 / 50.0	76.0 / 64.0 / 64.0
	External Static Pressure (Standard Mode)	mmAq (Pa)	15 (147)	15 (147)
	Motor Type		BLDC	BLDC
Air Filter			Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	Ø19.05 (3/4)	Ø22.2 (7/8)
	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	87.0	87.0
Sound Pressu	re Levels (H / M / L)	dB(A)	45 / 41 / 40	47 / 42 / 41
Sound Power	Levels (H / M / L)	dB(A)	67 / 62 / 60	68 / 64 / 62
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm²	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

Note:
1. Performance tested under EN14511
2. Capacities are based on the following conditions
- Cooling: Indoor temp. 27℃ (80.6°F) DB / 19℃ (66.2°F) WB, Outdoor temp. 35℃ (95°F) DB / 24℃ (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating: Indoor temp. 20℃ (68°F) DB / 15℃ (59°F) WB, Outdoor temp. 7℃ (44.6°F) DB / 6℃ (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
3. Due to our policy of innovation, some specifications may be changed without notification

### Accessories

CHASSIS	ARNU76GB8A4	ARNU96GB8A4		
Drain Pump				
Cassette Cover	-	-		
Refrigerant Leak Detector	PRLDNVS0 (R410A	), PLDRNV1S (R32)		
EEV Kit				
Multi-tenant Power Module	PINPN	ИB001		
Robot Cleaner	-			
Pre Filter (Washable)				
Ion Generator	-			
CO <sub>2</sub> Sensor	-	-		
Ventilation Kit	-	-		
IR Receiver	PWLR	VN000		
Zone Controller	ABZ			
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)			
External Input (1 point)	0			
Wi-Fi	PWFMI	DD200		

※ ○ : Applied, - : Not applied Option : Refer to model name in table

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### ARNU15GL5G4 / ARNU18GL5G4 ARNU21GL6G4 / ARNU24GL6G4



	MODEL	UNIT	ARNU15GL5G4	ARNU18GL5G4	ARNU21GL6G4	ARNU24GL6G4
Cooling Capac	city	kW	4.5	5.6	6.3	7.1
Heating Capa	city	kW	5	6.3	7.1	8
Power Input (H / M / L)	Nominal	W	54 / 45 / 38	57 / 39 / 30	65 / 50 / 42	81 / 59 / 43
Dimensions	Body	mm	900 x 190 x 460	900 x 190 x 460	1,100 x 190 x 460	1,100 x 190 x 460
(W x H x D)	Shipping	mm	1,125 x 255 x 561	1,125 x 255 x 561	1,325 x 255 x 561	1,325 x 255 x 561
	Туре		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output x Number	W x No.	19 x 1 + 5 x 1	19 x 1 + 5 x 1	19 x 2	19 x 2
	Air Flow Rate (H / M / L) (High Mode-Factory Set)	m³/min	12.5 / 10.0 / 8.5	15.0 / 12.5 / 10.0	17.5 / 14.0 / 12.0	20.0 / 16.0 / 12.0
Fan	External Static Pressure (High Mode)	mmAq (Pa)	1 (10)	1 (10)	1 (10)	1 (10)
	Air Flow Rate (H / M / L) (Standard Mode)	m³/min	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 (Standard Mode)	mmAq (Pa)	0 (0)	0 (0)	0 (0)	0 (0)
	Motor Type		BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter	Pre Filter	Pre Filter
	Liquid Side	mm (inch)	6.35 (1/4)	6.35 (1/4)	9.52 (3/8)	9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	12,7 (1/2)	12.7 (1/2)	15.88 (5/8)	15.88 (5/8)
	Drain Pipe (Internal Dia.)	mm (inch)	Ø25.4 (1)	Ø25.4 (1)	Ø25.4 (1)	Ø25.4 (1)
Weight	Body	kg	20	20	22	22
Sound Pressu	re Levels (H / M / L)	dB(A)	32 / 29 / 27	35 / 32 / 29	35 / 30 / 29	36 / 33 / 29
Sound Power	Levels (H / M / L)	dB(A)	38.4 / 35.1 / 32.7	42.1 / 38.4 / 35.1	42.5 / 38.3 / 36.0	45.0 / 40.7 / 36.0
Power Supply		V / Ø / Hz	220-230-240 / 1 / 50-60	220-230-240 / 1 / 50-60	220-230-240 / 1 / 50-60	220-230-240 / 1 / 50-60
Transmission	Cable	mm²	1.0 ~ 1.5 x 2C			

- 1. Performance tested under EN14511
  2. 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
  3. Due to our policy of innovation, some specifications may be changed without notification

### Accessories

CHASSIS	ARNU15GL5G4 ARNU18GL5G4 ARNU21GL6G4 ARNU24GL6G4				
Drain Pump	0				
Cassette Cover	-				
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDRNV1S (R32)				
EEV Kit	-				
Multi-tenant Power Module	PINPMB001				
Robot Cleaner	-				
Pre Filter (Washable)	0				
Ion Generator	-				
CO <sub>2</sub> Sensor	-				
Ventilation Kit	-				
IR Receiver	PWLRVN000				
Zone Controller	-				
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)				
External Input (1 point)	0				
Wi-Fi	PWFMDD200				

### ARNU07GM2A4 / ARNU09GM2A4 ARNU12GM2A4 / ARNU15GM2A4 ARNU18GM3A4



	MODEL	UNIT	ARNU07GM2A4	ARNU09GM2A4	ARNU12GM2A4	ARNU15GM2A4	ARNU18GM3A4
Cooling Capac	city	kW	2.2	2.8	3.6	4.5	5.6
Heating Capa	city	kW	2.5	3.2	4.0	5.0	6.3
Power Input (H / M / L)		W	32 / 29 / 27	32 / 29 / 27	33 / 30 / 28	33 / 30 / 28	97 / 70 / 51
Dimensions (W x H x D)	Body	mm	1,250 × 270 × 700	1,250 × 270 × 700	1,250 × 270 × 700	1,250 × 270 × 700	1,250 × 360 × 700
	Туре		Sirocco Fan				
	Motor Output x Number	W x No.	350 x 1	350 x 1	350 x 1	350 x 1	500 x 1
-	Air Flow Rate (H / M / L) (High static Mode - factory set)	m³/min	13.3 / 9.4 / 6.8	13.3 / 9.4 / 6.8	14.8 / 10.2 / 7.4	14.8 / 10.2 / 7.4	32.7 / 26.7 / 23.0
Fan	External Static Pressure	mmAq (Pa)	6 (59)	6 (59)	6 (59)	6 (59)	6 (59)
	Air Flow Rate (H / M / L) (Standard Mode)	m³/min	13.3 / 9.4 / 6.8	13.3 / 9.4 / 6.8	14.8 / 10.2 / 7.4	14.8 / 10.2 / 7.4	32.7 / 26.7 / 23.0
	External Static Pressure	mmAq (Pa)	5 (49)	5 (49)	5 (49)	5 (49)	5 (49)
	Motor type		BLDC	BLDC	BLDC	BLDC	BLDC
Air Filter			-	-	-	-	-
	Liquid Side	mm (inch)	Ø9.52 (3/8)				
Pipe Connections	Gas Side	mm (inch)	Ø15.88 (5/8)				
Connections	Drain Pipe (Internal Dia.)	mm (inch)	25 (1)	25 (1)	25 (1)	25 (1)	25 (1)
Net Weight		kg	36	36	36	36	42.2
Sound Pressu	re Levels (H / M / L)	dB(A)	33 / 33 / 32	33 / 33 / 32	34 / 33 / 32	34 / 33 / 32	38 / 36 / 34
Sound Power	Levels (H / M / L)	dB(A)	52 / 52 / 52	52 / 52 / 52	53 / 52 / 52	53 / 52 / 52	52 / 51 / 50
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm²	1.0 ~ 1.5 x 2C				

- Note:

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

  2. Wiring cable size must comply with the applicable local and national code. And "Electric characteristics" chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.

  3. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard. Therefore, these values can be increased owing to ambient conditions during operation.

  4. Capacities are net capacities and based on the following conditions. Refer to the Outdoor Unit Specifications for calculating the real capacity.

  4. Capacities are net capacities and based on the following conditions. Refer to the Outdoor Unit Specifications for calculating the real capacity.

  5. Cooling: Indoor Ambient Temp. 27°CDB / 15°CWB, Outdoor Ambient Temp. 35°CDB / 24°CWB

  6. Heteronnected Pipe is standard length and difference of Elevation (Outdoor Indoor Unit) is Zero.

  5. Sound levels are measured at SOPa External Static Pressure and setting value.

#### Accessories

CHASSIS	ARNU07GM2A4	ARNU09GM2A4	ARNU12GM2A4	ARNU15GM2A4	ARNU18GM3A4
Drain Pump		0			
Cassette Cover		-			
Refrigerant Leak Detector		PRLDN\	/S0 (R410A), PLDRNV	1S (R32)	
EEV Kit			-		
Multi-tenant Power Module		PINPMB001			
Robot Cleaner		-			
Pre Filter (Washable)		0			
Ion Generator		-			
CO <sub>2</sub> Sensor			-		
Ventilation Kit			-		
IR Receiver			PWLRVN000		
Zone Controller			ABZCA		
Dry Contact (with additional accessory)		PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)			
External Input (1 point)		0			
Wi-Fi			PWFMDD200		

<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table

<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table

# FR ES I AIR INTAKE

### ARNU24GM3A4 / ARNU28GM3A4 ARNU36GB8A4 / ARNU42GB8A4 ARNU48GB8A4



	MODEL	UNIT	ARNU24GM3A4	ARNU28GM3A4	ARNU36GB8A4	ARNU42GB8A4	ARNU48GB8A4
Cooling Capac	city	kW	7.1	8.2	10.6	12.3	14.1
Heating Capa	city	kW	8.0	9.2	11.9	13.8	15.9
Power Input (H / M / L)		W	109 / 83 / 60	109 / 83 / 60	420 / 403 / 478	528 / 497 / 465	538 / 505 / 482
Dimensions (W x H x D)	Body	mm	1,250 × 360 × 700	1,250 × 360 × 700	1,562 x 460 x 688	1,562 x 460 x 688	1,562 x 460 x 688
	Туре		Sirocco Fan				
	Motor Output x Number	W x No.	500 x 1	500 x 1	375 x 2	375 x 2	375 x 2
	Air Flow Rate (H / M / L) (High static Mode - factory set)	m³/min	35.5 / 30.6 / 26.2	35.5 / 30.6 / 26.2	49.0 / 37.3 / 30.2	54.2 / 41.3 / 31.8	57.2 / 43.0 / 34.0
Fan	External Static Pressure	mmAq (Pa)	6 (59)	6 (59)	18 (176)	18 (176)	18 (176)
	Air Flow Rate (H / M / L) (Standard Mode)	m³/min	35.5 / 30.6 / 26.2	35.5 / 30.6 / 26.2	53.7 / 49.5 / 43.9	55.6 / 50.6 / 45.0	58.0 / 52.3 / 47.3
	External Static Pressure	mmAq (Pa)	5 (49)	5 (49)	9 (88)	9 (88)	9 (88)
	Motor type		BLDC	BLDC	BLDC	BLDC	BLDC
Air Filter			-	-	-	-	-
	Liquid Side	mm (inch)	Ø9.52 (3/8)				
Pipe Connections	Gas Side	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	25 (1)	25 (1)	25 (1)	25 (1)	25 (1)
Net Weight		kg	42.2	42.2	87	87	87
Sound Pressu	re Levels (H / M / L)	dB(A)	39 / 37 / 35	39 / 37 / 35	46 / 45 / 42	47 / 46 / 43	47 / 46 / 44
Sound Power	Levels (H / M / L)	dB(A)	53 / 52 / 51	53 / 52 / 51	65 / 64 / 62	66 / 65 / 63	66 / 65 / 64
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm²	1.0 ~ 1.5 x 2C				

- Note:

  1. Due to our policy of innovation some specifications may be changed without notification.
- 2. Wiring cable size must comply with the applicable local and national code. And "Electric characteristics" chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.

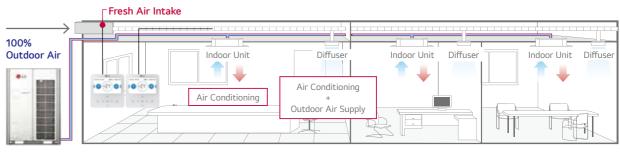
  3. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741
- Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Sound power level is measured on the rated and the rate of the result o

#### Accessories

CHASSIS	ARNU24GM3A4	ARNU28GM3A4	ARNU36GB8A4	ARNU42GB8A4	ARNU48GB8A4
Drain Pump			0		
Cassette Cover			-		
Refrigerant Leak Detector		PRLDNV	'S0 (R410A), PLDRNV	1S (R32)	
EEV Kit			-		
Multi-tenant Power Module	PINPMB001				
Robot Cleaner	·				
Pre Filter (Washable)	0				
Ion Generator	-				
CO <sub>2</sub> Sensor			-		
Ventilation Kit			-		
IR Receiver			PWLRVN000		
Zone Controller			ABZCA		
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)				
External Input (1 point)			0		
Wi-Fi			PWFMDD200		

### Fresh Outdoor Air Supply

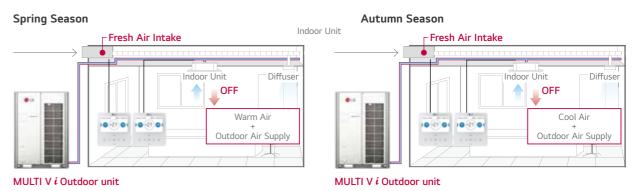
The LG Fresh Air Intake Unit (FAU) is the alternative solution for ventilation, which supplies the fresh outdoor air indoors as well as and simultaneously cools and heats the air inside. It means the indoor space can have positive air pressure consistently, which can block cold, hot or contaminated air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



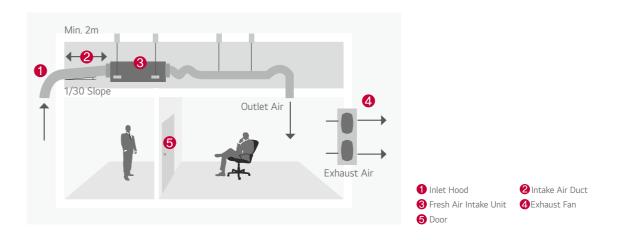
MULTI V i Outdoor unit

### **Economic Operation**

Natural outdoor air is utilized as seasons change for cost efficiency.

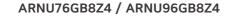


### **Installation Scene**



<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table

NOTE







	MODEL	UNIT	ARNU76GB8Z4	ARNU96GB8Z4	
		kW	22.4	28.0	
Heating Capacity		kW	21.4	26.7	
Power Input (H / M / L) Nominal		W	230 / 200 / 200	360 / 230 / 230	
Dimensions Body		mm	1,562 x 460 x 688	1,562 x 460 x 688	
(W x H x D)	Shipping	mm	1,806 x 537 x 825	1,806 x 537 x 825	
	Туре		Sirocco Fan	Sirocco Fan	
	Motor Output x Number	W x No.	375 x 1	375 x 1	
Fan	Air Flow Rate (H / M / L) (High Mode-Factory Set)	m³/min	23.7 / 13.2 / 13.2	35.7 / 23.7 / 23.7	
	External Static Pressure	mmAq (Pa)	22 (216)	22 (216)	
	Motor Type		BLDC	BLDC	
Air Filter			Long Life Filter	Long Life Filter	
ъ.	Liquid Side	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	
Pipe Connections	Gas Side	mm (inch)	Ø19.05 (3/4)	Ø22.2 (7/8)	
	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)	
Weight	Body	kg	73.0	73.0	
Sound Pressu	re Levels (H / M / L)	dB(A)	45 / 43 / 43	47 / 45 / 45	
Sound Power	Levels (H / M / L)	dB(A)	70 / 67 / 67	72 / 70 / 70	
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	

- Note: 1. Performance tested under EN14511
  2. Capacities are based on the following conditions
   Cooling: Indoor temp. 27℃ (80.6°P) DB / 19℃ (66.2°F) WB, Outdoor temp. 35℃ (95°F) DB / 24℃ (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
   Heating: Indoor temp. 20℃ (68°F) DB / 15℃ (59°F) WB, Outdoor temp. 7℃ (44.6°F) DB / 6℃ (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
  3. Due to our policy of innovation, some specifications may be changed without notification

### **▲** CAUTION

1	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 capacity of fresh air intake 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

CHASSIS	ARNU76GB8Z4	ARNU96GB8Z4
Drain Pump	C	)
Cassette Cover	-	
Refrigerant Leak Detector	PRLDNVS0 (R410A)	), PLDRNV1S (R32)
EEV Kit	-	
Multi-tenant Power Module	PINPM	IB001
Robot Cleaner	-	
Pre Filter (Washable)	C	)
Ion Generator	-	
CO <sub>2</sub> Sensor	-	
Ventilation Kit	-	
IR Receiver	PWLRV	/N000
Zone Controller	-	
Dry Contact (with additional accessory)	PDRYCB000 (1 point o PDRYCB400 (2 points inpu	
External Input (1 point)	C	)
Wi-Fi	PWFME	DD200

※ ○ : Applied, - : Not applied Option : Refer to model name in table





SMART



### Features & Benefits

- Modern design with V-shape and black vane
- Powerful air speed and volume can reach up to 15m

### **Key Applications**

- Retail
- Restaurant
- Shop

	CEILINGS	CEILING & FLOOR CONVERTIBLE	CEILING SUSPENDED
Smart	Wi-Fi	0	0
Fast Cooling & Heating	Jet Cool	0	0
	Sleep mode	0	0
	Timer (On / Off)	0	0
Comfort	Timer (Weekly)	0	0
	Two thermistor control	0	0
	Group control	0	0

※ ○: Applied, - : Not applied

### Wi-Fi Control

Access your air conditioner anytime and from anywhere.

#### ThinQ

Search "ThinQ" on Google market or the App Store to download the app.



#### Easy Registration and Log-in

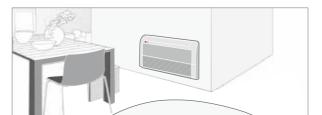
Follow the easy set-up steps that will activate ThinQ's impressive



\*\* For our policy of continuous ThinQ App improvement, specification, design and features are subject to change without prior notice.

### **Flexible**

The ceiling and floor models can be installed either on the ceiling or on the floor.





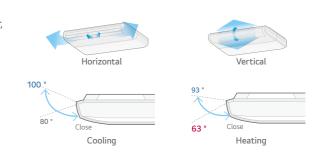
# **Filter Change Alarm**

The filter change alarm informs you when the unit has been operating for 2,400 hours.



### **Air Flow Direction Control**

Vertical air flow direction can be adjusted using remote controller, and horizontal air flow direction can be adjusted manually.



NOTE

# **Differentiated Design**

Modern, elegant design with V-shape and black vane is appropriate for any commercial space. It received the iF Design Award.



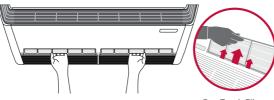
# **Powerful Cooling & Heating**

High ceiling mode provides powerful cooling and heating up to 4.2m in height from floor, 15m away from ceiling.



### One Touch & 2 Piece Filter

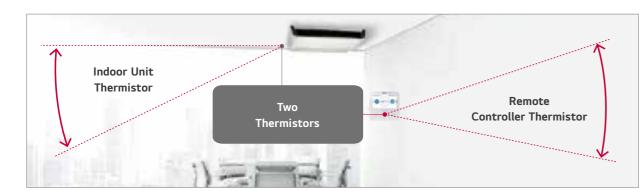
Easy in / out filter structure as well as a simplified two-piece filter, which slides out for easy cleaning and maintenance.



ne Touch Filter

### **Two Thermistors Control**

Users can purchase a wired remote controller that includes a second thermistor, allowing for temperature checks from multiple locations.



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#### ARNU09GVEA4 / ARNU12GVEA4



	MODEL	UNIT	ARNU09GVEA4	ARNU12GVEA4	
Cooling Capacity		kW	2.8	3.6	
Heating Capacity		kW	3.2	4.0	
Power Input (H / M / L) Nominal		W	19 / 15 / 11	28 / 19 / 15	
Exterior Color			Morning Fog	Morning Fog	
RAL Code			RAL 9001	RAL 9001	
Dimensions	Body	mm	900 x 490 x 200	900 x 490 x 200	
(W x H x D)	Shipping	mm	975 x 562 x 279	975 x 562 x 279	
	Туре		Cross Flow Fan	Cross Flow Fan	
	Motor Output x Number	W x No.	27 x 1	27 x 1	
Fan	Air Flow Rate (H / M / L)	m³/min	7.6 / 6.9 / 6.2	9.2 / 7.6 / 6.9	
		cfm	268 / 244 / 219	325 / 268 / 244	
	Motor Type		BLDC	BLDC	
Air Filter			Pre Filter	Pre Filter	
ъ.	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø6.35 (1/4)	
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)	
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø16 (5/8)	Ø16 (5/8)	
Weight	Body	kg	13.3	13.3	
Sound Pressu	re Levels (H / M / L)	dB(A)	36 / 32 / 28	38 / 36 / 30	
Sound Power	Levels (H / M / L)	dB(A)	55 / 51 / 45	56 / 55 / 49	
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	
Transmission	Cable	mm² x cores	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C	

Note: 1. Performance tested under EN14511
2. Capacities are based on the following conditions
- Cooling: Indoor temp. 27℃ (80.6°) DB / 19℃ (66.2°F) WB, Outdoor temp. 35℃ (95°F) DB / 24℃ (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating: Indoor temp. 20℃ (68°F) DB / 15℃ (59°F) WB, Outdoor temp. 7℃ (44.6°F) DB / 6℃ (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero
3. Due to our policy of innovation, some specifications may be changed without notification

#### Accessories

CHASSIS	ARNU09GVEA4	ARNU12GVEA4		
Drain Pump	-			
Refrigerant Leak DetEctor	PRLDNVSO (R410A), PLDRNV1S (R32)			
EEV Kit	PRGKO	24A0		
Multi-tenant Power Module	PINPMB001			
Plasma Kit	·			
Robot Cleaner				
Pre Filter (Washable)	0			
Ion Generator	-			
CO <sub>2</sub> Sensor	-			
Ventilation Kit	-			
IR Receiver	-			
Zone Controller	-			
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)			
External Input (1 point)	0			
Wi-Fi	PWFMD	D200 <sup>1)</sup>		

<sup>※ ○ :</sup> Applied, - : Not Applied Option: Refer to model name in table

### ARNU18GV1A4 / ARNU24GV1A4 ARNU36GV2A4 / ARNU48GV2A4





	MODEL	UNIT	ARNU18GV1A4	ARNU24GV1A4	ARNU36GV2A4	ARNU48GV2A4
Cooling Capac	city	kW	5.6	7.1	10.6	14.1
Heating Capa	city	kW	6.3	8.0	11.9	15.9
Power Input (H / M / L)	Nominal	W	23 / 20 / 17	25 / 21 / 17	84 / 77 / 66	91 / 79 / 66
Exterior Color	r		Morning Fog	Morning Fog	Morning Fog	Morning Fog
RAL Code			RAL 9001	RAL 9001	RAL 9001	RAL 9001
Dimensions	Body	mm	1,200 x 235 x 690	1,200 x 235 x 690	1,600 x 235 x 690	1,600 x 235 x 690
(W x H x D)	Shipping	mm	1,315 x 320 x 772	1,315 x 320 x 772	1,715 x 320 x 772	1,715 x 320 x 772
	Туре		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
r	Motor Output x Number	W x No.	85.9 x 1	85.9 x 1	125 x 1	125 x 1
Fan	Air Flow Rate (H / M / L)	m³/min	13.5 / 12.5 / 12.0	14.0 / 13.0 / 12.0	27.0 / 24.0 / 20.0	29.0 / 24.0 / 20.0
	Motor Type		BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter	Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø16 (5/8)	Ø16 (5/8)	Ø16 (5/8)	Ø16 (5/8)
Weight	Body	kg	29.0	29.0	37.0	37.0
Sound Pressu	re Levels (H / M / L)	dB(A)	36 / 34 / 33	37 / 35 / 33	45 / 44 / 40.5	47 / 44 / 40.5
Sound Power	Levels (H / M / L)	dB(A)	61 / 59 / 56	62 / 59 / 56	68 / 66 / 64	68 / 67 / 66
Power Supply		V/Ø/Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm² x cores	1.0 ~ 1.5 × 2C			

Note: 1. Performance tested under EN14511
2. 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
3. Due to our policy of innovation, some specifications may be changed without notification

#### Accessories

CHASSIS	ARNU18GV1A4 ARNU24GV1A4 ARNU36GV2A4 ARNU48GV2A4				
Drain Pump	-				
Cassette Cover	-				
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDRNV1S (R32)				
EEV Kit	-				
Multi-tenant Power Module	PINPMB001				
Robot Cleaner	-				
Pre Filter (Washable)	0				
Ion Generator	-				
CO <sub>2</sub> Sensor	·				
Ventilation Kit	·				
IR Receiver	-				
Zone Controller	-				
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)				
External Input (1 point)	0				
Wi-Fi	PWFMDD200				

※ 〇 : Applied, - : Not Applied Option: Refer to model name in table



SMART



### Features & Benefits

#### 6 way flexible pining

· O way nexible piping	
• Cold draft window protectio	n
<ul> <li>Condensation protection</li> </ul>	

#### **Key Applications**

Residential building • Histo	orical build
------------------------------	--------------

• Hotel

FLO	OR STANDING	CONSOLE	FLOOR STANDING
Smart	Wi-Fi	0	0
Energy Efficiency	Jet Cool	-	0
Health	Ionizer	0	-
Fast Cooling & Heating Jet Cool		0	-
	Sleep Mode	0	0
	Timer (On / Off)	0	0
Comfort	Timer (Weekly)	0	0
	Two Thermistor Control	0	0
	Group Control	0	0

※ ○: Applied, - : Not applied

### Wi-Fi Control

Access your air conditioner anytime and from anywhere.

#### ThinQ

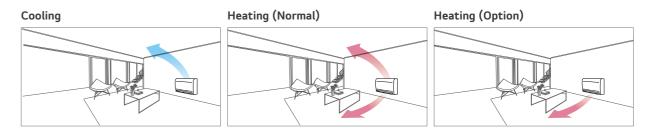
Search "ThinQ" on Google market or the App Store to download the app.



 $\ensuremath{\mathbb{X}}$  For our policy of continuous ThinQ App improvement, specification, design and features are subject to change without prior notice.

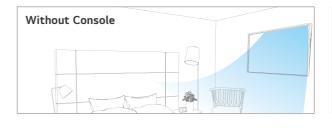
### **Air Flow Direction Change**

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.



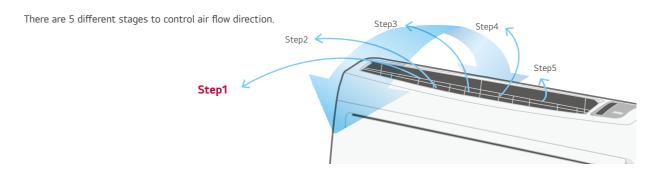
### **Cold Draft Protection**

The console protects cold draft from windows to provide comfortable environment.





# **5-Step Vane Control**

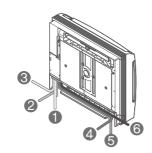


CONSOLE

### 6 Way Flexible Piping

It is possible to install and connect the outdoor unit in 6 different ways. (Right Side, Right Back, Right Floor, Left Side, Left Back, Left Floor)

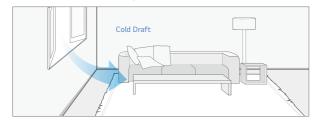




### **Protect Cold Draft**

The floor standing unit protects cold draft from coming from the window, preventing condensation.

#### Without Floor Standing

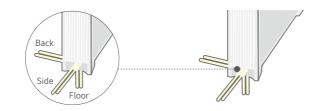






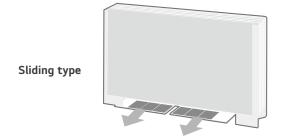
## 3 Way Flexible Piping

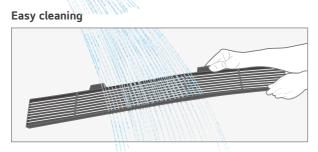
It is possible to install and connect the outdoor unit in 3 different ways. (Side, Back, Floor)

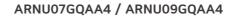


## **Sliding Type Filter**

Easy maintenance and extended product life with sliding type filter.









	MODEL	UNIT	ARNU07GQAA4	ARNU09GQAA4
Cooling Capacity k		kW	2.2	2.8
Heating Capa	city	kW	2,5	3.2
Power Input (H / M / L)	Nominal	W	15 / 12 / 10	15 / 12 / 10
Exterior Colo	r		Morning Fog	Morning Fog
RAL Code			RAL 9001	RAL 9001
Dimensions	Body	mm	700 x 600 x 210	700 x 600 x 210
(W x H x D)	Shipping	mm	775 x 662 x 284	775 x 662 x 284
	Туре		Turbo Fan	Turbo Fan
_	Motor Output x Number	W x No.	48 x 1	48 x 1
Fan	Air Flow Rate (H / M / L)	m³/min	6.7 / 5.9 / 4.8	6.7 / 5.9 / 4.8
	Motor Type		BLDC	BLDC
Air Filter			Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø6.35 (1/4)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø12 (15/32)	Ø12 (15/32)
Weight	Body	kg	14.0	14.0
Sound Pressu	re Levels (H / M / L)	dB(A)	37 / 34 / 28	37 / 34 / 28
Sound Power	Levels (H / M / L)	dB(A)	53 / 50 / 44	53 / 50 / 44
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

- Note:

  1. Performance tested under EN14511

  2. 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

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

### Accessories

CHASSIS	ARNU07GQAA4	ARNU09GQAA4		
Drain Pump	-			
Cassette Cover				
Refrigerant Leak Detector	PRLDNVS0 (R410A	), PLDRNV1S (R32)		
EEV Kit	PRGKO	024A0		
Multi-tenant Power Module	PINPN	MB001		
Robot Cleaner	-			
Pre Filter (Washable)	0			
Ion Generator	0			
CO <sub>2</sub> Sensor	-	-		
Ventilation Kit	-			
IR Receiver	-	-		
Zone Controller	-			
Dry Contact (with additional accessory)	PDRYCB000 (1 point of PDRYCB400 (2 points input			
External Input (1 point)				
Wi-Fi	PWFMI	DD200		

※ O : Applied, - : Not Applied Option: Refer to model name in table



	MODEL	UNIT	ARNU12GQAA4	ARNU15GQAA4
Cooling Capacity		kW	3.6	4.5
Heating Capa	city	kW	4.0	5.0
Power Input (H / M / L)	Nominal	W	18 / 15 / 13	24 / 19 / 17
Exterior Colo	r		Morning Fog	Morning Fog
RAL Code			RAL 9001	RAL 9001
Dimensions	Body	mm	700 x 600 x 210	700 x 600 x 210
$(W \times H \times D)$	Shipping	mm	775 x 662 x 284	775 x 662 x 284
	Туре		Turbo Fan	Turbo Fan
Fan	Motor Output x Number	W x No.	48 x 1	48 x 1
ran	Air Flow Rate (H / M / L)	m³/min	7.5 / 5.9 / 4.8	8.7 / 6.7 / 5.9
	Motor Type		BLDC	BLDC
Air Filter			Pre Filter	Pre Filter
р.	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø6.35 (1/4)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø12 (15/32)	Ø12 (15/32)
Weight	Body	kg	14.0	14.0
Sound Pressu	re Levels (H / M / L)	dB(A)	39 / 34 / 28	42 / 37 / 31
Sound Power	Levels (H / M / L)	dB(A)	56 / 50 / 44	58 / 53 / 50
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

Note:

1. Performance tested under EN14511

2. 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

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

### Accessories

CHASSIS	ARNU12GQAA4	ARNU15GQAA4		
Drain Pump	-	-		
Cassette Cover	-	-		
Refrigerant Leak Detector	PRLDNVS0 (R410A	), PLDRNV1S (R32)		
EEV Kit	PRGKO	024A0		
Multi-tenant Power Module	PINPM	/IB001		
Robot Cleaner	· ·			
Pre Filter (Washable)		0		
Ion Generator	0			
CO <sub>2</sub> Sensor	·			
Ventilation Kit	-			
IR Receiver	-	-		
Zone Controller	-			
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)			
External Input (1 point)	0			
Wi-Fi	PWFMI	DD200		

<sup>※ ○ :</sup> Applied, - : Not Applied Option: Refer to model name in table

ARNU07GCEA4 / ARNU09GCEA4 ARNU12GCEA4 / ARNU15GCEA4 ARNU18GCFA4 / ARNU24GCFA4



 $\ensuremath{\,\times\,}$  A : Floor Standing with case

	MODEL	UNIT	ARNU07GCEA4	ARNU09GCEA4	ARNU12GCEA4	ARNU15GCEA4	ARNU18GCFA4	ARNU24GCFA4
Cooling Capac	city	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating Capa	city	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power Input (H / M / L)	Nominal	W	24 / 17 / 14	30 / 24 / 17	36 / 30 / 24	44 / 35 / 28	54 / 41 / 29	84 / 54 / 41
Exterior Color	r		Morning Fog	Morning Fog				
RAL Code			RAL 9001	RAL 9001				
Dimensions	Body	mm	1,067 x 635 x 203	1,345 x 635 x 203	1,345 x 635 x 203			
$(W \times H \times D)$	Shipping	mm	1,154 x 705 x 289	1,432 x 705 x 289	1,432 x 705 x 289			
	Туре		Sirocco Fan	Sirocco Fan				
Fan	Motor Output x Number	W x No.	19 x 1, 5 x 1	19 x 2	19 x 2			
rdii	Air Flow Rate (H / M / L)	m³/min	8.5 / 7.5 / 6.5	9.5 / 8.5 / 7.5	10.5 / 9.5 / 8.5	11.5 / 10.0 / 9.5	16.0 / 14.0 / 12.0	18.0 / 16.0 / 14.0
	Motor Type		BLDC	BLDC	BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter				
n:	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø9.52 (3/8)				
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø15.88 (5/8)				
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø12 (15/32)	Ø12 (15/32)				
Weight	Body	kg	27.0	27.0	27.0	27.0	34.0	34.0
Sound Pressu	re Levels (H / M / L)	dB(A)	35 / 33 / 31	36 / 34 / 32	37 / 35 / 33	38 / 37 / 35	40 / 37 / 34	43 / 40 / 37
Sound Power	Levels (H / M / L)	dB(A)	52 / 47 / 43	54 / 51 / 47	54 / 51 / 50	55 / 54 / 51	57 / 54 / 50	61 / 57 / 54
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C				

Note:

1. Performance tested under EN14511

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

### Accessories

CHASSIS	ARNU07GCEA4 ARNU09GCEA4 ARNU12GCEA4 ARNU15GCEA4	ARNU18GCFA4 ARNU24GCFA4		
Drain Pump	<u>-</u>	-		
Cassette Cover	-	-		
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDRNV1S (R32)	PRLDNVSO (R410A), PLDRNV1S (R32)		
EEV Kit	PRGK024A0	-		
Multi-tenant Power Module	PINPMB001	PINPMB001		
Robot Cleaner	-	-		
Pre Filter (Washable)	0	0		
Ion Generator	-	-		
CO <sub>2</sub> Sensor	-	-		
Ventilation Kit	-	-		
IR Receiver	PWLRVN000	PWLRVN000		
Zone Controller	-	-		
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)			
External Input (1 point)	0			
Wi-Fi	PWFMDD200	PWFMDD200		

※ O : Applied, - : Not Applied Option: Refer to model name in table

FLOOR

STANDING (PAC)

### ARNU07GCEU4 / ARNU09GCEU4 ARNU12GCEU4 / ARNU15GCEU4 ARNU18GCFU4 / ARNU24GCFU4



W U : Floor Standing without case

	MODEL	UNIT	ARNU07GCEU4	ARNU09GCEU4	ARNU12GCEU4	ARNU15GCEU4	ARNU18GCFU4	ARNU24GCFU4
Cooling Capac	city	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating Capa	city	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power Input (H / M / L)	Nominal	W	24 / 17 / 14	30 / 24 / 17	36 / 30 / 24	44 / 35 / 28	54 / 41 / 29	84 / 54 / 41
Dimensions	Body	mm	978 x 639 x 190	1,256 x 639 x 190	1,256 x 639 x 190			
$(W \times H \times D)$	Shipping	mm	1,055 x 702 x 260	1,333 x 702 x 260	1,333 x 702 x 260			
	Туре		Sirocco Fan	Sirocco Fan				
Fan	Motor Output x Number	W x No.	19 x 1, 5 x 1	19 x 2	19 x 2			
rdii	Air Flow Rate (H / M / L)	m³/min	8.5 / 7.5 / 6.5	9.5 / 8.5 / 7.5	10.5 / 9.5 / 8.5	11.5 / 10.0 / 9.5	16.0 / 14.0 / 12.0	18.0 / 16.0 / 14.0
	Motor Type		BLDC	BLDC	BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter				
	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø9.52 (3/8)				
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	Ø15.88 (5/8)				
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø12 (15/32)	Ø12 (15/32)				
Weight	Body	kg	21.0	21.0	21.0	21.0	25.0	25.0
Sound Pressu	re Levels (H / M / L)	dB(A)	35 / 33 / 31	36 / 34 / 32	37 / 35 / 33	38 / 37 / 35	40 / 37 / 34	43 / 40 / 37
Sound Power Levels (H / M / L) dB(A)		52 / 47 / 43	54 / 51 / 47	54 / 51 / 50	55 / 54 / 51	59 / 57 / 53	63 / 59 / 57	
Power Supply V / Ø / Hz		220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	
Transmission	Cable	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C				

- Note:

  1. Performance tested under EN14511

  2. 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

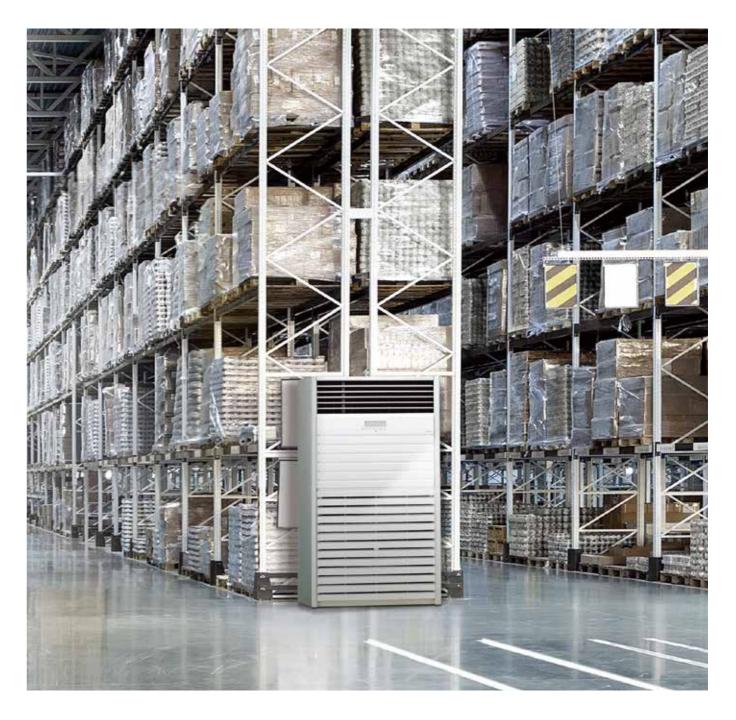
   Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero

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

### Accessories

CHASSIS	ARNU07GCEU4 ARNU09GCEU4 ARNU12GCEU4 ARNU15GCEU4	ARNU18GCFU4 ARNU24GCFU4		
Drain Pump	-	-		
Cassette Cover	-	-		
Refrigerant Leak Detector	PRLDNVSO (R410A), PLDRNV1S (R32)	PRLDNVS0 (R410A), PLDRNV1S (R32)		
EEV Kit	PRGK024A0	-		
Multi-tenant Power Module	PINPMB001	PINPMB001		
Robot Cleaner	-	-		
Pre Filter (Washable)	0	0		
Ion Generator	-	-		
CO <sub>2</sub> Sensor	-	-		
Ventilation Kit	-	-		
IR Receiver	PWLRVN000	PWLRVN000		
Zone Controller	-	-		
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320, PDRYCB400 (2 points input), PDRYCB500 (Modbus)			
External Input (1 point)	0			
Wi-Fi	PWFMDD200	PWFMDD200		

<sup>※ ○ :</sup> Applied, - : Not Applied Option: Refer to model name in table



#### Features & Benefits

• Powerful air speed and volume means the air flow can reach up to 30m away from the air conditioner

### **Key Applications**

 Factory Retail

 Office Restaurant

Shop

FLOOR S	TANDING (PAC)	FLOOR STANDING (PAC)
Smart	Wi-Fi*	0
Energy Efficiency	Jet Cool	0
Health	Ionizer	-
Fast Cooling & Heating	Jet Cool	0
	Sleep Mode	0
	Timer (On / Off)	0
Comfort	Timer (Weekly)	-
	Two Thermistor Control	0
	Group Control	0

<sup>※</sup> O: Applied, - : Not applied\* Extra module is necessary for Wi-fi (module: PWFMDD200)

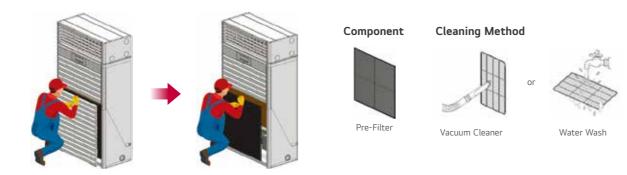
# **Airflow to Distant Spaces**

The new Floor Standing Unit can blow both cooled and heated air into a space as far as 30m away.



# **Easy Filter Cleaning**

Standing on the floor, customers can easily separate the filter from the indoor unit. They can also easily clean the filter with a vacuum cleaner or water.



\* You may need professional help to clean the filter.

# Wi-Fi Control with LG ThinQ

Customers can monitor and control the new Floor Standing Unit anytime, anywhere through LG ThinQ.



- \*\* The Wi-Fi modem is separately purchased as an accessory.\*\* The router and smart speakers are purchased separately.\*\* The Functions may vary depending on the indoor unit and region.

### ARNU48GPTA4 / ARNU96GPFA4



	MODEL	UNIT	ARNU48GPTA4	ARNU96GPFA4			
Cooling Capa	city	kW	14.1	28.0			
Heating Capa	city	kW	15.9	31.5			
Power Input	Cooling (SH / H / M / L)	W	260 / 190 / 140 / 110	400 / 280 / - / 180			
Power input	Heating (SH / H / M / L)	W	260 / 190 / 140 / 110	400 / 280 / - / 180			
FLA (Full Loa	d Ampere)	Α	1.3	2.3			
Casing			Galvanized	Steel Plate			
Dimensions (W×H×D)	Body	mm	590 × 1,840 × 440	1,050 × 1,880 × 495			
Coil	Rows × Columns ×FPI		3 ×38 ×19	3 ×40 ×19			
Con	Face Area	m <sup>2</sup>	0.39	0.77			
	Туре		Blower Fan	Blower Fan			
	Motor Output x Number	W	224 × 1	700 × 1			
Fan	Air Flow Rate (SH / H / M / L) (Standard Mode)	m³ / min	37 / 33 / 28 / 24	68 / 61 / - / 50			
	Drive		Direct				
	Motor Type		BLDC				
Temperature	Control		Microprocessor, Thermostat for cooling and heating				
Sound Absorb	ing Thermal Insullation Ma	aterial	Foamed Polystyrene				
Air Filter			-	-			
Safety Device			Fuse				
Di-	Liquid Side	mm (inch)	9.52 (3/8)	9.52 (3/8)			
Pipe Connections	Gas Side	mm (inch)	15.88 (5/8)	22.2 (7/8)			
	Drain(ID)	mm	19	22			
Net Weight		kg (lbs)	48 (105.8)	103 (227.0)			
Sound Pressu	Sound Pressure Level (SH / H / M / L)		54 / 51 / 49 / 45	60 / 57 / - / 53			
Power Supply		V / Ø / Hz	220 / 1 / 60	220 / 1 / 60			
i ower supply	Power Supply V		220-240 / 1 / 50	220-240 / 1 / 50			
Refrigerant C	ontrol		Ef	EV			
Communication	on Cable	mm² (VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C			

COMPATIBILITY

			REQUIRED CONTROLLER		
NO.	NEW FUNCTION NAME (4 <sup>TH</sup> GENERATION INDOOR)	FUNCTION DESCRIPTION	WIRED REMOTE CONTROLLER	CENTRALIZED CONTROLLER	REMARKS
1	Energy Monitoring (Accumulated Electric	Monitoring accumulated power consumption by Wired Remote Controller	0	0	* Necessary to install the PDI (Power Distribution Indicator) and central controller  * Combined with Multi V Water S outdoor unit, this function is not available.
	Energy Check)	Monitoring accumulated power consumption by Central Control Device / PDI	-	0	* Necessary to install the PDI (Power Distribution Indicator) * To make a report, central controller must be installed
2	2 Set Point	2 set point control by Indoor and central controller     Synchronization function with remote control (Synchronization Setting and Monitoring)	0	0	* 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)	Synchronization according to occupied / unoccupied by Indoor and Central control      Synchronization icon with remote controller (Synchronization Monitoring)	0	0	* 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 activated 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	0	0	* Check more details in PDB (Product Data Book) * Central controller can create and control group.
5	Test Run (Heating)	Test run mode can be operated in cooling mode and heating mode for easy service	0	-	
6	Model Information Monitoring	Product Type / Indoor Type / Indoor capacity information can be monitored by remote controller	0	-	
7	Indoor unit address checking	Wired remote controller can check indoor unit address information	0	-	
8	Refrigerant Leakage Detection	Function error sign display when refrigerant leakage occurred	0	0	* 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 PRLDNVSO 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	0	-	* 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 Step)	0	-	* Thermo On / Off temperature setting (4 step)
11	Static Pressure 11 Step Control (Only for Ceiling	Depends on the installation environment, 4th generation Ceiling Concealed Duct can control the static pressure by 11 steps for providing comfortable environment	0	-	* Only applied in Ceiling Concealed Duct
12	1 point External Input (On / Off control)	Indoor unit can be controlled by external devices without purchasing Dry contact as an accessory (All 4th generation indoors)	0	-	* 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.	0	0	* The alarm activates on the central controller, but the remaining time is not displayed.
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	0	-	
15	Indoor Humidity display	Monitoring indoor humidity Wired Remote Controller	0	0	* Available only with MULTI V i
16	Comfort Cooling setting	set the outdoor unit comfort cooling operation value	0	0	* Available only with MULTI V $m{i}$
17	Smart Load Control setting	Change the outdoor unit's Smart Load Control stage value.	0	0	* Available only with MULTI V i
18	ODU Refrigerant Noise Reduction setting	set the outdoor unit's refrigerant noise reduction function	0	0	* Available only with MULTI V $m{i}$
19	Low noise mode time setting	set the start and end time of the outdoor unit's low noise mode operation	0	0	* Available only with MULTI V $\emph{i}$

				SIM	PLE					
NEW DELUXE (PREMTA201)	PREMIUM (PREMTA000 PREMTA000A PREMTA000B)	STANDARD III (PREMTB101) (PREMTBB11)	STANDARD II (PREMTBB01) (PREMTB001)	SIMPLE FOR HOTEL (PQRCHCA0Q / QW)	SIMPLE (PQRCVCL0Q / QW)	AC EZ (PQCSZ250S0)	AC EZ TOUCH (PACEZA000)	AC SMART 5 (PACS5A000)	ACP 5 (PACP5A000)	AC MANAGER 5 (PACM5A000)
0	0	0	0	-	-	-	0	0	0	0
-	-	-	-	-	-	-	0	0	0	0
0	0	0	-	-	-	-	0	0	0	0
0	0	0	-	-	-	-	0	0	0	0
0	0	0	0	-	-	-	-	0	0	0
0	0	0	0	-	-	-	-	-	-	-
0	0	0	0	-	-	-	-	-	-	-
0	0	0	0	-	-	-	-	-	-	-
0	0	0	0	-	-	-	-	0	0	-
0	0	0	0	-	-	-	-	-	-	-
○ (4 step)	○ (4 step)	○ (4 step)	○ (3 step)	○ (3 step)	○ (3 step)	-	-	-	-	-
0	0	0	0	0	0	-	-	-	-	-
0	0	0	0	-	-	-	-	-	-	-
0	0	0	0	-	-	0	0	0	0	0
0	0	0	0	-	-	-	-	-	-	-
0	0	0	-	-	-	-	-	0	0	-
0	0	0	-	-	-	-	-	0	0	-
0	0	0	-	-	-	-	-	0	0	-
	_	0				_	-	0	0	-
0	0									

WIRED REMOTE CONTROLLER CENTRALIZED CONTROLLER

Note: 1) No.1, 2, 3, 8: Functions are available to use together with 4th generation Indoor units only. If used together 2th 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 2th generation indoor unit and 4th generation indoor unit these functions will be activate only in 4th generation indoor 3) 2th 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

				Deluxe	Premium	Standard III	Standard II
	Produ	Controll	er	26	251 1000		
				PREMTA201	PREMTA000 PREMTA000A PREMTA000B	PREMTBB11 PREMTB101	PREMTBB01 PREMTB001
		4 Way	ARNU-A4 ARNU-B4	0	0	0	0
	Ceiling Mounted Cassette	2 Way /1 Way	ARNU-B4 ARNU-C4	0	0	0	0
		Round CST	ARNU-A4	0	0	0	0
		High Sensible	ARNU-A4	0	0	0	0
	Ceiling Concealed Duct	High / Mid Statics	ARNU-A4	0	0	0	0
		Low Statics	ARNU-G4	0	0	0	0
-	FAU (Fresh Air intake)		ARNU-Z4	0	0	0	0
	Convertible & Ceiling Suspended		ARNU-A4	0	0	0	0
MULTI V	Console		ARNU-A4	0	0	0	0
Σ.	Floor Standing		ARNU-A4 ARNU-U4	0	0	0	0
	Floor Standing (PAC)		ARNU-A4	0	0	0	0
			ARNU-A4	0	0	0	0
	Wall Mounted		ARNU-R4	0	0	0	0
			ARNU-A4 ARNU-C4 ARNU-N4	0	0	0	0
	HYDRO KIT <sup>1)</sup>		ARNH-A4	-	-	-	-
	Ventilation	ling	Energy Recovery Ventilator	0	0	0	0
		TB	Recovery Ventilator with DX coil	0	0	0	0
	AHU Commu	nication Kit	•4	0	0	0	0

PQRCVCL0Q PQRCVCL0QW	PQRCHCA0Q PQRCHCA0QW	PWLSSB21H (H/P)	Simple Dry Contact PDRYCB000	2 points Dry Contact PDRYCB400	Dry Contact for Thermostat PDRYCB320	For Modbus PDRYCB500 PDRYCB510
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	Δ	0	0	0	0
0	0	Δ	0	0	0	0
0	0	Δ	0	0	0	0
0	0	Δ	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
-	-	-	0	-	0	-
-	-	-	0	-	-	0
-	-	-	0	-	-	0
-	-	Δ	-	-	-	-

Simple Simple for Hotel Wireless Dry Contact

NOTE


Controller	Name	Deluxe	Premium	Wired Remo	te Controller Standard II	Simple	Simple (Hotel)	Wireless Remote Controller
Model Nan	ne	NEW 26	251) HH 0 0 0	0-0	_ /K, _ /K			100 100 100 100 100 100 100 100 100 100
		PREMTA201	PREMTA000 PREMTA000A PREMTA000B	PREMTB101 PREMTBB11	PREMTB001 PREMTBB01	PQRCVCL0Q PQRCVCL0QW	PQRCHCA0Q PQRCHCA0QW	PWLSSB21H (H/P)
	On / Off	0	0	0	0	0	0	0
	Fan Speed Control	0	0	0	0	0	0	0
	Temperature Setting	0	0	0	0	0	0	0
	Mode Change	0	0	0	0	0	-	0
	Auto Swing	0	0	0	0	0	0	0
Basic	Vane Control (Louver Angle)	0	0	0	0	0	0	0
	E.S.P (External Static Pressure)	0	0	0	0	0	0	-
	Electric Failure Compensation	0	0	0	0	0	0	-
	Indoor Temperature Display	0	0	0	0	0	0	0
	ALL Button Lock (Child Lock)	0	0	0	0	0	0	-
	Schedule / Timer	Pre-set Schedule Mode <sup>2)</sup> / Weekly~Yearly		Weekly - Yearly	Weekly	-	-	Sleep / On / Off
	Additional Mode Setting 1)	0	0	0	0	-	-	-
	Time Display	0	0	0	0	-	-	0
	Humid. Display	0	0	0	-	-	-	-
Advanced	Advanced Lock (mode, set point, set point range, on/off Lock)	Advanced Lock	Advanced Lock	Advanced Lock	-	-	-	-
	Filter Sign	0	0	0	0	-	-	-
	Energy Management 3)	0	0	0	0	-	-	-
	Dual Set Point	0	0	0	-	-	-	-
	Human Detection	0	-	0	-	-	-	-
	Temp, Humidity Compensation	0	0	0	-	-	-	-
	Wi-Fi AP mode setting	0	0	0	0	0	0	0
	Proximity Sensor	0	-	-	-	-	-	-
	Operation Status LED	-	0	0	0	0	0	-
FTC	Wireless Remote Controller Receiver	O 4)	O 4)	-	O 4)	O 4)	O 4)	-
ETC						2.6 inch mono	2.6 inch mono	2 inch mono
	Display	4.3 inch Color	5 inch Color	4.3 inch Color	4.3 inch mono	2.6 IIICH IIIOHO	2.0 1110110110	2 111011111111111
	Display Size (W x H x D, mm)		5 inch Color 137 x 121 x 16.5		120 x 121 x 16	70 x 121 x 16	70 x 121 x 16	51 x 153 x 26

C: Applied, -: Not Applied

1) It might not be indicated or operated at the partial product

2) Only for Residential GUI (Based on the housing usage patterns in the United States, please assess whether it is applicable for your usage conditions before using it.)

3) Centralized control (PACEZA000 / PACPSA000 / PACPSA000) and PDI (PQNUDIS40 / PPWRDB000) should be installed for this function

4) For ceiling type duct

Note:

1. Indoor unit should have functions requested by the controller

2. If you need more detail, please refer to the manual of product. (http://partner.lge.com: Home> Doc.Library> Manual)

202 ~ 213

# HOT WATER SOLUTION

HYDRO KIT

# **HYDRO KIT**

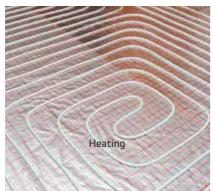
#### Features & Benefits

- Lower operation costs compared to fossil fuel-based systems such as boilers.
- More energy saving through MULTI V heat recovery system.

#### **Key Applications**

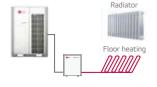
 Where Hot Water is needed such as domestic Hot Water, underfloor heating, or radiators. Or where cold water is needed, such as a fan coil unit and chilled beam.

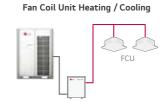






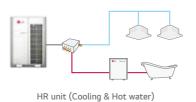
Radiant Heating / Cooling

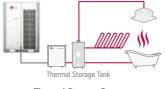








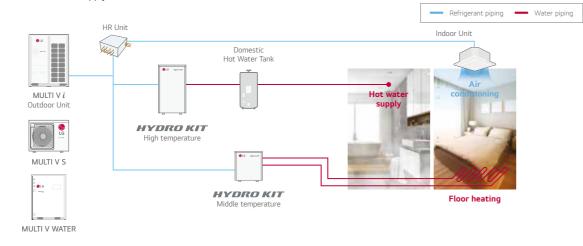




Thermal Storage System

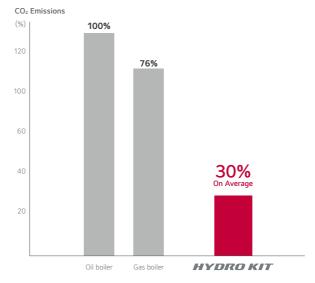
### **Total Solution**

A total solution is provided with a heat pump, air conditioning (cooling by refrigerant and cold water / heating by refrigerant hot water) and domestic hot water supply.



### **Eco-conscious Solution**

Green energy solution through the reduction of CO<sub>2</sub> emmisions.



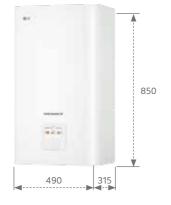




# **Space Saving**

Wall mounted hydro kit with MULTI V S outdoor is suitable for residential applications with its compact size and design.





#### Compatible with compact R32 MULTI V S

Product Volume (m³)

1.63

1.20

LG MULTI V S R32

D

P

### **Cost Savings with High Efficiency**

Equivalent installation cost of traditional boiler with reduced operational costs.

#### 1st Proposal MULTI V i HYDRO KIT

(Air Conditioning + Hot Water Supply + Floor Heating)  $2^{\rm nd}$  Proposal MULTI V i Air-Conditioning + Gas Boiler (Hot Water Supply + Floor Heating) 3<sup>rd</sup> Proposal MULTI V *i* Air-Conditioning + Oil Boiler

(Hot Water Supply + Floor Heating)

#### **Analysis Conditions**

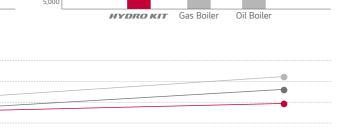
10,000

- 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

### Initial Costs 25,000 20,000 15,000 10,000

**HYDRO KIT** Gas Boiler

### **Annual Operating Costs** 25,000 20,000 15,000



### **Energy Savings through Heat Recovery**

Oil Boiler

#### Conventional

LCC

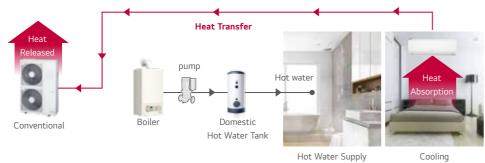
50.00

40,000

30,000 20,000

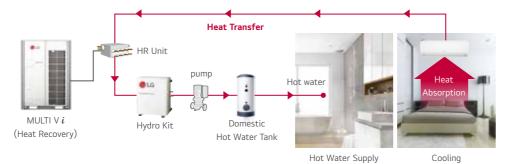
Absorbed heat is released to outdoor air.

• HYDRO KIT



#### **HYDRO KIT**

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



### Free HR Unit for Hydro Kit

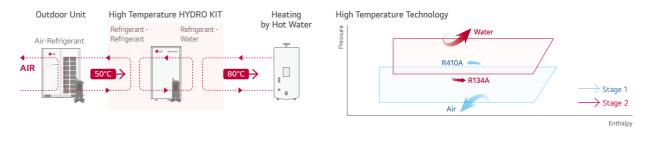
With MULTI V i, HR Units are not required for Hydro Kit which operates in only heating to supply hot water. As such, it can reduce the initial investment cost for the HVAC system.



- \* The Free HR Unit function will be available in November, 2023 by applying MULTI V i. However, the schedule for this function may change.
- \*\* When applying the Hydro Kit for heating only, the Hydro Kit can be connected to the outdoor unit without the HR Unit.

  \*\* There are some restrictions on the installation of the Free HR Unit, such as the combination ratio and the height difference between the outdoor unit and the Hydro Kit.
- Therefore, you must check the restrictions in advance by contacting the LG sales engineer who is responsible for your country.

# **High Temperature HYDRO KIT Cycle Diagram**



### **Various Applications**

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



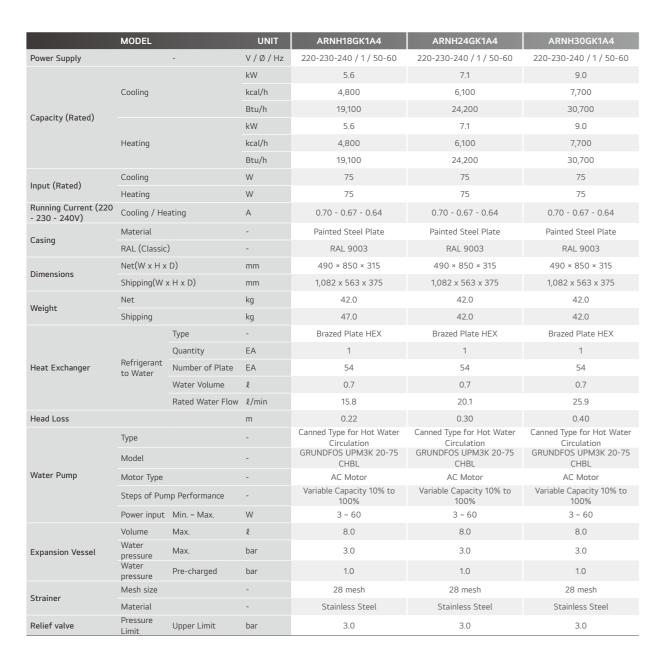
HYDRO

X I

(WALL-MOUNTED)

### ARNH18GK1A4 / ARNH24GK1A4 ARNH30GK1A4







	MODEL		UNIT	ARNH18GK1A4	ARNH24GK1A4	ARNH30GK1A4
	Туре		-	Sheath	Sheath	Sheath
	Number of Heatin	ng Coil	EA	2	2	2
	Capacity Combina	ation	kW	3.0 + 3.0	3.0 + 3.0	3.0 + 3.0
Dealers Heater	Operation		-	Automatic	Automatic	Automatic
Backup Heater	Heating Steps		Step	2	2	2
	Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
	FLA		А	31.0	31.0	31.0
	Power Cable (H0) (Included Earth)	7RN-F)	mm² x cores	4.0 x 3C	4.0 x 3C	4.0 x 3C
	Туре		-	Vortex	Vortex	Vortex
	Model		-	SIKA VVX20	SIKA VVX20	SIKA VVX20
Flow Sensor	Measuring Range	Min. ~ Max.	l/min	5 ~ 80	5 ~ 80	5 ~ 80
	Flow (Trigger Point)	Min.	l/min	7.0	7.0	7.0
Temperature Control			-	Microprocessor, Thermostat for Cooling and Heating	Microprocessor, Thermostat for Cooling and Heating	Microprocessor, Thermostat for Cooling and Heating
Water Tank	Type(Sensor Holder)		-	Male PT 1/2 inch	Male PT 1/2 inch	Male PT 1/2 inch
Temperature Sensor	Length		m	12	12	12
Sound Absorbing Ther	mal Insulation Mat	terial	-	Foamed Polystrene	Foamed Polystrene	Foamed Polystrene
Safety Device			-	Fuse	Fuse	Fuse
	Water Side	Inlet	-	Male PT 1 inch	Male PT 1 inch	Male PT 1 inch
Piping Connections	water side	Outlet	-	Male PT 1 inch	Male PT 1 inch	Male PT 1 inch
Pipilig Collifections	Definement Cide	Liquid	mm(inch)	Ø 9.52 (3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)
	Refrigerant Side	Gas	mm(inch)	Ø 15.88 (5/8)	Ø 15.88 (5/8)	Ø 15.88 (5/8)
Power Cable Supply Cable (H07RN-F)		mm² x cores	2.5 x 3C	2.5 x 3C	2.5 x 3C	
Communication Cable	(VCTF-SB)		mm² x cores	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C	1.0 ~ 1.5 × 2C
Sound Pressure Level	Cooling / Heating	Rated	dB(A)	35	35	35
Sound Power Level	Cooling / Heating	Rated	dB(A)	44	44	44

- Due to our policy of innovation some specifications may be changed without notification.
   Wiring cable size must comply with the applicable local and national codes. And "Electric characteristics" chapter should be considered for electrical 2. Wiring cable size must comply with the applicable local and national codes. And "Electric characteristics" chwork and design. Especially the power cable and circuit breaker should be selected in accordance with that.
  3. Performances are based on the following conditions:

  Cooling: Inlet/Outlet Water Temp. 23°C/18°C, Outdoor Air Temp. 35°CDB / 24°CWB
  Heating: Inlet/Outlet Water Temp. 30°C/25°C, Outdoor Air Temp. 7°CDB / 6°CWB
  Interconnected Pipe Length is standard length and difference of Elevation (Outdoor - Indoor Unit) is 0m.

  4. This product contains Fluorinated greenhouse gases.
  5. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard.
  Therefore the enables can be increased existed to are being treatly increased.

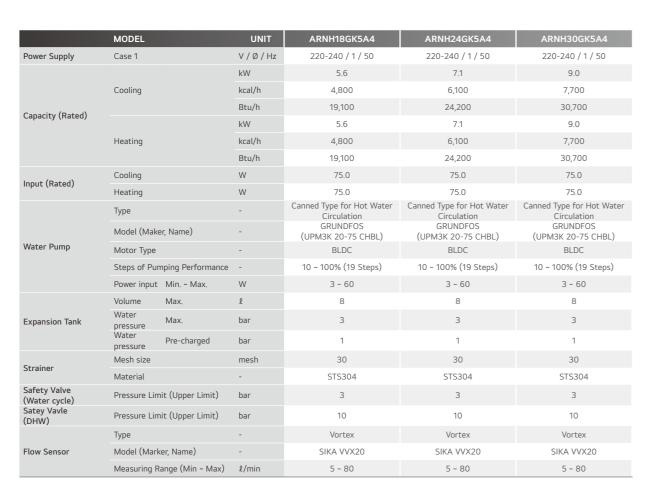
- Therefore, these values can be increased owing to ambient conditions during operation.

HYDRO

KIT (IWT)

### ARNH18GK5A4 / ARNH24GK5A4 ARNH30GK5A4







	MODEL	UNIT	ARNH18GK5A4	ARNH24GK5A4	ARNH30GK5A4
	Туре	-	Sheath	Sheath	Sheath
	Power Supply	V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Electric Backup Heater	Number of Heating Coil	EA	2	2	2
	Capacity Comnination	kW	3	3	3
	Power Supply Cable (H07RN-F)	mm' x cores	2.5 x 3C	2.5 x 3C	2.5 x 3C
	Туре	-	Brazed Plate HEX	Brazed Plate HEX	Brazed Plate HEX
Heat Exchanger (Refrigerant to Water)	Quantity	EA	1	1	1
	Number of Plate	Sheet	52	52	52
Refrigerant Piping	Liquid	mm (inch)	Ø 9.52 (3/8)	Ø 9.52 (3/8)	Ø 9.52 (3/8)
Connection	Gas	mm (inch)	Ø 15.88 (5/8)	Ø 15.88 (5/8)	Ø 15.88 (5/8)
Sound Power Level	Heating (Rated)	dB (A)	42	42	42
Dimensions	Net (W x H x D)	mm	600 x 1,750 x 660	600 x 1,750 x 660	600 x 1,750 x 660
Dimensions	Shipping (W x H x D)	mm	660 x 2,009 x 750	660 x 2,009 x 750	660 x 2,009 x 750
14/a:aba	Net	kg	118	118	118
Weight	Shipping	kg	137	137	137
Cannactina Cabla	Power Supply Cable (H07RN-F)	mm² x cores	1.5 x 3C	1.5 x 3C	1.5 x 3C
Connecting Cable	Communication Cable (VCTF-SB)	mm² x cores	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

- Note
  1. Due to our policy of innovation some specifications may be changed without notification.
  2. Wiring cable size must comply with the applicable local and national codes. And "Electric characteristics" chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.
  3. Performances are based on the following conditions:

   Cooling: Inlet/Outlet Water Temp. 23°C/18°C, Outdoor Air Temp. 35°CD8 / 24°CWB
   Heating: Inlet/Outlet Water Temp. 30°C/13°C, Outdoor Air Temp. 7°CD8 / 6°CWB
   Interconnected Pipe Length is standard length and difference of Elevation (Outdoor Indoor Unit) is 0m.
  4. This product contains Fluorinated greenhouse gases.
  5. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard. Therefore, these values can be increased owing to ambient conditions during operation.

HYDRO

KIT

(FLOOR)

#### ARNH04GK2A4 / ARNH10GK2A4



	MODEL	UNIT	ARNH04GK2A4	ARNH10GK2A4
Cooling Capac	city	kW	12.3	28.0
Heating Capa	city	kW	13.8	31.5
Power Input	Nominal <sup>1)</sup>	W	10	10
Exterior Color	-		Morning Gray	Morning Gray
RAL Code			RAL 7030	RAL 7030
Dimensions	Body	mm	520 x 631 x 330	520 x 631 x 330
(W x H x D)	Shipping	mm	677 x 687 x 418	677 x 687 x 418
ъ.	Liquid Side	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	Ø15.88 (5/8)	Ø22.2 (7/8)
Connections	Drain Pipe (Internal Dia.)	A (inch)	25A (Male PT 1)	25A (Male PT 1)
Water Pipe	Inlet	A (inch)	25A (Male PT 1)	25A (Male PT 1)
Connections	Outlet	A (inch)	25A (Male PT 1)	25A (Male PT 1)
Weight	Body	kg	29.2	33.7
Sound Pressu	re Levels (H / M / L)	dB(A)	26	26
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

- 1) Nominal: Performance tested under EN14511

  Note:

  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, Water Inlet 23°C (73.4°F) / Outlet 18°C (64.4°F)

   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, Water Inlet 30°C (86°F) / Outlet 35°C (95°F)

  2. Piping Length: Interconnected Pipe Length = 7.5m

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

  4. MULTI V S 4HP (ARUN040GSSO, ARUN040LSSO) 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°C (outdoor temp.) during cooling mode.

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

#### Accessories

CHASSIS	ARNH04GK2A4	ARNH10GK2A4		
Drain Pump		-		
Cassette Cover		-		
Refrigerant Leak Detector	PRLD	NVS0		
EEV Kit		-		
Multi-tenant Power Module				
Robot Cleaner		-		
Pre Filter (Washable)				
Ion Generator				
CO <sub>2</sub> Sensor	·			
Ventilation Kit	-			
IR Receiver		-		
Zone Controller		-		
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320			
External Input (1 point)	0			
Wi-Fi	PWFM	DD200		

※ ○ : Applied, - : Not applied Option : Refer to model name in table

### ARNH04GK3A4 / ARNH08GK3A4 ARNH04LK3A4 / ARNH08LK3A4



	MODEL	UNIT	ARNH04GK3A4	ARNH08GK3A4	ARNH04LK3A4	ARNH08LK3A4
Heating Capacity		kW	13.8	25.2	13.8	25.2
Power Input	Nominal <sup>1)</sup>	W	2,300	5,000	2,300	5,000
Exterior Color		Morning Gray	Morning Gray	Morning Gray	Morning Gray	
RAL Code			RAL 7030	RAL 7030	RAL 7030	RAL 7030
Dimensions (W x H x D)	Body	mm	520 x1,074 x 330	520 x 1,080 x 330	520 x 1,074 x 330	520 x1,074 x 330
	Shipping	mm	682 x 1,168 x 423	682 x 1,168 x 423	682 x 1,168 x 423	682 x 1,168 x 423
Pipe Connections	Liquid Side	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)
	Gas Side	mm (inch)	Ø15.88 (5/8)	Ø19.05 (3/4)	Ø15.88 (5/8)	Ø19.05 (3/4)
	Drain Pipe (Internal Dia.)	A (inch)	25A (Male PT 1)	25A (Male PT 1)	25A (Male PT 1)	25A (Male PT 1)
Water Pipe Connections	Inlet	A (inch)	25A (Male PT 1)	25A (Male PT 1)	Male PT1	Male PT 1
	Outlet	A (inch)	25A (Male PT 1)	25A (Male PT 1)	Male PT1	Male PT 1
Weight	Body	kg	86.0	91.0	84.0 (185.2)	90.0 (198.4)
Sound Pressure Levels (H / M / L)		dB(A)	43	46	44	46
Power Supply		V / Ø / Hz	220-240 / 1 / 50	220-240 / 1 / 50	380-400-415 / 3 / 50-60	380-400-415 / 3 / 50-60
Communication Cable		mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

1) Nominal : Performance tested under EN14511

- 1) Nominal: Performance tested unual ENGRAL
  Note:

  1. Capacities are based on the following conditions:

  1. Capacities are based on the following conditions:

  1. 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, Water Inlet 55°C (131°F) / Outlet 65°C (149°F)

  2. Piping Length: Interconnected Pipe Length = 7.5m

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

  4. MULTI V S 4HP (ARUN040GSSO, ARUN040LSSO) cannot be connected to Hydro Kit.

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

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

# Accessories

CHASSIS	ARNH04GK3A4	ARNH08GK3A4	ARNH04LK3A4	ARNH08LK3A4		
Drain Pump			-			
Cassette Cover						
Refrigerant Leak Detector	PRLDNVSO					
EEV Kit	·					
Multi-tenant Power Module	0					
Robot Cleaner						
Pre Filter (Washable)						
Ion Generator						
CO <sub>2</sub> Sensor	·					
Ventilation Kit						
IR Receiver	·					
Zone Controller	·					
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB320					
External Input (1 point)	0					
Wi-Fi	PWFMDD200					

<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table

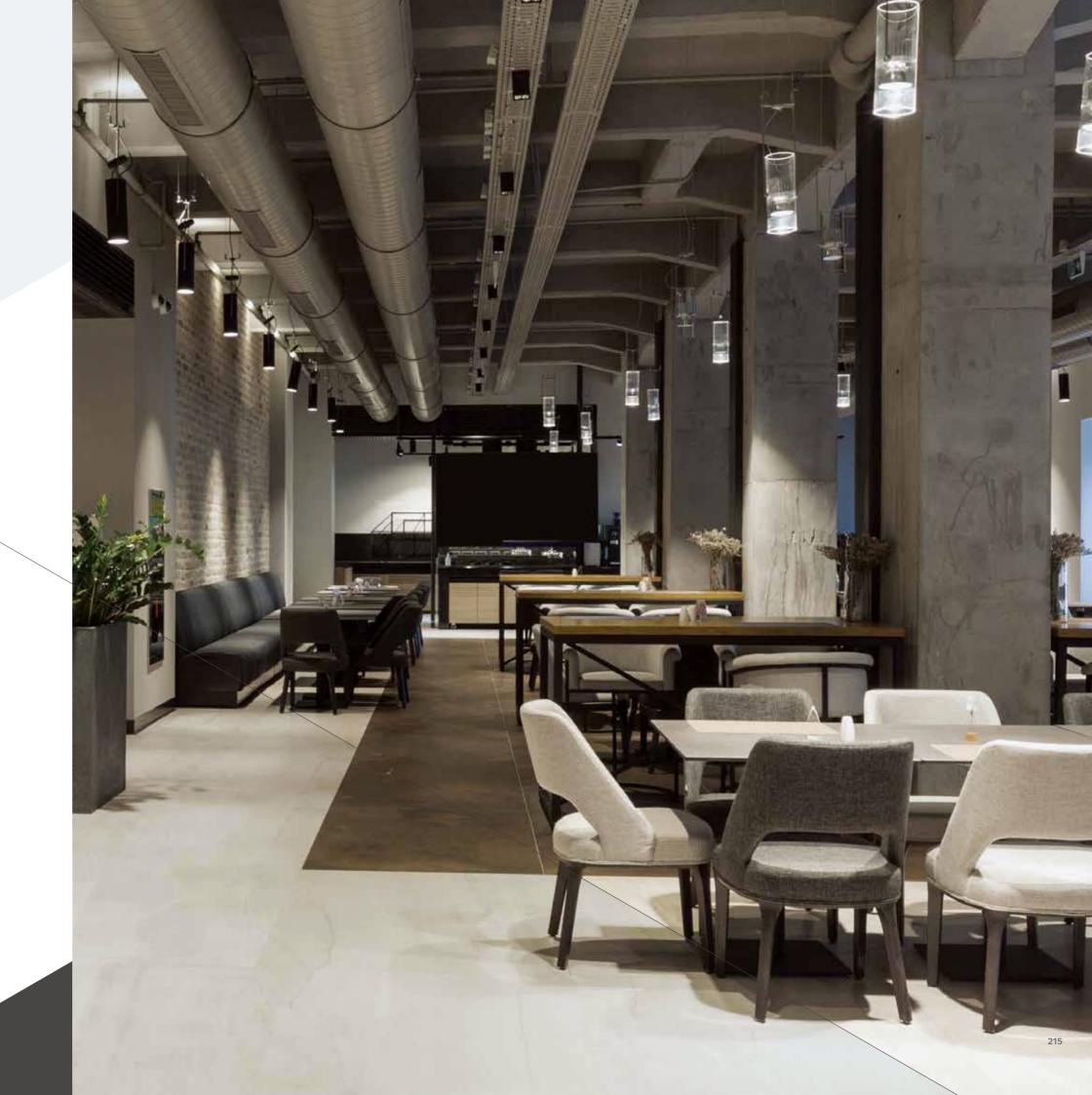
214 ~ 231

# VENTILATION SOLUTIONS

ERV

ERV WITH DX COIL

RESIDENTIAL ERV

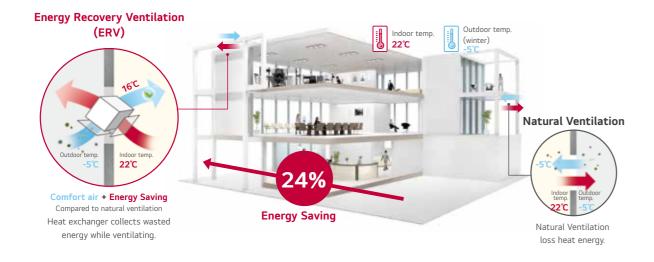


HIGH

EFFICIENCY

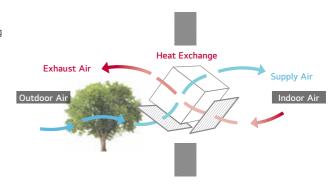


# **Necessity of ERV**



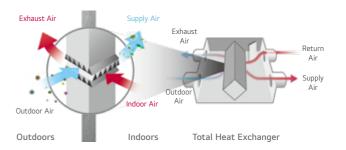
# **High Efficiency Heat Exchanger**

Efficiency and comfort is ensured through the high-efficiency energy recovery central core. This recovers energy from outgoing indoor air and transfers it to the fresh incoming air without mixing the air stream.



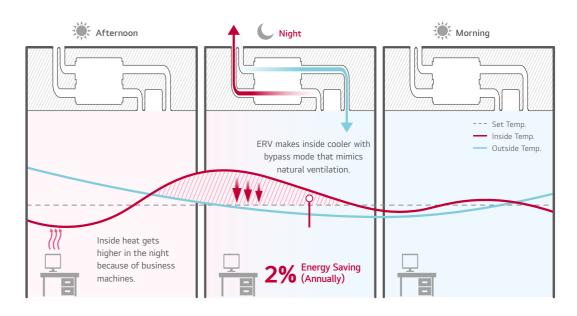
# **Cross Flow System**

The exhaust system uses a high static sirocco fan to remove stale indoor air. Supply and exhaust air flows are completely separated in the heat exchanger, allowing the LG ERV to filter out particles before supplying outdoor air to ensure indoor air is fresh and healthy.



# **Night Time Free Cooling**

During summer nights, indoor heat can be discharged outdoors and cool outdoor air can be brought indoors for energy savings.



- \*\* This function is operated with 'Night Time Free Cooling' on remote controller, (with MULTI V only)
   \*\* Energy saving ratio can be differed by weather condition.
   \*\* Test Condition
   Office (49,000ft²) / Occupancy: 30 / Area: London, UK
   ERV (1000 CMH) + MULTI V 4 (12HP) Unit Combination
   Other conditions are subject to BREEAM.

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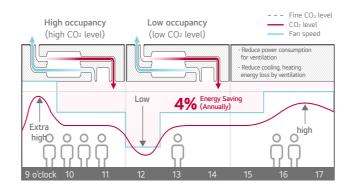
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ELIABILITY

# **CO<sub>2</sub> Auto Operation**

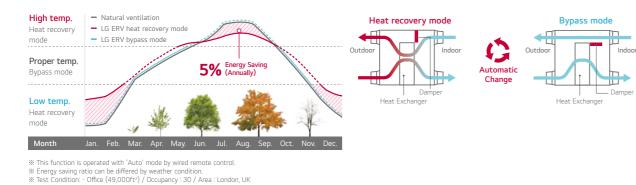
LG ERV reduces energy loss with auto fan speed control following CO2 level.

- \* This function is operated with 'Night Time Free Cooling' on remote controller.
- \*\* Energy saving ratio can be differed by weather condition.
   \*\* Test Condition Office (49,000ft²) / Occupancy: 30 / Area: London, UK
- ERV (1000 CMH) + MULTI V 4 (12HP) Unit Combination



# **Seasonal Auto Operation**

LG ERV senses outdoor temperature and operates automatically following weather conditions.



# **Delay Operation**

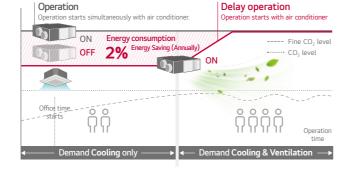
- ERV (1,000 CMH) + MULTI V 4 (12HP) Unit Combination - Other conditions are subject to BREEAM

When the air conditioner and ERV are switched on simultaneously, delayed operation can reduce unnecessary heating and cooling energy loss by slowing down automatic ERV operation.

- \* This function is operated with 'Night Time Free Cooling' on remote controller.(with
- MULITY only)

  \*\* Energy saving ratio can be differed by weather condition.

  \*\* Test Condition Office (49,000ft2) / Occupancy: 30 / Area: London, UK
   ERV (1000 CMH) + MULTI V 4 (12HP) Unit Combination
   Other conditions are subject to BREEAM



# CO<sub>2</sub> Level Monitoring

CO2 sensor senses CO2 level in the room. Users can monitor CO2 level on new wired remote controller, and ERV controls the fan speed automatically following the level.

### CO<sub>2</sub> Level Visualization

CO<sub>2</sub> sensor senses indoor CO<sub>2</sub> level and displays it on a new wired remote



### Main display

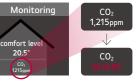
If the CO<sub>2</sub> level is above 900ppm in the room, the red mark appears.



- ※ Applicable to only Standard III, Premium remote controller.

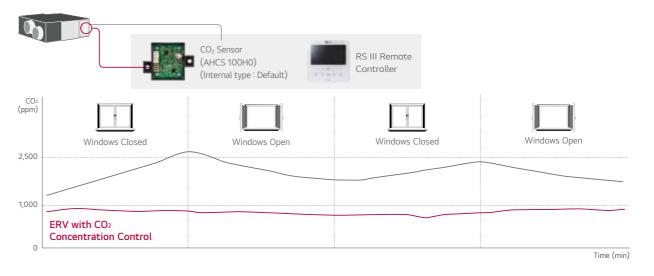
### Further information

CO<sub>2</sub> level and room condition are displayed continuously.



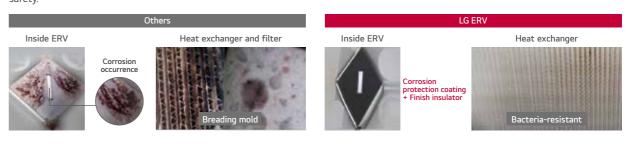
# **CO<sub>2</sub> Concentration Control**

Using CO<sub>2</sub> sensor, LG ERV controls exhaust air flow automatically to keep indoor air fresh under settled CO<sub>2</sub> concentration.



# **High Durability**

There is no moving part within the heat exchanger and therefore it has higher durability and reliability. The heat exchanger is made of special thin paper membranes which are bacteria-resistant to prevent harmful bacteria growth, and flame-retardant treated for fire safety.



ONVENIENC

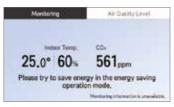
# **Easy Control**

The wired remote controller is easy to use.



### Easy

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





### Display

- Indoor CO<sub>2</sub> level
- Alarm for filter change / remaining time to change filters



### Convenient

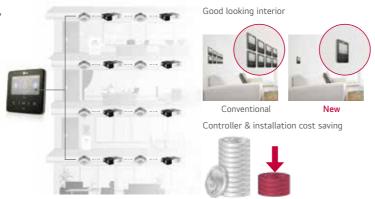
- Flexible display
- Dual display with air conditioner
- Zoom selected directory to increase legibility

# **Group Control**

1 wired remote controller can work with up to 16 ERVs, including air conditioners. It is convenient for large common spaces such as lobbies.

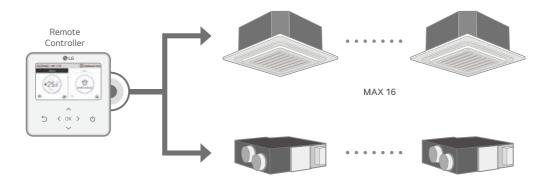
### Combine several units

16 units group control is available with 1 remote controller.



# **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 1 remote controller.

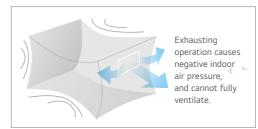


# **Fast Ventilation Mode**

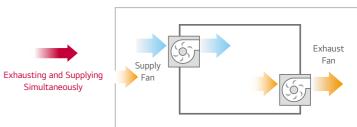
Fast ventilation mode prevents the spread of contaminants under negative indoor pressure, and makes indoor air fresh and comfortable quickly.

Simultaneously

### Only Exhausting

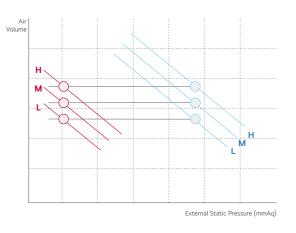


### Fast Ventilation Mode



# **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



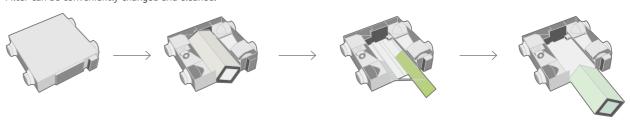
Remove Heat Exchanger

# **Easy Cleaning and Filter Change**

Remove Side Panel

Filter can be conveniently changed and cleaned.

ERV Unit



Change Filter



	MODEL		UNIT	LZ-H025GBA4	LZ-H035GBA5	LZ-H050GBA5
Dimensions (W x H x D)	Body		mm	988 x 273 x 1,014		
Weight	Body		kg		44	
Power Supply			V / Ø / Hz		220-240 / 1 / 50	
Normal Air flow			m³/h	250	350	500
	Operating Step			Super-high / High / Low		
	Current	SH / H / L	Α	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 / 87 /52	150 / 125 / 60	247 / 230 / 95
	Air Flow	SH / H / L	m³/h	250 / 250 / 150	350 / 350 / 210	500 / 500 / 320
	External Static Pressure	SH / H / L	Pa	100 / 70 / 50	150 / 100 / 50	150 / 100 / 50
ERV Mode	Temperature Exchange Efficiency	SH / H / L	%	80 / 80 / 83	80 / 80 / 82	79 / 79 / 82
	Enthalpy Exchange	Heating (SH / H / L)	%	70 / 70 / 72	75 / 75 / 80	75 / 75 / 78
	Efficiency	Cooling (SH / H / L)	%	66 / 66 / 68	71 / 71 / 75	68 / 68 / 75
	Energy Label	A+ to G Scale		A	В	В
	Sound Pressure Level	SH / H / L	dB(A)	29 / 28/ 24	35 / 32 / 26	37 / 36 / 28
	Sound Power Level	SH / H / L	dB(A)	50	53 / 50 / 42	57 / 56 / 46
	Operating Step	erating Step			Super-high / High / Low	
	Current	SH / H / L	Α	0.70 / 0.60 / 0.42	1.05 / 0.90 / 0.50	1.65 / 1.56 / 0.80
Bypass Mode	Power Input	SH / H / L	W	97 / 87 /52	150 / 125 / 60	247 / 230 / 95
bypass Mode	Air Flow	SH / H / L	m³/h	250 / 250 / 150	350 / 350 / 210	500 / 500 / 320
	External Static Pressure	SH / H / L	Pa	100 / 70 / 50	150 / 100 / 50	150 / 100 / 50
	Sound Pressure Level	SH / H / L	dB(A)	29 / 29/ 25	35 / 33 / 26	37 / 37 / 28
Duct Work		Qty	EA		4	
Duct Work		Size (Ø)	mm		Ø200	
Supply Air Fan		Qty	EA		1	
Supply All Tall		Туре			Direct-Drive Sirocco	
Exhaust Air Fan		Qty	EA		1	
LAHAUST AH FAII		Туре			Direct-Drive Sirocco	
		Qty	EA		2	
Filters		Туре			Cleanable Fibrous Fleeces	
		Size (W x H x D)	mm		855 x 10 x 166	

- 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.

### Accessories

CHASSIS	LZ-H025GBA4	LZ-H035GBA5	LZ-H050GBA5	
Drain Pump		-		
Cassette Cover		-		
Refrigerant Leak Detector		-		
EEV Kit		-		
Multi-tenant Power Module		-		
Robot Cleaner		-		
Pre Filter (Washable)		-		
Ion Generator		-		
CO <sub>2</sub> Sensor		0		
Ventilation Kit		-		
IR Receiver		-		
Zone Controller		-		
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB500 (Modbus)			
External Input (1 point)	-			
Wi-Fi				

※ ○ : Applied, - : Not applied Option : Refer to model name in table

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





	MODEL		UNIT	LZ-H080GBA5	LZ-H100GBA5	LZ-H150GBA5	LZ-H200GBA5
Dimensions (W x H x D)	Body		mm	1,101 x 405 x 1,230		1,353 x 815 x 1,230	
Weight	Body		kg	6	53	13	30
Power Supply			V / Ø / Hz	220-24	0/1/50	220-240	0/1/50
Normal Air flow			m³/h	800	1,000	1,500	2,000
	Operating Step			Super-high	/ High / Low	Super-high	/ High / Low
	Current	SH/H/L	Α	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	m³/h	800 / 800/ 660	1,000 / 1,000 / 800	1,500 / 1,500 / 1,200	2,000 / 2,000 / 1,60
	External Static Pressure	SH / H / L	Pa	160 / 100 / 50	160 / 100 / 50	160 / 100 / 50	160 / 100 / 50
ERV Mode	Temperature Exchange Efficiency	SH / H / L	%	82 / 82 / 83	80 / 80 / 81	82 / 82 / 83	80 / 80 / 81
	Enthalpy Exchange	Heating (SH / H / L)	%	73 / 73 / 76	71 / 71/ 73	73 / 73 / 76	71 / 71/ 73
	Efficiency	Cooling (SH / H / L)	%	66 / 66 / 70	64 / 64 / 67	66 / 66 / 70	64 / 64 / 67
	Sound Pressure Level	SH / H / L	dB(A)	40 / 36 / 32	40 / 37 / 33	43 / 39 / 35	43 / 40 / 36
	Sound Power Level	SH / H / L	dB(A)	56 / 53 / 47	59 / 56 / 52	59 / 56 / 50	62 / 59 / 55
	Operating Step			Super-high / High / Low		Super-high / High / Low	
	Current	SH / H / L	Α	2.13 / 1.75 / 1.00	2.92 / 2.38 / 1.40	4.26 / 3.50 / 2.00	5.92 / 4.76 / 2.80
Bypass Mode	Power Input	SH / H / L	W	328 / 266 / 144	463 / 370 / 208	660 / 530 / 290	926 / 740 / 420
bypass Mode	Air Flow	SH / H / L	m³/h	800 / 800 / 660	1,000 / 1,000 / 800	1,500 / 1,500 / 1,200	2,000 / 2,000 / 1,60
	External Static Pressure	SH / H / L	Pa	160 / 100 / 50	160 / 100 / 50	160 / 100 / 50	160 / 100 / 50
	Sound Pressure Level	SH / H / L	dB(A)	41 / 37 / 33	41 / 38 / 34	44 / 40 / 36	44/41/37
Duct Work		Qty	EA		4	4 -	+ 2
Duct work		Size (Ø)	mm	Ø	250	Ø250 -	+ Ø350
Supply Air Fan		Qty	EA		1		2
Supply All Fall		Туре		Direct-Dr	ive Sirocco	Direct-Dri	ve Sirocco
Exhaust Air Fan		Qty	EA		1		2
EXIIduSt All Fall		Туре		Direct-Dr	Direct-Drive Sirocco		ve Sirocco
		Qty	EA		2	4	4
Filters		Туре		Cleanable Fi	brous Fleeces	Cleanable Fil	brous Fleeces
		Size (W x H x D)	mm	1,148 x	6 x 245	1,148 x	6 x 245

- 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.

### Accessories

CHASSIS	LZ-H080GBA5	LZ-H100GBA5	LZ-H150GBA5	LZ-H200GBA5
Drain Pump			-	
Cassette Cover			-	
Refrigerant Leak Detector			-	
EEV Kit			-	
Multi-tenant Power Module			-	
Robot Cleaner			-	
Pre Filter (Washable)			-	
Ion Generator			-	
CO <sub>2</sub> Sensor		(	0	
Ventilation Kit			-	
IR Receiver			-	
Zone Controller			-	
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB500 (Modbus)			
External Input (1 point)			-	
Wi-Fi			-	

※ ○ : Applied, - : Not applied Option : Refer to model name in table

WITH

### ZE050GUCCA0 / ZE080GUCDA0 ZE100GUCDA0



### **\* 2Q Launching**

Ventilation with sensible and latent heat recovery

• Air flow coverage from 500 to 1,000 m³/h

Compact size from 273 mm height

• Various filters can be used to improve indoor air quality (IAQ)

- Filters grades : ePM10 50% (M5), ePM1 70% (F7), ePM1 80% (F9)

- A second filter can be installed on the supply air side

• Built-in CO<sub>2</sub> concentration sensor

- CO<sub>2</sub> Auto Operation based on CO<sub>2</sub> level

• Wi-Fi connection (optional)

Hygienic material with Safe plus insulation

• Group control available up to 16 units with one wired controller

	MODEL		UNIT	ZE050GUCCA0	ZE080GUCDA0	ZE100GUCDA0
Dimensions (W x H x D)	Body		mm	1,014 × 273 × 988	1,062 x 365 x 1,240	
Weight	Body		kg	41.7	54.4	54.4
Power Supply			V / Ø / Hz		220-240 / 1 / 50-60	
Normal Airflow	Rate		m³/h	500	800	1,000
	Operating Step				High / Mid / Low	
	Current	SH / H / L	Α	1.7 / 1.2 / 0.8	2.2 / 1.4 / 0.8	3.0 / 1.9 / 1.0
	Power Input	SH / H / L	W	250 / 160 / 105	330 / 200 / 100	475 / 280 / 140
	Airflow Rate	SH / H / L	m³/h	500 / 400 / 300	800 / 640 / 480	1,000 / 800 / 600
	External Static Pressure	SH / H / L	Pa	150 / 96 / 54	160 / 102 / 57	160 / 102 / 57
	Temperature Exchange Efficiency	SH/H/L	%	78	75	73
	Enthalpy Exchange	Heating (SH / H / L)	%	75 / 75 / 78	73 / 76 / 79	72 / 73 / 74
	Efficiency	Cooling (SH / H / L)	%	68 / 68 / 75	68 / 70 / 73	63 / 67 / 71
	Sound Pressure Level	SH / H / L	dB(A)	39 / 34 / 29	39 / 34 / 28	40 / 36 / 29
	Sound Power Level	SH / H / L	dB(A)	TBD	TBD	TBD
Bypass Mode					0	
Duct Work		Qty	EA		4	
Duct Work		Size (Ø)	mm	200	250	250
Supply Air Fan		Qty	EA		1	
зирріу Ан Рап		Туре			Direct-Drive Sirocco	
Exhaust Air Fan		Qty	EA		1	
LAIIdUSL AII Fdii		Туре			Direct-Drive Sirocco	
Filters		Default	Grade (Qty)		OA: F7 RA: M5	
i nucl 3		Option	Grade		OA: M5, F7, F9 SA: M5, F7, F9	

Rev 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.

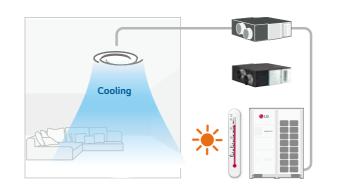
### Accessories

CHASSIS	ZE050GUCCA0	ZE080GUCDA0	ZE100GUCDA0		
Filter	M5, F7, F9				
CO <sub>2</sub> Sensor	Embedded				
Dry Contact (with additional accessory)	PDRYCB000 (1 point contact), PDRYCB500 (Modbus)				
Wi-Fi	PWFMDD200				

※ ○ : Applied, - : Not applied Option : Refer to model name in table

# **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 draft during the winter by supplying warm air.

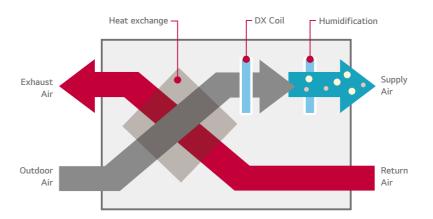




# Total Air Conditioning u

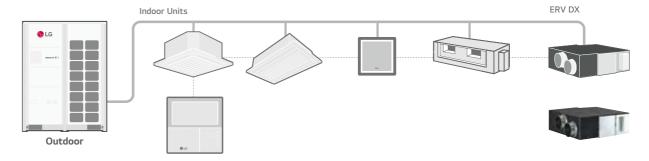
LG ERV DX can be used as a Total Air Conditioning to ensure comfortable indoor air. In the summer, L winter, warm air is provided by heating and humi

condition of incoming air with the ning by cooling and dehumid



# 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.



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M	IODEL	UNIT	LZ-H050GXH4	LZ-H080GXH4	LZ-H100GXH4	LZ-H050GXN4	LZ-H080GXN4	LZ-H100GXN4
Fresh Air	Cooling	kW	4.93	7.46	9.12	4.93	7.46	9.12
Conditioning Load	Heating	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	Cooling (SH / H / L)	%	61 / 61 / 63	50 / 50 / 53	45 / 45 / 50	61 / 61 / 63	50 / 50 / 53	45 / 45 / 50
Efficiency	Heating (SH / H / L)	%	76 / 76 / 77	67 / 67 / 69	64 / 64 / 66	76 / 76 / 77	67 / 67 / 69	64 / 64 / 66
Operation Range	Outdoor air Temperature	°C	-15 ~ 45	-15 ~ 45	-15 ~ 45	-15 ~ 45	-15 ~ 45	-15 ~ 45
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
	System		Na	tural Evaporating Ty	ре		-	
Humidifier	Amount	kg/h	2.70	4.00	5.40		-	
	Pressure Feed Water	Мра		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		V / Ø / Hz			220-240 /	1 / 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
(Nominal)	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	Heat Exchange Mode (SH / H / L)	Α	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
Current (RLA)	Bypass Mode (SH / H / L)	Α	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
Heat Exchange System				Air Cross Flow To e + Latent heat) E		(Sensible	Air Cross Flow To e + Latent heat) I	Exchange
Heat Exchange Element			. ,	ocessed Non-flam		. ,	ocessed Non-flan	
Air Filter			Multidi	rectional Fibrous	Fleeces	Multid	irectional Fibrous	Fleeces
Dimensions	WxHxD	mm	1	,667 x 365 x 1,14	0	1	,667 x 365 x 1,14	10
Net Weight		kg		105			98	
	Liquid	mm		Ø6.35			Ø6.35	
Piping	Gas	mm		Ø12.7			Ø12.7	
Connection	Water	mm		Ø6.35			-	
	Drain Pipe (Internal Dia.)	mm (inch)		Ø25 (1)			Ø25 (1)	
Connection Duct Diamete	er	mm		Ø250			Ø250	

- 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

  4. Cooling and heating capacities are based on the following conditions.: Fan is based on High and Super-high.

  5. 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.

  6. The specifications, designs and information here are subject to change without notice.

### Accessories

CHASSIS	LZ-H050GXH4	LZ-H080GXH4	LZ-H100GXH4	LZ-H050GXN4	LZ-H080GXN4	LZ-H100GXN4
Drain Pump						
Cassette Cover			-			
Refrigerant Leak Detector			PRLD	NVS0		
EEV Kit			-			
Multi-tenant Power Module			-			
Robot Cleaner			-			
Pre Filter (Washable)			-			
Ion Generator			-			
CO <sub>2</sub> Sensor			AHCS1	100H0		
Ventilation Kit			-			
IR Receiver			-			
Zone Controller			-			
Dry Contact (with additional accessory)		PDRYCB0	00 (1 point conta	ct), PDRYCB500	(Modbus)	
External Input (1 point)				)		
Wi-Fi			-			

※ ○ : Applied, - : Not applied Option : Refer to model name in table

# **Clean Air Supply**

Remove Up to 99.99% of Harmful Particles on Pre-Filter with UVnano

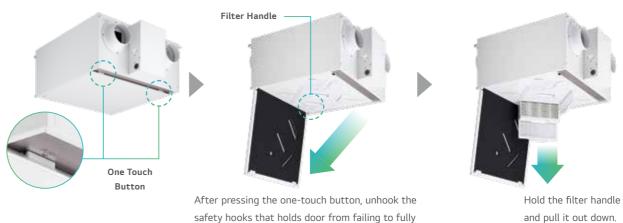


UVnano Technology Applied

It Prevents 99.99 % of Bacteria and Viruses from Growing

# **Easy Filter Maintenance**

Via the one-touch button, the user can open the access door at the bottom of the unit, pull down the heat exchanger to change the filters. It is easy and simple without the need for any additional tools.



open the door.

and pull it out down.

# **Smart Control**

### ① Dual Laser Fine Dust Sensor

Two fine dust sensors monitor the incoming air and the supplied air to the room in real time to ensure that clean air is always supplied.



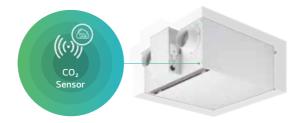
When the measured dust concentration in the air supplied to the room is higher than the pre-set value, a notification or text message will be sent out for filter replacement.



Optional.

### 2 CO<sub>2</sub> Monitoring

The embedded CO<sub>2</sub> sensor monitors the carbon dioxide concentration in the room in real time and automatically controls the ventilation rate.



The system monitors the CO<sub>2</sub> concentration \* Wi-Fi Modem is in the room and adjusts the ventilation rate accordingly. When the CO<sub>2</sub> concentration is high, it increases the ventilation rate, and automatically reduces it when the concentration is low.



### \* CO<sub>2</sub> Sensor is Embedded.

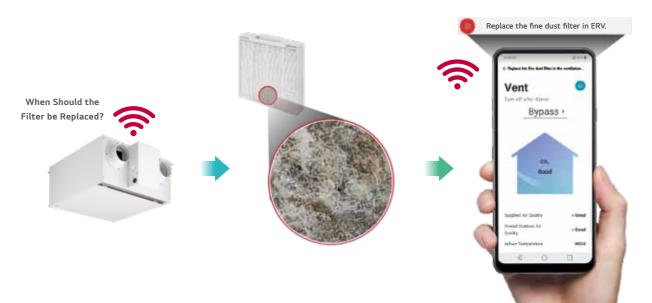
### 3 Control ERV Anytime, Anywhere

Wired Remote Control	Mobile	Third-Party Compatibility	
	- the Sealing	<b>M</b> odbus	
	Special or control of the control of	+	
<ul> <li>Indoor CO<sub>2</sub> concentration</li> <li>Dust concentration in the supply air</li> <li>Dust concentration in outdoor air</li> </ul>	Check and control the Indoor air condtioner anytime, anywhere	With the dry contact connected, Modbus protocol is available.	

<sup>\*</sup> To use 3<sup>rd</sup> party wall pad, please contact Sales Engineer.

### **4** Filter Maintenance Alarm

The filter replacement notification and text message are sent when the fine dust concentration is higher than the pre-set point.



### LZ-H015GBA6 / LZ-H020GBA6



	MODEL		UNIT	LZ-H015GBA6	LZ-H020GBA6
Dimensions (W x H x D)	Body		mm	640 x 320 x 640	640 x 320 x 640
Weight	Body		kg	23	23
Power Supply			V / Ø / Hz	230 / 1 / 50	230 / 1 / 50
	Operating Step			SH / H / L	SH / H / L
	Current	SH / H / L	А	0.43 / 0.38 / 0.23	0.59 / 0.51 / 0.26
	Power Input	SH / H / L	W	56 / 49 / 26	79 / 71 / 30
	Air Flow	SH / H / L	CMH	150 / 150 / 80	200 / 200 / 100
	External Static Pressure	SH / H / L	Pa	100 / 70 / 50	100 / 70 / 50
		Heating (SH / H / L) (ErP)	%	85	82
ERV Mode	Temperature Exchange Efficiency	Heating (SH / H / L) (JIS)	%	80 / 80 / 84	78 / 78 / 82
	Linciency	Cooling (SH / H / L) (JIS)	%	74 / 74 / 83	70 / 70/ 81
	Enthalpy Exchange Efficiency	Heating (SH / H / L) (JIS)	%	79 / 79 / 83	75 / 75 / 81
		Cooling (SH / H / L) (JIS)	%	74 / 74 / 80	68 / 68 / 76
	Energy Label	A+ to G Scale		A	A
	Sound Power Level	SH / H / L	dB(A)	53 / 51 / 45	55 / 53 / 46
	Sound Pressure Level	SH / H / L	dB(A)	28 / 26 / 21	30 / 28 / 22
	Current	SH / H / L	Α	0.45 / 0.40 / 0.26	0.60 / 0.52 / 0.29
Dunasa Mada	Power Input	SH / H / L	W	63 / 53 / 31	84 / 73 / 35
Bypass Mode	Air Flow	SH / H / L	CMH	150 / 150 / 80	200 / 200 / 100
	External Static Pressure	SH / H / L	Pa	100 / 70 / 50	100 / 70 / 50
Operation Range	Outdoor Air Temperature	/ Relative Humidity	℃ / %	-10 ~ 40 / 20 ~ 80	-10 ~ 40 / 20 ~ 80
Duct Work	Qty		EA	4	4
Duct work	Size (Ø)		mm	125	125
	Supply Air Fan		RPM	1,850 / 1,710 / 1,300	2,050 / 1,910 / 1,400
Fan Motor	Exhaust Air Fan		RPM	1,750 / 1,600 / 1,250	1,910 / 1,770 / 1,320
Fair MOLOI	Max.		RPM	2,100	2,100
	Min.		RPM	1,000	1,000
Fileson	Grade <sup>(1)</sup>		-	ePM1 95%	ePM¹ 95%
Filters	Size (W x H x D)		mm	278 x 276 x 50	278 x 276 x 50

- 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 operating sound measured at the point 1.5 m below the center of the unit is converted to that measured at an anechoic chamber.
- 6. The specifications, designs and information here are subject to change without notice.

NOTE



LZ-H015GBA6 / LZ-H020GBA6

### Accessories

CHASSIS	LZ-H015GBA6	LZ-H020GBA6	
CO <sub>2</sub> Sensor	Embedded		
UVnano	Embedded		
Pre Filter (Washable)	Embe	edded	
Dual Laser Fine Dust Sensor	Embe	edded	
Remote Controller (PREMTB101 / PREMTBB11)	0		
Wi-Fi Modem (PWFMDD200)	0		

※ ○ : Applied, - : Not applied Option : Refer to model name in table

### Functions

	MODEL	LZ-H015GBA6	LZ-H020GBA6
	UVnano	0	0
Air Purification	Pre-Filter	0	0
	Fine Filter (ePM1 95%)	0	0
Reliability	Self Diagnosis	0	0
	Auto Restart	0	0
	Child Lock*	0	0
	Forced Operation	0	0
	Group Control*	0	0
	Turn On / Off Reservation	0	0
Convenience	Schedule*	0	0
	Night Silent Cooling Operation	0	0
	Delayed Operation	0	0
	Airflow Amount Customized Operation	0	0
	Seasonal Customized Operation	0	0
	Seasonal Auto Operation	0	0
Installation	E.S.P. Control*	0	0
	Central Control (LGAP)	0	0
ETC	Filter Alarm	0	0
EIC	CO <sub>2</sub> Sensor	0	0
	Wi-Fi	Accessory	Accessory

Note
1. O: Applied, X: Not applied
Accessory: Ordered and purchased separately the accessory package referring to the model name provided and install at field.
Accessory line-ups varies by region, so check your local catalogue or local sales material.
2. Some functions can be limited by remote controller.
3. \*: These functions need to connect the wired remote controller

232 ~ 243

# AHU SOLUTION

# SOLUTION

AHU

# **LG AHU Solution**

LG AHU solution can satisfy customer's needs by providing energy savings and high product reliability with various high technology products and optimized solutions.





### Energy savings

- High efficiency inverter system
- Smart refrigerent control





### Optimized application

- Various cooling capacities and air volume
- Return, Supply air control
- Various components combination









EC motor Bag filter DX coil



### Model selection tool

- Web base program
- Quick respond to customer's requirement



### Visualized controller

- Smart wired remote controller
- Central and BMS control







Remote controller (RS3)

 $\ensuremath{\mbox{\%}}$  The LG controllers can only monitor operations such as on/off, operation mode, and temperature



### High reliability

- High efficiency inverter compressor
- Corrosion resistant black fin
- System check using mobile

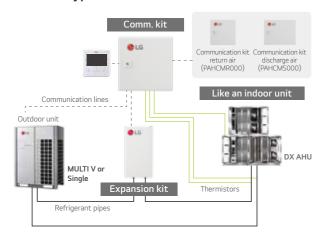




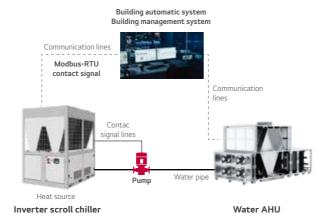
MULTI V inverter

# **Application scene**

### DX AHU type



### Water AHU type



## LG selection tool

LG AHU is highly customizable to meet the exact needs of the site at which it is installed. Various types of components can be designed using model selection program so we can quickly respond customer's conditions including technical reports and design files.





\* LG selection tool link: www.lgahuselection.com

# Components

### EC motor



- Available Energy classes: IE4.
- Rated voltage: EC motors of nominal capacity exceeding 0,75 kW 3x400 V AC.
- Rated voltage: EC motors of nominal capacity equal or less 0,75 kW 1x230 V AC. • Motor widing insulation class: F.
- Protection degree: IP54.
- Maximum working ambient temperature: 55°C.

### Rotary heat wheel



- Up to 86% energy recovery, depending on airflow rate and its velocity in the heat wheel
- Rotor made of aluminum with shaft suspended on bearings, installed in steel housing.
- Rotor filling two layers of alternately winded aluminium foil one flat, the other corrugated - making small ducts for the air.
- The rotor drive system enables smooth control of revolutions, maximizing recovery efficiency and allowing for adjustable performance.



- Max permissible ambient temperature around heating elements: 65°C.
- The heater is available in a version built in the air handling unit and in a duct heater version (without thermal insulation).

 $\triangleright$ UH

# **Highlight of LG AHU Solution**

### Modular type



longitudinal rigidity of the

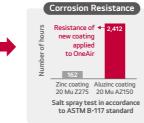
Structure and tightness



Aluminum structural post with additional sealing blade and



- Steel skin coated with Aluzinc AZ 150



### Direct drive plug fan set



Fan: Low and medium pressure ventilation systems with fan static pressure not exceeding 2,000 Pascals.

- FC Motor: Available energy class of IE4.

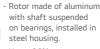
- AC Motor: Available energy classes of IE2 and IE3.

DX coil



Block of copper pipes integrated with another block of aluminum fins, creating expanded heat exchange surface.

### Rotary heat wheel



Up to 86% energy

(-O-



ISO Coarse 75% (G4)



ISO ePM<sub>10</sub> 50% (M5) / ePM<sub>2,5</sub> 65% (F7) / ePM<sub>1</sub> 70% (F9\*)

\* F9 is available as secondary filter

### Compact type (Floor mounted)

### Casing



- Panels filled with mineral wool. enclosed with steel sheet on both sides

Casing parameters according to EN 1886: T2, TB3, L1, D1, F9

### Counter flow heat exchanger



Highly efficient counter flow hex recovery with by-pass

Recovery efficiency reaching 90%

### Rotary heat wheel



- Up to 86% of energy recovery

### Mini-pleat or bag filters

Air filters with extended high efficiency filtration surface ISO ePM<sub>10</sub> 50%(M5) / ePM<sub>25</sub> 65% (F7) / ePM<sub>1</sub> 70% (F9\*)

\* F9 is available as secondary

- Efficient, silent and low vibration fan with electronically commutated

up to **93%** 

drive efficiency

motor in a IE4 class.





### Compact type (Floor mounted with vertical duct connection)





- Panels filled with mineral wool enclosed with steel sheet on both sides

- Casing parameters according to EN 1886: T2, TB3, L1, D1, F9

### Dimension



- Unit width 880 mm
- Can be transported through the opening of 90 cm without disassembling the device

### Mini-pleat or bag filters

- Air filters with extended high efficiency filtration surface
- ISO ePM<sub>10</sub> 50% (M5) / ePM<sub>2,5</sub> 65% (F7) / ePM<sub>1</sub> 70% (F9\*)

### Counter flow heat exchanger

- Highly efficient counter flow hex recovery with by-pass
- Recovery efficiency reaching 90%





- Multifunctional controls, integrated with the unit
- Fully pre-configured and

### Compact type (Ceiling suspended)

### Casing



- Panels filled with mineral wool, enclosed with steel sheet on both sides

Casing parameters according to EN 1886: T2, TB3, L1, D1, F9



- Efficient, silent and low vibration fan with electronically commutated motor in a IE4 class.



up to **93%** drive efficiency

### Mini-pleat filters

- Air filters with extended high efficiency filtration surface
- ISO ePM<sub>10</sub> 50% (M5) / ePM<sub>2,5</sub> 65% (F7) / ePM<sub>1</sub> 70% (F9\*)
- \* F9 is available as secondary filter

# - Multifunctional controls,

Control

- integrated with the unit
- Fully pre-configured and ready to run

### Recuperator by-pass



- recovery capacity
- Passive cooling function.
- Recuperator frost protection.



- Highly efficient counter flow hex recovery with by-pass

Counter flow heat exchanger

- Recovery efficiency reaching 90%

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# Modular type



### **Key Features**



### Airflow

from **800** m<sup>3</sup>/h to **70,850** m<sup>3</sup>/h



Up to **92%** of energy recovery efficiency



14 sizes



Durable and tight structure



Highly efficient rotary and hex counter

### Recommended Air Flow Rate (rotary heat wheel) (Unit: m/h) 3,000 6,000 9,000 12,000 15,000 18,000 21,000 24,000 27,000 30,000 33,000 $\cdots$ E-AVGV021M 806 2,415 E-AVGV030M 1,180 3,450 E-AVGV040M 1,958 4,600 E-AVGV055M 2,878 6,325 E-AVGV075M 8,625 E-AVGV100M 4,863 11,500 E-AVGV120M 5,815 13,800 E-AVGV150M E-AVGV180M 8,640 19,620 E-AVGV230M 10,398 25,070 E-AVGV300M 13,491 32,700 E-AVGV400M 18,704 43,600 E-AVGV500M 59,950 E-AVGV650M 70,850 28,725

### \*\* For more information, please refer to LG selection tool and / or contact LG B2B sales department (LG selection tool link: www.lgahuselection.com)

# **Compact type (Floor mounted)**



### **Key Features**



Up to **90%** of energy recovery efficiency



and silent fans with



Highly efficient rotary and hex counter flow heat exchanger

### Base unit overall data

Unit Size	Nominal Airflow (m³/h)	Airflow Range (m³/h)	Height (mm)	Width (mm)	Duct Connection Heigth (mm)	Duct Connection Width (mm)
E-AVGV021C	2,100	840 - 2,310	991	967	345	860
E-AVGV030C	3,000	900 - 3,300	1,255	967	480	860
E-AVGV040C	4,000	1,200 - 4,400	1,255	1,174	480	1,065
E-AVGV055C	5,500	1,650 - 6,050	1,525	1,345	615	1,235
E-AVGV075C	7,500	2,250 - 8,250	1,765	1,486	735	1,380
E-AVGV100C	10,000	3,000 - 11,000	1,965	1,666	835	1,560
E-AVGV120C	12,000	3,600 - 13,200	2,039	1,897	870	1,790
E-AVGV150C	15,000	4,500 - 16,500	2,241	2,091	970	1,985

### Base unit lengths

Unit Size (mm)	(a) (b) (b)	© @ @	© © W	3 8 9 3	3/8 33	3 8 5
E-AVGV021C	1,240	1,080	1,080	2,230	2,230	2,500
E-AVGV030C	1,240	1,080	1,080	2,230	2,230	2,500
E-AVGV040C	1,240	1,080	1,080	2,230	2,230	2,500
E-AVGV055C	1,240	1,080	1,080	2,290	2,290	2,560
E-AVGV075C	1,240	1,080	1,080	2,530	2,530	2,800
E-AVGV100C	1,300	1,300	1,080	2,570	2,570	2,800
E-AVGV120C	1,300	1,300	1,080	2,670	2,670	2,900
E-AVGV150C	1,300	1,300	1,080	2,730	2,730	2,940

AHU

SOLUTION

# Compact type (Vertical floor mounted)

### **Key Features**



Up to **90%** of energy recovery efficiency



Highly efficient hex counter

flow heat recovery





and silent fans with

### Base unit overall data

u	Init Size	Nominal Airflow (m³/h)	Airflow Range (m³/h)	Height (mm)	Width (mm)	Duct Connection (mm)
E-A	AVGV023T	2,100	1,250 - 2,100	1,176	880	700 x 445
E-A	AVGV033T	3,000	1,800 - 3,000	1,447	880	700 x 513
E-A	AVGV043T	4,000	2,400 - 4,000	1,737	880	700 x 613

### Base unit lengths

Unit Size (mm)	(A) 8 (A)	
E-AVGV023T	2,100	2,100
E-AVGV033T	2,460	2,460
E-AVGV043T	2,860	2,860

# Compact type (Ceiling suspended)



### **Key Features**



Up to **90%** of energy recovery efficiency









Integrated

multifunctional

controls



Mineral wool insulation

Highly efficient hex counter flow heat recovery

### Base unit overall data

Unit Size	Nominal Airflow (m³/h)	Airflow Range (m³/h)	Height (mm)	Width (mm)	Duct Connection Heigth (mm)	Duct Connection Width (mm)
E-AVGV005S	500	150 - 650	400	790	318	335
E-AVGV010S	1,000	300 - 1,100	400	1,150	318	515
E-AVGV015S	1,500	450 - 1,650	400	1,550	318	715
E-AVGV020S	2,000	600 - 2,200	490	1,610	408	743
E-AVGV030S	3,000	900 - 3,300	490	2,160	408	1,018

### Section length

Unit Size (mm)	
E-AVGV005S	1,230
E-AVGV010S	1,500
E-AVGV015S	1,500
E-AVGV020S	1,828
E-AVGV030S	1,828

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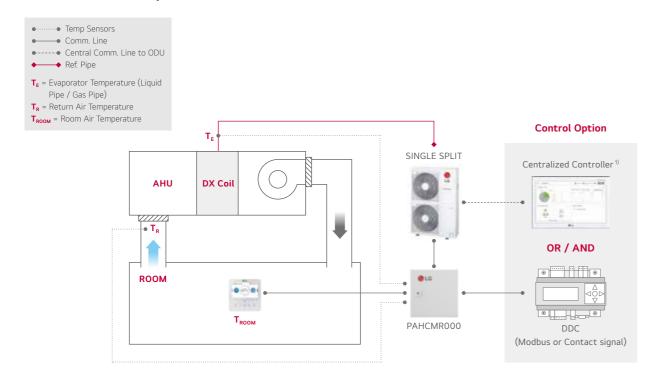
AHU

COMBINATION

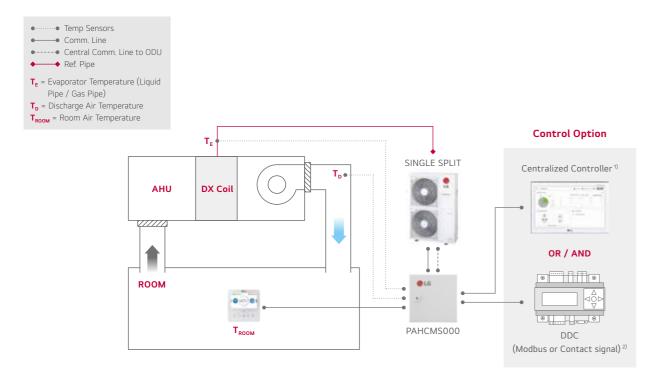
# **Air Handling Applications**

Economically feasible solution for paired application with air handling units.

### Return/Room Air Temperature Control



### Discharge Air Temperature Control



### 1) PI485(PMNFP14A1) is required for using centralized controller.

# **Communication Kit**



### PAHCMR000 / PAHCMS000

### Specification

	Combi	ination		Dimensions (mm)		
Model	Outdoor Unit	Centralized Controller	Description		н	D
PAHCMR000	Single Split	•	Return / Room air temperature control by DDC or LG individual / centralized controller	300	300	155
PAHCMS000	Single Split	•	Discharge air temperature control by DDC or LG individual / centralized controller	380	300	155

### Function list for Communication kit

	Function List*	PAHCMR000	PAHCMS000	Note
	Comm. Kit Operation	On / Off	On / Off	
	Operation Mode 1)	Cooling / Heating	Cooling / Heating	
	Return (room) Air Temperature	16~30°C	-	
Control	Discharge Air Temperature 2)	-	16~30°C	Available in case of using DDC with Modbus or LG Control system
	Fan Speed 3)	Low / Middle / High	Low / Middle / High	It may not be possible depending on the particular condition
	Forced Thermal On / Off	On / Off	-	Available in case of using DDC with contact signal
	Capacity Control	-	•	Available in case of using DDC with Modbus or contact signal
	Comm. Kit Operation	On / Off	On / Off	
	Operation Mode 1)	Cooling / Heating	Cooling / Heating	Available in case of using DDC with Modbus or LG Control system
Monitor	Fan Speed	Low / Middle / High	Low / Middle / High	
MONITOR	Error Alarm		•	
	Compressor On / Off	On / Off	On / Off	Available in case of using DDC with Modbus or LG individual controller PAHCMR000 doesn't provide this in case of using DDC with contact signal

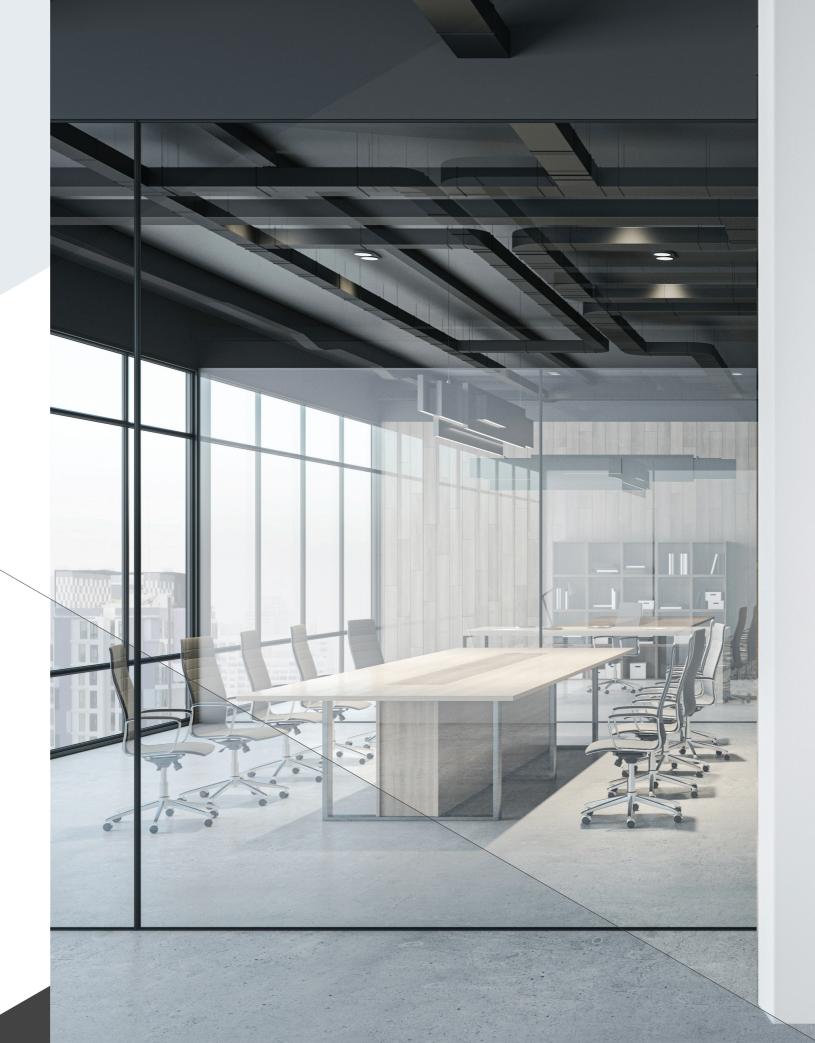
- 1) Available operation mode can be varied depending on the setting of AHU Communication Kit.
- This range may differ depending on the type of controller.
- 3) To control and monitor the fan speed, DO ports for the fan speed status have to be connected with the fan unit.
- \* Some of functions may not be possible depending on the setting of AHU Communication Kit. For more details of condition, please refer to the product data book.

### **Combination Table**

	R32					R410A		
Model Name		UUA1 UL0	UUB1 U20	UUC1 U40	UUD1 U30 UUD3 U30	UU70W U34	UU85W U74	
	kBtu/h	9 ~18	18 ~ 30	24 ~ 36	36 ~ 60	70	85	
Capacity Index Range	kW	2.5 ~ 5.0	5.0 ~ 8.0	6.8 ~ 10.0	10.0 ~ 14.6	20.0	25.0	
PAHCMR000		X	0	0	0	0	0	
PAHCMS000		X	0	0	0	0	0	

<sup>2)</sup> In case of applying DDC with contact signal, discharge air temperature should be measured and controlled by DDC.

<sup>3)</sup> For more detail, please refer to the PDB of AHU Communication Kit.  $\,$ 





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# CONTROL SOLUTIONS

INDIVIDUAL CONTROL

CENTRALIZED CONTROL

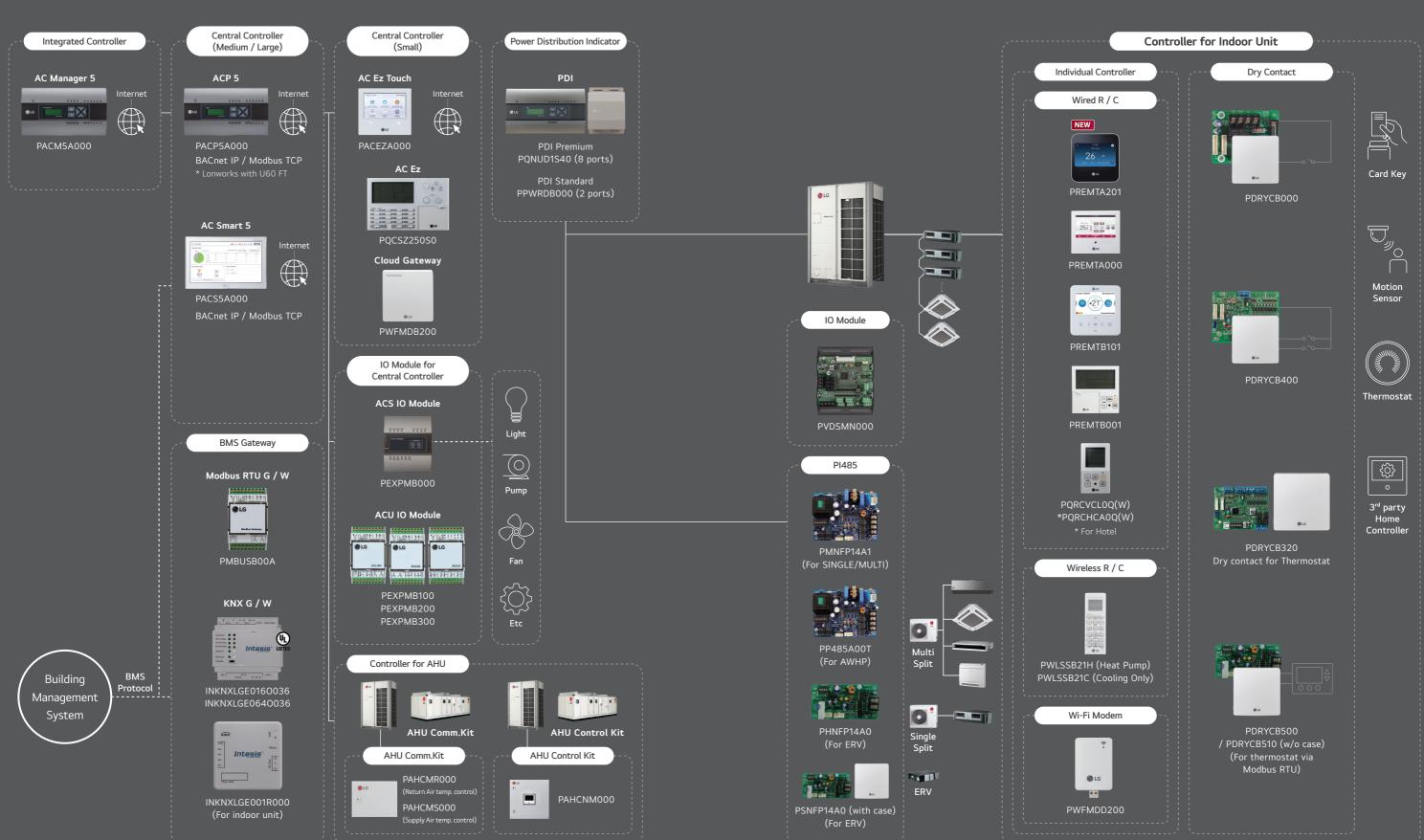
INTEGRATION DEVICE

# **LG BECON HVAC SOLUTION**



# CONTROL SYSTEM ARCHITECTURE

LG BECON HVAC SOLUTION offers a diverse range of effective control solutions that satisfy the specific needs of each building and its user scene. These control systems are equipped with a user-friendly interface, flexible interlocking environment, energy management and a smart individual controller for optimized control conditions and smart building management.



INDIVIDUAL CONTROL



# **Feature Functions**

Controller	Name	Deluxe	Premium	Wired Remot	te Controller Standard II	Simple	Simple (Hotel)	Wireless Remote Controller
Model Nan	ne	26° ±	253) = 0 0	) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (				3 D D d 1 2 C
		PREMTA201	PREMTA000 PREMTA000A PREMTA000B	PREMTB101 PREMTBB11	PREMTB001 PREMTBB01	PQRCVCL0Q PQRCVCL0QW	PQRCHCA0Q PQRCHCA0QW	PWLSSB21H (H/P)
	On / Off	0	0	0	0	0	0	0
	Fan Speed Control	0	0	0	0	0	0	0
	Temperature Setting	0	0	0	0	0	0	0
	Mode Change	0	0	0	0	0	-	0
	Auto Swing	0	0	0	0	0	0	0
Basic	Vane Control (Louver Angle)	0	0	0	0	0	0	0
	E.S.P (External Static Pressure)	0	0	0	0	0	0	-
	Electric Failure Compensation	0	0	0	0	0	0	-
	Indoor Temperature Display	0	0	0	0	0	0	0
	ALL Button Lock (Child Lock)	0	0	0	0	0	0	-
	Schedule / Timer	Pre-set Schedule Mode <sup>2)</sup> / Weekly~Yearly		Weekly - Yearly	Weekly	-	-	Sleep / On / C
	Additional Mode Setting 1)	0	0	0	0	-	-	-
	Time Display	0	0	0	0	-	-	0
	Humid. Display	0	0	0	-	-	-	-
Advanced	Advanced Lock (mode, set point, set point range, on/off Lock)	Advanced Lock	Advanced Lock	Advanced Lock	-	-	-	-
	Filter Sign	0	0	0	0	-	-	-
	Energy Management 3)	0	0	0	0	-	-	-
	Dual Set Point	0	0	0	-	-	-	-
	Human Detection	0	-	0	-	-	-	-
	Temp, Humidity Compensation	0	0	0	-	-	-	-
	Wi-Fi AP mode setting	0	0	0	0	0	0	0
	Proximity Sensor	0	-	-	-	-	-	-
	Operation Status LED	-	0	0	0	0	0	-
	Wireless Remote Controller Receiver	O 4)	O 4)	-	O 4)	O 4)	O 4)	-
ETC	Display	4.3 inch Color	5 inch Color	4.3 inch Color	4.3 inch mono	2.6 inch mono	2.6 inch mono	2 inch mond
	Size (W x H x D, mm)	110 x 110 x 15	137 x 121 x 16.5	120 x 120 x 16	120 x 121 x 16	70 x 121 x 16	70 x 121 x 16	51 x 153 x 26
	Black Control for	0	0					

<sup>\*\*</sup> O: Applied, -: Not Applied

1) It might not be indicated or operated at the partial product

2) Only for Residential GUI (Based on the housing usage patterns in the United States, please assess whether it is applicable for your usage conditions before using it.)

3) Centralized control (PACEZA000 / PACSSA000 / PACPSA000) and PDI (PQNUDIS40 / PPWRDB000) should be installed for this function

4) For ceiling type duct

Note:

1. Indoor unit should have functions requested by the controller

2. If you need more detail, please refer to the manual of product, (http://partner.lge.com: Home> Doc.Library> Manual)

CONTRO

# **Deluxe Wired Remote Controller**

### PREMTA201

The LG Deluxe, with its full-touch LCD screen and a seamless design, is suitable for residential and commercial applications. It is a NEW solution with enhanced usability and convenience based on customer experience. Upgrade your precious space and everyday life with Deluxe Remote Controller.

### NEW





### Features & Benefits

- Full-Touch & Slim design
- Multi Application (Residential or Commercial)
- Built-in Wi-Fi
- Remote Control (with ThinQ Compatibility)
- FOTA\*
- Easy Installation
- Setting ( as-is: numeric code, word → to-be: Function Code Search Tool)
- Installation Wizard (Date & Time, Language, Temperature unit etc) easily
- Energy related functions, Air Quality Monitoring
- Whole week Scheduling with Mode setting (Home / Away / Sleep / Awake) for residential
- Humidity/Proximity Sensor
- Al Smart Care

MODEL NAME	PREMTA201
Max. Number of Units	16 (Group Control)
Applicable Unit Types	Air Conditioner, ERV, ERV DX, Residential ERX
On / Off	0
Fan Speed Control	0
Temperature Setting	0
Mode	Cool / Heat / Dry / Fan / Auto / Emergency Heater / Air Purify / Power Heat / Power Cool / Stop
Additional Mode Setting 1)	Electric Heater / Energy Saving / Fan Auto / Comfort Cooling / Cooling By Ventilation / Air Purify / Robot Cleaning/Humidifi-cation / Mosquito Away / Zone Control / Fast / eSave / Wind Direction
Auto Swing	0
Vane Control (Louver Direction)	0
E.S.P (External Static Pressure) 2)	0
Reservation	Simple / Sleep / On & Off Timer / Weekly / Yearly / Holiday
Time Display	0
Electric Failure Compensation	0
Lock	All / On & Off / Mode / Set Temperature Range
Filter Sign	○ (Remain time + Alarm)
Energy Management 3)	Al Energy Control <sup>1)</sup> / Check Energy Usage, Operation Time / Target Setting
Proximity Sensor	0
Operation Status LED	·
Air Purify Control 4)	0
Indoor Temperature Display	0
Indoor Humidity Display	0
Display	4.3 inch TFT color LCD (480 x 272)
Size (W x H x D, mm)	110 x 110 x 15
Black Light for Screen Saver	0
Home Leave	2 Set Point Control

- ※ O : Applied, -: Not Applied

   The function is available in some product. (Refer to the Product Data Book).
   This function is available for duct type.
   This function requires PDI (PQNUDIS40 / PPWRDB000) to be installed.
   This function is available for indoor units that provide corresponding function.

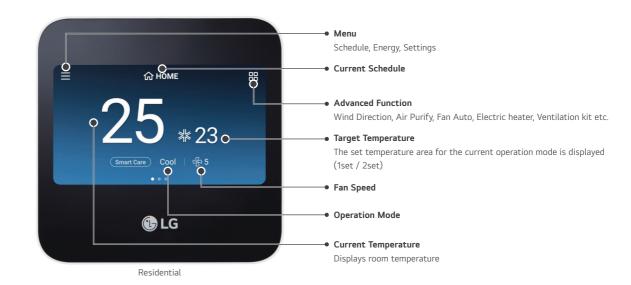
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- 1. Indoor unit needs to have functions requested by the controller.
  2. 2 set points control works normally with MULTI V Heat Recovery and Single Split Heat Pump. But in case of MULTI V Heat Pump, It may not work properly.
- \* FOTA (Firmware Over The Air) is a wireless method of updating device firmware, allowing updates without manual intervention or physical connections.

### Adding Value to the Indoor Space

### Full Touch & Easy Access

- Provides intuitive GUI through full touch screen.
- New Design (Sleek, Interior Fit)



### User Interface

Friendly GUI

### Simple Timer



Operation On / Off reservations conveniently display the remaining time and are easily viewable.

# Quick On / Off button





### Floating button



Advanced Function : Energy Saving, Air Purify, Fan Auto, Humidification, Electric Heater, Ventilation Kit, Comfort Cooling etc..

Monitoring : Smart Care

Smart Care: Enable. Disable

Air Purify: Air Quality Leve I(PM1.0, PM2.5, PM10)

### Pre-set Schedule Mode\*: Home, Awake, Sleep, Away



LG Deluxe remote controller controls the room temperature automatically according to your pre-set program that follows your daily routine

- Offers to make a different schedule for each mode
- The setting of repeat days makes it easy to copy and register the events you are preparing

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INDIVIDUAL

CONTRO

# /IDUAL CONTROL

# **Deluxe Wired Remote Controller**

### Adding Value to the Indoor Space

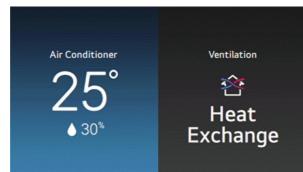
### User Interface

• The world's first remote controller to incorporate airflow animation, facilitating a better understanding of the operation modes.

### Intuitive Airflow Visualization



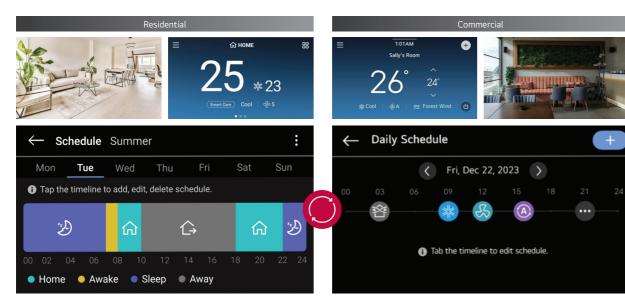
Vent Mode Visualization



With animations applied, the customer intuitively understands the settings.

### Multi Applications

- Space customized solution.
- Adaptable GUI for Commercial and Residential Applications



- The user cannot change it after setting it once, and it can be changed after the installer setting > factory reset function.
- Manage your schedule more comfortable.

### **Experience Ultra-convenience**

### Remote Control

- Built-in Wi-Fi Easily connect to and start using ThinQ
- Possible to control anytime and from anywhere through ThinQ App.
- Compatible with popular smart home and voice speakers (Google Assistant & Amazon Alexa)



### Easy to Install

- Starting from the installation wizard, the GUI is intuitive and easy to understand.
- Saves time

### Installation Wizard (Welcome function)



- Language
- Use type (1 set point / 2 set point)
- Temperature unit (Celsius / Fahrenheit)
- Date & Time
- Humidity Display
- Etc

### Function Search Tool



- Auto-suggests list of options based on your input.
- Search by the code number of the installer setting.

### FOTA\* (Firmware Over The Air)

• Enables you to quickly and conveniently initiate software updates.







\* Firmware update is possible through ThinQ App.

CONTRO

# **Deluxe Wired Remote Controller**

### **Smart Energy Saving**

### **Energy Management**

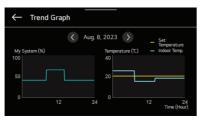
- Provides the energy usage trend of the entire system for a certain period of time.
- · Energy usage function provides comparison of the entire system operating time and power consumption to previous data on a weekly, monthly and yearly
- LG Inverter driven systems use only the amount of compressor capacity necessary to keep you comfortable.

### Energy Usage Check

### Total Energy



### **Energy Trend**



### Graph



User can check how much power is being used compared to the maximum capacity of the system.

### Al Smart Care Control

• Uses AI<sup>1)</sup> Smart Care to know system power consumption. You can check the system power consumption including savings rate of this month and year which is calculated by AI Energy management function 2).

### Al Energy management

Experience AI Smart Care with Deluxe.

### Al Energy Usage Check



### Energy Saving Rate (%)

Check the system energy saving rate through AI Smart Care.

Target system e	energy usage				
Set and check the monthly target energy usage of the system (Indoor & outdoor unit).  If you do not set the time, the function may not function normally					
arget energy usage Energy usage leargy usage leargy usage l					
2000 kWh	100 kWh	500 kWh			
kWh	1100 kWh	1500 kWh			
1500 kWh	2100 kWh	2500 kWh			
	and check the monthly sor & outdoor unit), do not set the time, the Target energy usage 2000 kWh	nor & autdoor unit), do not set the time, the function may not functi Target energy usage			

### **Energy Consumption Target**

Deluxe is able to set monthly energy usage target and the MULTI V  $\emph{i}$  controls power consumption according to the target.



- 1) Al: Artificial Intelligence 2) MULTI V i is equipped with machine learning algorithms that enable it to self-learn. i This functions can manage the system energy usage, not the energy usage per unit.

# **Standard III Wired Remote Controller**

### PREMTB101 (White) / PREMTBB11 (Black)

4.3 inch color screen with modern design.







Convenience







Comfort & Reliability (Air Purify)



Energy

Interlocking

Managemen

MODEL NAME	PREMTB101 / PREMTBB11		
On / Off	0		
Fan Speed Control	0		
Temperature Setting	0		
Mode	Cool / Heat / Dry / Fan / Auto		
Additional Mode Setting 1)	Energy-Saving Cooling / Robot Cleaning / Heater / Humidification / Comfort Cooling		
Auto Swing	0		
Vane Control (Louver direction)	0		
E.S.P (External Static Pressure) 2)	0		
Reservation	Simple / Sleep / On & Off timer / Weekly / Yearly / Holiday		
Time Display	0		
Electric Failure Compensation	0		
Lock	All / On & Off / Mode / Set temperature range		
Filter Sign	(Remain time + Alarm)		
Energy Management	Check Energy Usage <sup>3)</sup> / Check Operation Time / Target Setting (Energy, Operation Time) / Time Limit Operation / Alarm Popup / Initialization Usage Data		
Operation Status LED	0		
Air Purify Control <sup>4)</sup>	0		
Air Quality Level 4)	0		
Indoor Temperature Display	0		
Indoor Humidity Display	0		
Human Detection	0		
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	0		
Home Leave	2 set points control		

- ※ : Applied. : Not Applied
- S: Applied, -: Not Applied
   The function is available in some product. (Refer to the product data Book).
   This function is available for duct type.
   This function requires PDI (PQNUD1S40 / PPWRDB000) to be installed.
   This function is available for indoor units that provide corresponding function.

- 1. Indoor unit needs to have functions requested by the controller.
  2. 2 set points control works normally with MULTI V Heat Recovery and Single Split Heat Pump. But in case of MULTI V Heat Pump, It may not work properly.

CONTRO

# **Standard III Wired Remote Controller**

### - 4.3 inch color LCD / Intuitive GUI

- Seamless design / Touch button
- Humidity sensor embedded

### Comfort & Air Purification

- CO<sub>2</sub> level monitoring (For ERV)
- Air purify control
- Air quality level monitoring

### - Power consumption monitoring

**Energy Contents** 

- Operation time monitoring
- Temperature setback
- Time limit control

### **Advanced Functions**

- Comfort cooling setting
- Smart Load Control setting
- Outdoor unit low noise setting
- Defrost noise setting
- ODU capacity control
- Schedule functions







**Energy Contents** 





Touch Button













Error History

### **Duty Rotation**

Operates more than 2 sets of indoor units alternatively at every rotation interval time.

### Without Duty Rotation



### Air Conditioners Overwork

- Reduces air conditioner's life time
- Reduces compressor's life expectancy
- The service cost may increase due to air conditioner's overwork

### With Duty Rotation



### Stable & Safe Operation

- Stable operation since indoor units take turns
- Smaller breakdown chances and keeps server room in operation
- Increase air conditioner's life expectancy
- Rotation interval can be set from 1h to 999h freely.

### Operation Scenario









A → B : Duty Rotation is working properly

### When the number of the indoor units: 2

- If the interval time is set to 24h (default), ① While IDU #1 operates during interval time, and IDU #2 is on standby.
- ② IDU #2 operates next 24 hours, and IDU #1 goes into standby.

### Failure Back-up Operation

If an error occurs during operation and the system stops, the standby unit starts operation automatically.

### Without Failure Back-up



### Server can be Shut Down

- Server room overheats and server can be shut down.
- Probability for increase service cost
- Needs manual monitoring and operation for failure

### With Failure Back-up



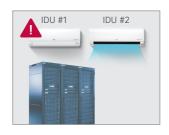
### Stable & Safe Operation

- Stable operation because the operation error can be covered by failure back-up operation
- Keeps server operation and decreases risk
- Protects server from overheating
- Less manual work

### Operation Scenario











### When the number of the indoor units: $\boldsymbol{2}$

- ① When duty rotation is enabled, IDU #1 is in operation and IDU #2 is on standby.
- ② If an error occurs on IDU #1, standby unit starts operation.
- ③ After the error is cleared, IDU #2 goes back to standby.

CONTRO

## Standard III Wired Remote Controller

### Air Quality Level Display

### Easy check for indoor air quality

PM10 / PM2.5 / PM1.0 · Status / Monitoring



CLASSIFICATION	GOOD	MODERATE	UNHEALTHY	POOR
* PM10 (µg / m3)	0 ~ 54	55 ~ 154	155 ~ 254	255 ~
* PM2.5 (µg / m3)	0 ~ 12	13 ~ 35	36 ~ 55	56 ~
* PM1.0 (ug / m3)	0 ~ 12	13 ~ 35	36 ~ 55	56 ~

- Note: Display color may change depending on the region / country.
  This function is available for indoor units that provide corresponding function.
  \* PM (Particulate matter)
- PM10 : Coarse Particulate matter / PM2.5 : Fine Particulate matter / PM1.0 : Ultra Fine Particulate matter
- PM designated as a carcinogen as like an asbestos, widely known as carcinogen.
   If the dust diameter is under 10 micrometers, it is PM10. And under 2.5 micrometers, it's PM2.5.

### **Environment Display**

### Displaying environment information for the more user comfort

Temperature / Humidity / Comfort level / CO<sub>2</sub> concentration







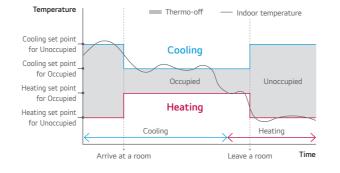
### **Dual Set Point**

### Auto changeover for convenience

- Indoor unit will keep the indoor temperature within the range of dual set point by automatically switching the unit operation.

### Setback for energy savings and comfort

- In the user's absence, the room temperature will remain between two set points rather than switching off, providing quick comfort when the mode is changed to 'occupied'.
- \* This function is for Heat Recovery system or Single heat pump. Otherwise it is not guaranteed.



### **Energy Savings**

### **Energy Management**

- Energy Monitoring & Alarm Real-time and day / week / month / year energy usage monitoring is possible. In addition, it can set target for energy usage and operation time, and alarm will be displayed when exceeded.

\* PDI (PQNUD1S40 / PPWRDB000) is required.



Instantaneous Power Check

Energy Usage Target Setting

### Time Limit Control

- Monitoring the unit's continuous running time. Prevents wasted energy by turning the unit off automatically.



### **Schedule Function**

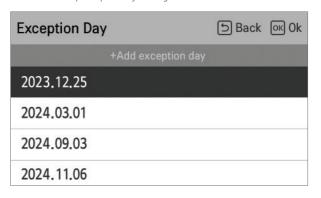
### Simple Schedule Status

Standard III remote controller provides clock type daily schedule.



### **Exception Day Settings**

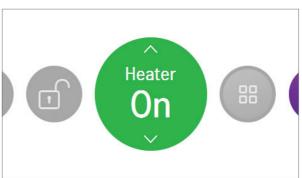
Possible to set up exception days on regular schedule.



### External Device On / Off

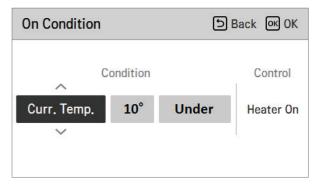
### **External Equipment Control**

User can control the external equipment through additional contact signal output.



### **Customized Interlocking Control**

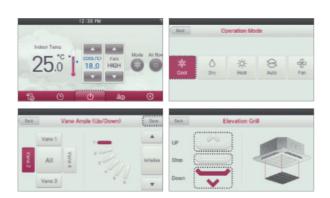
Users can create automatic control patterns, such as setting the system to adjust the temperature when it falls below or rises above a certain threshold.



CONTROL

# **Premium Wired Remote Controller**





### PREMTA000 1) / PREMTA000A 2) / PREMTA000B 3)

5-inch full touch screen with a premium design.



\* Supported languages list 1) English / Portuguese / Spanish / French 2) English / Italian / Russian / Chinese 3) English / German / Polish / Czech

MODEL NAME	PREMTA000 / PREMTA000A / PREMTA000B		
On / Off	0		
Fan Speed Control	0		
Temperature Setting	0		
Mode	Cool / Heat / Dry / Fan / Auto		
Additional Mode Setting 1)	Energy-Saving Cooling / Robot Cleaning / Heater / Humidification		
Auto Swing	0		
Vane Control (Louver direction)	0		
E.S.P (External Static Pressure) 2)	0		
Reservation	Simple / Sleep / On / Off / Weekly / Yearly / Holiday		
Time Display	0		
Electric Failure Compensation	0		
Child Lock	0		
Filter Sign	○ (Remain time + Alarm)		
Energy Management	Check Energy Usage <sup>3)</sup> / Check Operation Time / Target Setting (Energy, Operation Time) / Time Limit Operation / Alarm Popup / Initialization Usage Data		
Operation Status LED	0		
Indoor Temperature Display	0		
Wireless Remote Controller Receiver	O 4)		
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	0		
Home Leave	2 set points control		

- O: Applied, -: Not Applied
   It might not be indicated or operated at the partial product.
   This function is available for duct type.
   This function requires PDI (PONUDIS40 / PPWRDB000) to be installed.

- 4) For ceilling type ducted unit

  Note: 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

### Easy Energy Management

- Check the operation hour or electricity usage
- Comparison of usage by year
- Set the target usage and time





### Easy Scheduling

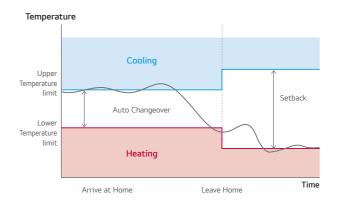
- Daily, Weekly, Yearly schedule function
- Schedule pattern setting
- Schedule copy





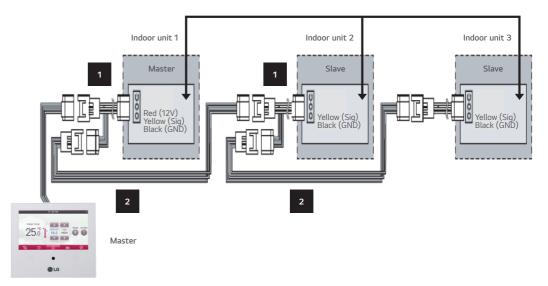
### **Dual Set Point**

- Auto changeover switches the operation mode automatically
- Setback (Leave Home) Changing status by occupied / unoccupied
- $\ensuremath{\star}$  This function is only for Heat Recovery system and Single heat pump.



### **Group Control**

- Max. 16 Indoor units by one remote controller



CONTROL

# **Standard II Wired Remote Controller**

### PREMTB001 / PREMTBB01

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





### Features & Benefits

• Wired remote controller that can implement various functions such as scheduling or filter alert.

MODEL NAME	PREMTB001 / PREMTBB01			
On / Off	0			
Fan Speed Control	0			
Temperature Setting	0			
Mode	Cool / Heat / Dry / Fan / Auto			
Additional Mode Setting	Energy-Saving Cooling / Robot Cleaning / Heater / Humidification			
Auto Swing	0			
Vane Control (Louver direction)	0			
E.S.P (External Static Pressure)	0			
Reservation	Simple / Sleep / On / Off / Weekly / Holiday			
Time Display	0			
Electric Failure Compensation	0			
Child Lock	0			
Filter Sign	○ (Remain time + Alarm)			
Operation Status LED	0			
Indoor Temperature Display	0			
Wireless Remote Controller Receiver	O 1)			
Size (W x H x D, mm)	120 x 121 x 16			
Black Light	0			
Power Consumption Monitoring	○ <sup>2)</sup>			
Check Model Information	0			

# **Simple Wired Remote Controller**

### PQRCVCLOQW (White) / PQRCVCLOQ (Black) / PQRCHCA0QW (White) / PQRCHCA0Q (Black)

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







### Features & Benefits

• Small remote control with minimal functionality.

MODEL NAME	PQRCVCL0QW / PQRCVCL0Q	PQRCHCA0QW / PQRCHCA0Q
On / Off	0	0
Fan Speed Control	0	0
Temperature Setting	0	0
Mode	Cool / Heat / Dry / Fan / Auto	-
Auto Swing	0	0
Vane Control (Louver direction)	0	0
E.S.P (External Static Pressure)	0	0
Electric Failure Compensation	0	0
Child Lock	0	0
Indoor Temperature Display	0	0
Wireless Remote Controller Receiver	O 1)	O 1)
Size (W x H x D, mm)	70 x 121 x 16	70 x 121 x 16
Black Light	0	0

# **Wireless Remote Controller**

### PWLSSB21H (Heat Pump), PWLSSB21C (Cooling Only)

Handy and portable wireless type.



### Features & Benefits

- · Easy to use while moving. · Main functions are available.
- On / Off Fan Speed Control Temperature Setting Cool / Heat / Dry / Fan / Auto Additional Mode Setting Air Purification / Energy-Saving Cooling / Robot Cleaning / Auto Dry Vane Control (Louver direction) Reservation Sleep / On / Off Time Display Sleep Mode Auto Max. 7 hours 51 x 153 x 26 Size (W x H x D, mm)

<sup>\*\*</sup> O : Applied, - : Not Applied
1) For ceiling type ducted unit
2) This function requires PDI (PQNUD1S40 / PPWRDB000) to be installed.
Note : Indoor unit needs to have functions requested by the controller.

For ceiling type ducted unit
 Note: Indoor unit needs to have functions requested by the controller.

<sup>※ ○ :</sup> Applied, - : Not Applied
1) For some products, you can use "slow" fan speed function.

CONTRO

# Wi-Fi Modem



### PWFMDD200

Control conditioners by using internet devices, such as Android or iOS smartphones.



### Features & Benefits

- User can enjoy anytime, anywhere access with Wi-Fi equipped device through LG's ThinQ mobile app.
- This allows the user to access the unit remotely to switch the unit on or off before or after leaving the vicinity.
- LG's exclusive Home Appliances control app (ThinQ) is available.
- Simple operation for various functions.
- On / Off
- Operation Mode
- Current / Set Temperature
- Fan Speed
- Vane Control 1

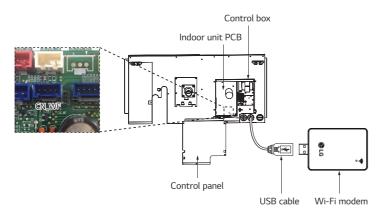
- Reservation (Sleep, Weekly On / Off)
- Energy Monitoring <sup>2)</sup>
- Filter Management - Error Check
- Air Purify 3)

MODEL NAME	PWFMDD200	
Size (W x H x D, mm)	48 x 68 x 14	
Interfaceable Products	System Air Conditioner 3)	
Connection Type	Indoor unit 1:1	
Communication Frequency	2.4 GHz	
Wireless Standards	IEEE 802.11b / g / n	
Mobile Application	LG ThinQ (Android 7.0 or higher, iPhone iOS 14.0 or higher)	
Optional Extension Cable	PWYREW000 (10m extension)	

- 1) Vane Control may not be possible according to the type of Indoor unit.
  2) LG Centralized controller and PDI installation is required for this function.
  3) For the compatibility with Indoor unit, please contact regional LG office.

- 1. Functionality may be different according to each IDU model.
  2. User interface of application shall be revised for its design and contents improvement.
  3. Application is optimized for smartphone use, so it may not be well functioning with tablet devices.

Installation Scene

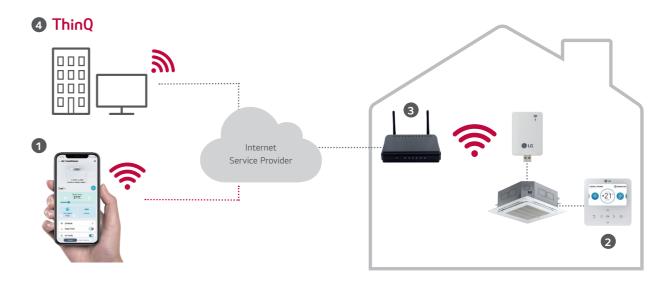


\*\* The Wi-Fi communication distance and reliability may be vary due to the type of Wi-Fi router and the installation environment, Please refer to the manual.

### ThinQ Connectivity

### Connection (Pairing) Order

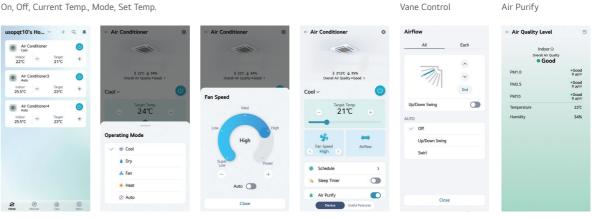
- Make an LG account on ThinQ (Application) and login.
- ② Select the installed product and set AP (Access Point) mode by wired / wireless remote controller.
- **3** Select the Wi-Fi network that will be used and insert the password.
- Product registration progress is completed.
- \* 5GHz networks may not be supported.



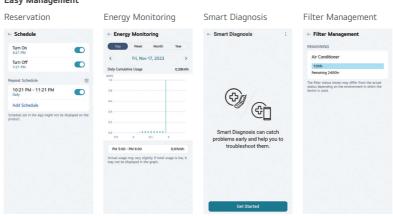
### ThinQ Mobile App

### Simple operation for various functions

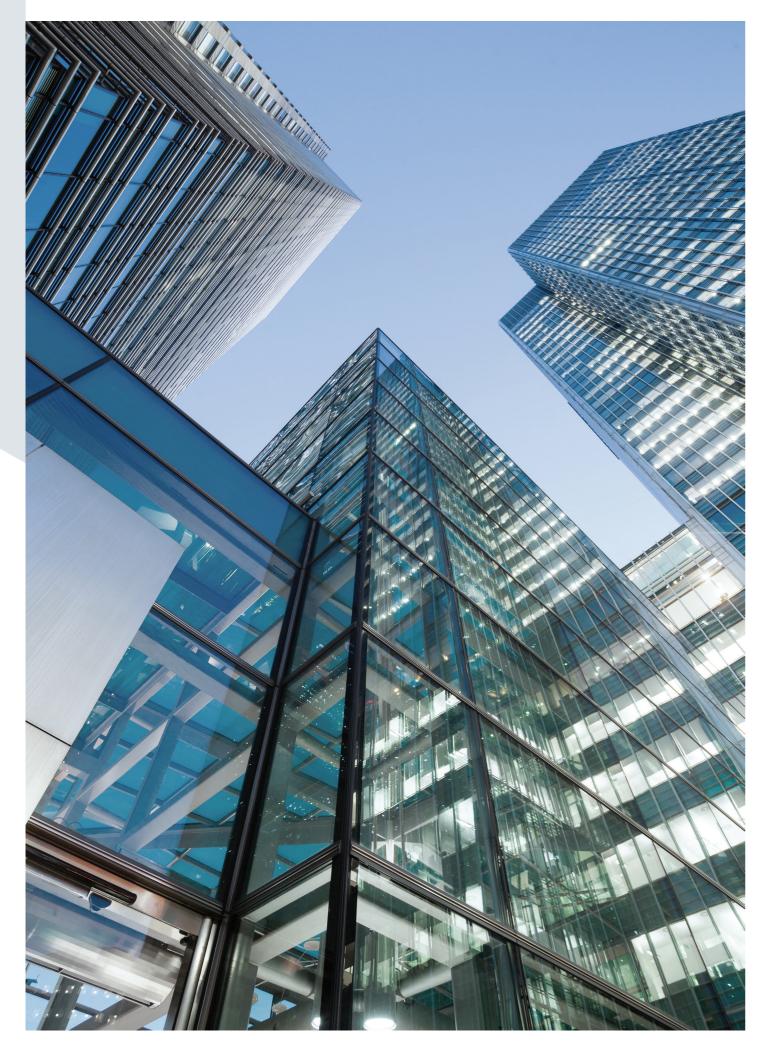
On, Off, Current Temp., Mode, Set Temp.



### Easy Management



CONTROL



# **Feature Functions**

Controller Nar	ne		AC Ez	AC Ez Touch	AC Smart 5 <sup>6)</sup>	ACF	<b>9</b> 5 <sup>6)</sup>	AC Manager 5 7)	Cloud Gateway
Model Name				ACO TAME OF TA	Table	<b>0</b> 16	STATE OF THE PARTY	●16 P************************************	Out friend
			PQCSZ250S0	PACEZA000	PACS5A000	PACP5A000	Using Lonworks	PACM5A000	PWFMDB200
	DO		-	-	2	4	-	-	-
	DI		-	1	2	10	-	-	-
		IDUs	32	64	128	256	64	8,192	16
		ERV	32	64	128	256	64	8,192	16
Product	Max.	A / C + ERV	32	64	128	256	64	8,192	16
	Connectable No.	AHU	-	-	16	16	16 5)	16 x 32	-
	INU,	Chiller	-	-	5	10	-	10 x 32	-
		Commercial Air Purifier <sup>1)</sup>	-	-	64	128	-	128 x 32	-
	Air Condition	er	O 3)	0	0	0	0	0	0
	Ventilation (ERV / ERV D	X)	O 4)	0	0	0	0	0	0
	Heating		-	0	0	0	0	0	O 8)
Compatibility	AHU		-	-	0	0	0	0	-
	Chiller		-	-	O 5)	O 5)	-	0	-
	Commercial A	Air Purifier 1)	-	-	O 5)	O 5)	-	0	-
	ACS IO		-	-	0	0	O 5)	0	-
	Add Drawing		-	-	O 5)	O 5)	O 5)	0	-
	Group Manag	Group Management		0	O 5)	O 5)	O 5)	0	-
	Auto Changer Over		-	0	O 5)	O 5)	O 5)	0	-
	Set Back		-	0	O 5)	O 5)	O 5)	0	-
Additional unction	Dual Setpoint	:	-	0	0	0	O 5)	0	-
unction	Change Alarn	n	-	Filter	Filter	Filter	Filter	Filter	-
	Indoor Unit L	ock	O 2)	0	0	0	O 5)	-	-
	Cycle Monito	ring	-	-	0	0	O 5)	0	0
	Air Purify		-	O 5)	O 5)	O 5)	-	0	-
Schedule			0	0	O 5)	O 5)	O 5)	0	O 9)
		Energy & Priority Control	-	0	0	0	O 5)	0	-
Auto Control	Peak Control	Outdoor Unit Capacity Control	-	-	O 5)	O 5)	O 5)	0	-
	Time limit cor	ntrol	-	-	○ 5)	O 5)	O 5)	0	-
	Interlocking		-	-	O 5)	O 5)	O 5)	0	-
nergy Navigat	ion		-	-	○ 5)	O 5)	-	0	-
	Power		-	0	0	0	O 5)	0	O 8)
nergy	Gas		-	-	0	0	O 5)	0	-
Report	Run time		-	-	O 5)	O 5)	O 5)	0	-
	Save to PC /	USB (Excel)	-	-	PC / USB <sup>5)</sup>	PC	PC	PC	-
rend Reporting	9		-	-	O 5)	O 5)	-	0	-
	Report (Cont	rol / Error)	-	Error	O 5)	O 5)	O 5)	0	0
History Send Email			-	-	O 5)	O 5)	O 5)	0	-
	Save to PC /	USB (Excel)	-	-	PC / USB	PC	O 5)	PC	-
	Summer Time	2	-	0	O 5)	O <sup>5)</sup>	O 5)	0	-
etc	Outdoor Unit Operation	Oil-Return	-	-	O 5)	O <sup>5)</sup>	O <sup>5)</sup>	-	-
	User Authorit	ty	-	Password	O 5)	O 5)	O 5)	0	-
	PC Access		-	0	O 5)	O 5)	○ 5)	0	-

<sup>\*\*</sup> O : Applied, - : Not Applied

1) The Commercial Air purifier must additionally install PI485 (PHNFPI4A0).

2) Hard Lock

3) Except for some feature (Individual lock, Limit temp., etc.)

4) Except for some feature (User mode, additional function, etc.)

5) This function is not applied for BMS points.

6) Without additional device, ACP 5 and AC Smart 5 provide BACnet IP and Modbus TCP interface for BMS.

7) ACP 5 or AC Smart 5 is required.

8) Only for Therma V

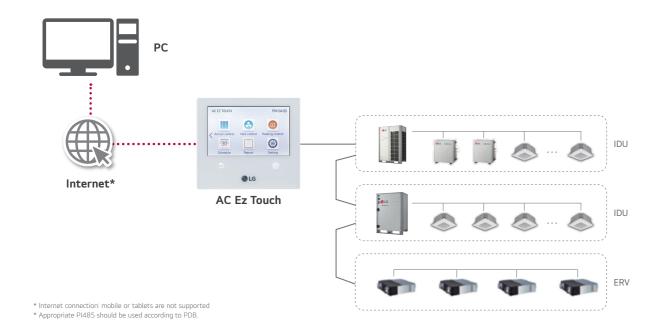
9) It will be released until 1Q in 2024.

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ENTRALIZED

CONTROL

# **AC Ez Touch**



### PACEZA000

Smart management with 5-inch touch screen for small sites.



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	0	
Slave Mode (Interlocking with higher level controller)	0	
Schedule	Weekly / Monthly / Yearly / Exception day	
Remote Access	By client S/W (Neither Android nor IOS are supported)	
Emergency Stop & Alarm Display	0	
Power Consumption Monitoring (with PDI)	0	
Auto Changeover / Setback	0	
Temperature Limit	0	
Operation History	Error record	
ODU Low Noise 1)	0	
Daylight Saving Time	0	
External IO Port	DI 1	
IPv6 Support	0	
Air Purify Control	0	
Air Quality Level	0	

<sup>※ ○ :</sup> Applied, - : Not Applied1) It is only available in some products.

### PC Access

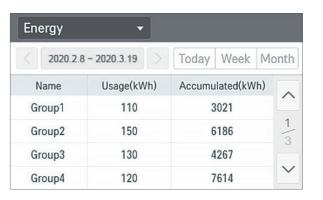
Users can control each space efficiently through PC access.



- \* IPv6 supported Open port 80 & 9300
- Fix public IP is mandatory. Router configuration of NAT is required.

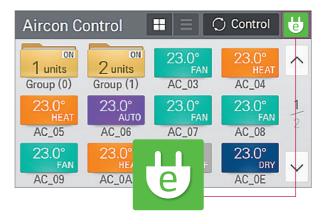
### Energy Statistics (with PDI)

Operational numbers (Time, Power consumption) are provided to help make intelligent system operation decisions.



### **Energy Mode**

When using the energy mode function, the system can forcefully switch from cooling mode to fan mode or from heating mode to off mode. (Only when operating an indoor unit)



### Air Purify Control & Monitoring





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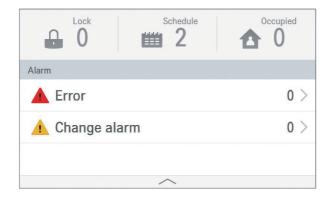
ENTRALIZED

CONTROL

# **AC Ez Touch**

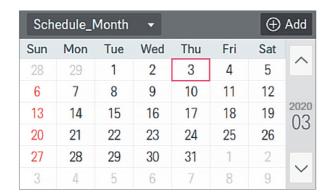
### **Alarm Indicator**

It shows errors and alarm information. Users can respond immediately according to alarm indicator so the HVAC system is monitored consistently.



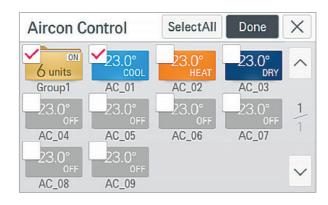
### Schedule

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

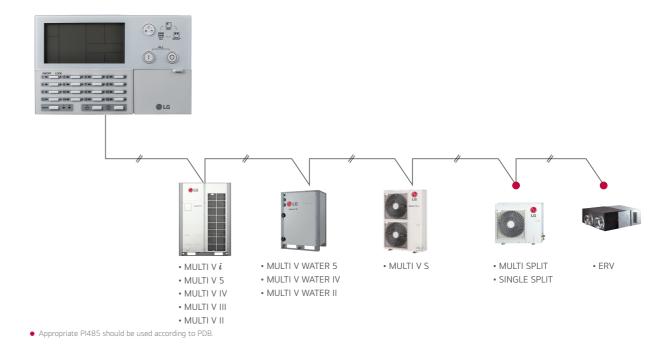


### Group / Individual Control

Users can control each indoor unit individually or by group by simply clicking each unit on control screen.



# **AC Ez**



### PQCSZ250S0

Easy to manage up to 32 indoor units, including ERV with a simple interface.



### Features & Benefits

- 32 indoor units control
- Weekly Schedule
- Individual / Group Control

MODEL NAME	PQCSZ250S0		
Size (W x H x D, mm)	190 x 120 x 20		
Interfaceable Products	MULTI V / ERV DX		
Display	LED / LCD Display		
Power	DC12V, 1A		
Maximum number of units	32		
Individual / Group Control	On & Off / Mode / Temperature / Fan speed		
Individual Controller Lock	All		
Error Check	0		
Slave Mode (Interlocking with higher level controller)	0		
Schedule	Weekly		

※ ○ : Applied, - : Not Applied

CONTROL

# **Cloud Gateway**



### PWFMDB200

Cloud Gateway can remotely control up to 16 indoor units through LG ThinQ or BECON Cloud.

### **Cloud Gateway**









MODEL NAME	PWFMDB200	
Size (W x H x D, mm)	120 x 120 x 29	
Interfaceable Products	System Air Conditioner	
Maximum Number of Units	16	
Communication Frequency	2.4 GHz	
Wireless Standards	IEEE 802,11b/g/n	
Mobile Application	LG ThinQ (Android 7.0 or higher, iPhone iOS 14.0 or higher)	

Fur	nction	ThinQ	BECON Cloud 1)
Max, number of unit		16	
	Operation Start / Stop	0	0
	Operation Mode	0	0
Remote Control	Target Temperature	0	0
Remote Control	Fan Speed	0	0
	Swing	0	0
	Air Purify	0	0
Interlocking Product	MULTI V	O <sup>2)</sup>	0
	GHP	0	0
	MULTI	0	0
	Single	0	0
	ERV	X	0
	Heating	X	O 3)
Etc	Schedule	0	Δ 4)
	Electricity Monitoring	X	○ 3)
	History	Х	0
Maintenance	Smart Diagnosis	0	X
	Cycle Monitoring	X	0

<sup>1)</sup> Depending on the region, BECON Cloud may not be available. Please contact to BECON Cloud administrator for checking availability. (BECONcloud-biz@lge.com) 2) Hydrokits are excluded 3) Only for Therma V 4) It will be released until 1Q in 2024.

CONTROL

# **SMARTPHONE TABLET BMS** INTERNET **BACnet** AC Smart 5 3<sup>rd</sup> party interlocking CH1 CH2 Motion Temp. CO<sub>2</sub> ACU IO Fan Emergency Lighting Centrifugal Absorption Screw Invert Scroll Comm.Kit (For Supply / scharge Air Cont €1.0 ±] Comm.Kit (For Return / Room Air Control)

276

- According to CH1 setting, normal ODU can be connected to CH1.
   (Flexible wiring design with 2 ports)
   Appropriate PI485 should be used according to PDB (Product Data Book).
   For details, refer to the product PDB or manual.

# **AC Smart 5**

### PACS5A000

10-inch touch screen with HTML5 GUI (Graphic User Interface) for easy control.













Multi leve grouping

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 / Commercial Air Purifier	
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 1)	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	0	
Slave Mode (Interlocking with higher level controller)	0	
Schedule	Weekly / Monthly / Yearly / Exception day	
Web Access	0	
Emergency Stop & Alarm Display	0	
Power Consumption Monitoring (with PDI)	0	
Auto Changeover / Setback	0	
Temperature Limit	0	
Operation Time Limit	0	
Visual Navigation	0	
Operation Trend	0	
Air Purify Control	0	
Air Quality Level	0	
Interlock Control	0	
Virtual Group Control	0	
ODU Capacity Control	0	
Energy Navigation (with PDI)	0	
Daylight Saving Time	0	
External IO Port	DI 2 / DO 2	
BMS Integration <sup>2)</sup>	BACnet IP / Modbus TCP	
IPv6 Support	0	

O: Applied, -: Not Applied
It is only available in some products.
For the detail point list, please refer to the installation manual.

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ENTRALIZE

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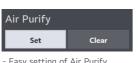
ONTROL

## **AC Smart 5**

### A Total Air Purification Solution

### Air Purify Control





- Easy setting of Air Purify function (Set / Clear)

### Air Quality Level Monitoring





Commercial Air Purifier

\* The Commercial Air purifier must additionally install PI485(PHNFP14A0).

### **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. In addition, HTML5 allows you to easily control LG HVAC systems on a variety of platforms (PC, Mobile, Tablet), at any time and from any location, not just on the touch screen.



### Visualized Control

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



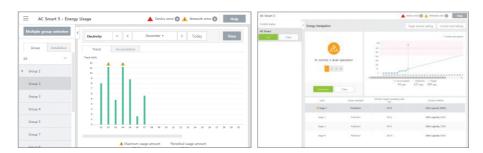
### **Multi Level Group Composition**

Users can create frequency or multi-level groups, making it easier to control and monitor the devices.



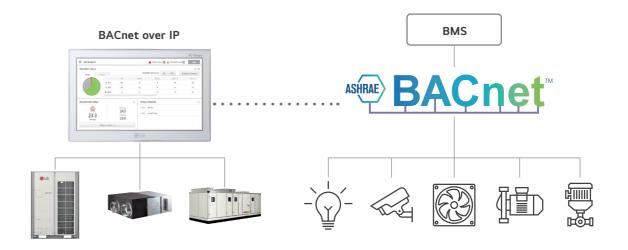
### **Energy Management**

The energy navigation function allows the air conditioner's operational energy usage to be manged monthly, weekly and yearly. By analyzing present energy consumption and comparing with the plan, overuse of system operational costs can be prevented.



### Building Management System (BMS) Integration

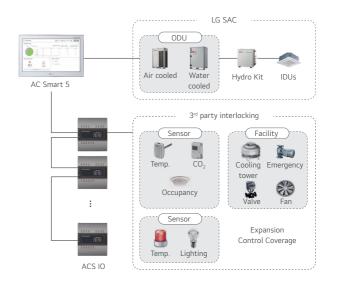
Without additional device, AC Smart 5 provides BACnet IP & Modbus TCP interface for BMS integration as well as its own management



### Interlocking with 3rd Party Equipment

AC Smart 5 can make operation scenarios with 3<sup>rd</sup> party equipment by ACS IO Module and ACU IO Module. Control coverage is expanded.

(Air conditioner only → Sensors, Fans, Pumps, Switches...)

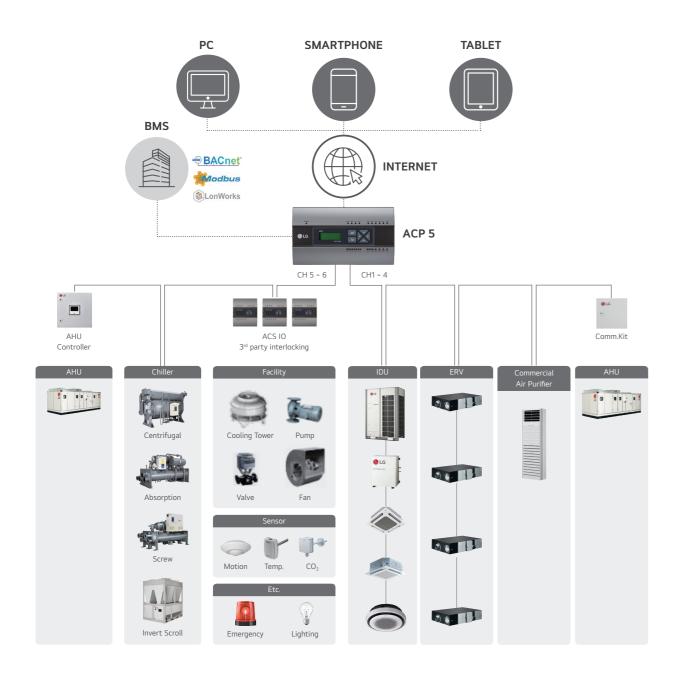


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ENTRALIZED

CONTROL

# ACP 5



### **Advanced Network Accessibility**

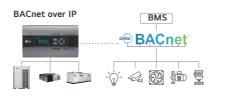


\* Fix Public IP is mandatory.
\* Router's Configuration of NAT is mandatory. Open port 80 & 9300.

### **Energy Navigation**



### **BACnet IP & Modbus TCP**



### PACP5A000

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



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 / Commercial Air Purifier	
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 1)	Comfort Cooling / ODU Low Noise / ODU Defrost Mode / Comfort Level display / CO <sub>2</sub> Level display (for ERV / ERV DX) / Night Time Free Cooling (for ERV / ERV DX)	
Error Check	0	
Schedule	Weekly / Monthly / Yearly / Exception day	
Web Access	0	
Emergency Stop & Alarm Display	0	
Power Consumption Monitoring (with PDI)	0	
Auto Changeover / Setback	0	
Temperature Limit	0	
Operation Time Limit	0	
Visual Navigation	0	
Operation Trend	0	
Air Purify Control	0	
Air Quality Level	0	
Interlock Control	0	
Virtual Group Control	0	
ODU Capacity Control	0	
Energy Navigation (with PDI)	0	
Daylight Saving Time	0	
External IO Port	DI 10 / DO 4	
BMS Integration <sup>2)</sup>	BACnet IP / Modbus TCP	
IPv6 Support	0	

- O: Applied, -: Not Applied
  It is only available in some products.
  For the detail point list, please refer to the installation manual.

### Air Purify Control / Monitoring

### Integrated Management

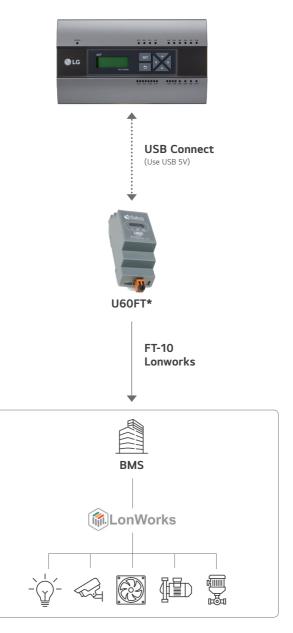
The Commercial Air Purifier can be used with LG central controller to monitor and control.



CONTROL

# **For Lonworks**

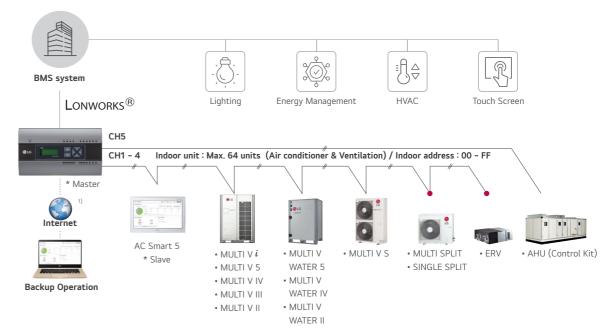
For LonWorks protocol, only ACP 5 provides an interface for BMS integration. Additionally, a U60FT module is required between ACP 5 and the BMS system to establish the system interface between the LonWorks FT-10 BMS and LG HVAC unit.



UNIT TYPE	BACNET IP	MODBUS TCP	LONWORKS
IDU	0	0	0
ERV, DX ERV	0	0	0
ODU	Monitoring Only	-	-
Heating	0	0	0
AHU	0	0	-
Scroll Air Inv Gen2	0	-	-
EXP I/O	0	-	-
Air Purifier	0	-	-

CONTROL	MONITORING
On / Off Command	On / Off
Operation Mode Setting	Operation Mode
Lock	Lock
Temperature	Temperature
Fan Level	Fan Level
Fan Direction Auto	Fan Direction Auto
Mode Lock	Mode Lock
Fan Level Lock	Fan Level Lock
Temperature Lock	Temperature Lock
Temperature Lower Limit	Temperature Lower Limit
Temperature Higher Limit	Temperature Higher Limit
Peak Convert Cycle	Peak Convert Cycle
Peak Setting	Peak Setting
Temperature Unit	Temperature Unit
Total Temperature Lock	-
Total On / Off	-
Total Temperature	-
-	Product Type
-	Product Address
-	Current Temperature
-	Alarm
-	Power
-	Error Code
-	Peak Current Operating Percent
-	Total Accumulate Power

※ ○ : Applied, - : Not Applied



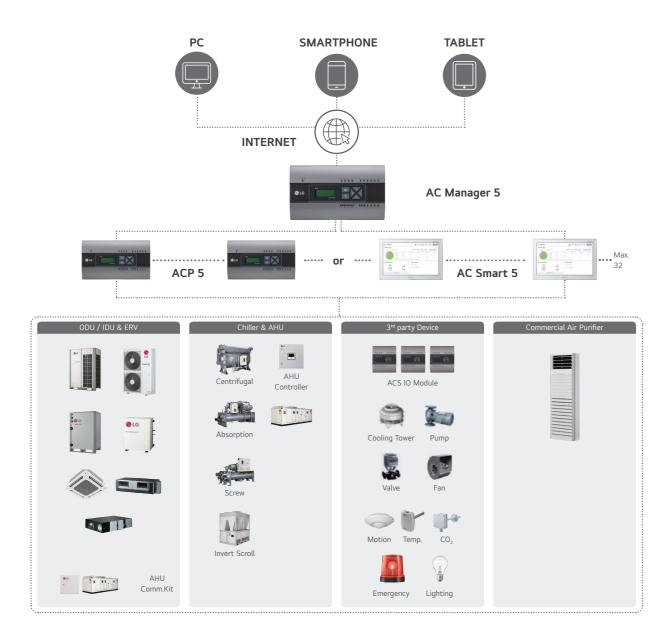
1) Assignment of public IP address is required to access central controller through internet.

Appropriate PI485 should be used according to PDB (Product Data Book).

<sup>※</sup> O: Applied, -: Not applied \*U60FT: This device should be purchased separately from 3<sup>rd</sup> party supplier. Please contact regional LG office for more detailed information.

CONTROL

# AC Manager 5





### PACM5A000

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





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 / Commercial Air Purifier	
Maximum number of units	8,192 (Supports 32 ACP 5 or AC Smart 5)	
Individual / Group Control	On & Off / Mode / Temperature / Fan speed	
Individual Controller Lock	Temperature / Mode / Fan speed / All	
Error Check	0	
Schedule	Weekly / Monthly / Yearly / Exception day	
Web Access	0	
Emergency Alarm Display	0	
Power Consumption Monitoring (with PDI)	0	
Auto Changeover / Setback	0	
Temperature Limit	0	
Operation Time Limit	0	
Visual Navigation	0	
Operation Trend	0	
Air Purify Control	0	
Air Quality Level	0	
Interlock Control	0	
Virtual Group Control	0	
ODU Capacity Control	0	
Energy Navigation (with PDI)	0	

※ ○ : Applied, - : Not Applied
Note : AC Manager 5 required for ACP 5 or AC Smart 5

### Up to 8,192 Connections for Indoor Units

Administrators can easily and conveniently manage a variety of LG HVAC equipment. Also, it is available to manage many buildings or areas at one place via AC Manager 5.



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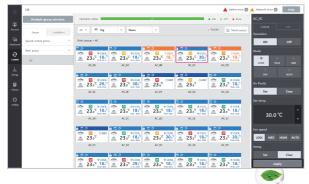
ONTROL

# **AC Manager 5**

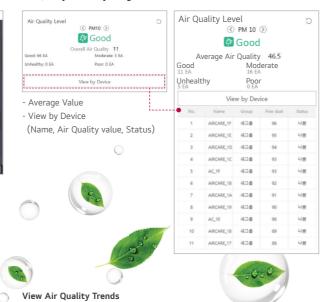
### Smart Air Purify Solution

Total management of the air purification function creates a clean environment everyday.





### Air Quality Summary Widget



Air Purify Control



- Easy setting of Air Purify function (Set / Clear)



- Daily (per hour), period (30 days) shows trends
- Excel output / easy to manage

### Advanced Network Accessibility & User Friendly GUI

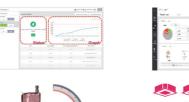
As an advanced central controller, AC Manager 5 offers a flexible interface for each user by assessing the device screen and automatically customizing the layout to provide the most optimized interface.





### **Energy Navigation & Energy Usage Graph**

Energy navigation is the function that sets the target usage amount to limit the monthly power consumption and control so that the total accumulated power consumption does not exceed the target usage amount. It performs a total of 7 control levels with the estimated / actual usage amount exceeding the ratio compared to the monthly target usage amount. For the control method, there are indoor unit operation ratios, outdoor unit capacity control, and indoor unit operation controls.





IDU Operation Ratio Control





IDU Operation Level

### Peak Control

This function can reduce electricity use. There are two kinds of control logic: energy saving effect by indoor unit operation control rate, and load management effect by outdoor unit capacity control.

### Operation ratio (IDUs) Control



Compressor Capacity Control

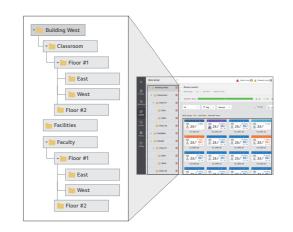
### **ODU Capacity Control**



Compressor Hz Cont

### Multi Level Group Composition

Users can create frequency or multi-level groups, making it easier to control and monitor the devices.



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# **MODBUS RTU Gateway**

## PMBUSB00A

Providing MODBUS RTU connection between LG Air conditioners and BMS.



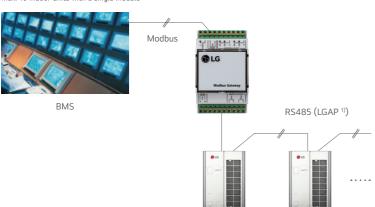
## Features & Benefits

- Function
- Modbus RTU communication with Modbus master controller
- Modbus RTU slave (RS485) / 9,600 bps
- Applicable for MULTI V i, MULTI V 5, ERV, Heating
- Size (W x H x D, mm): 53.6 x 89.7 x 60.7
- Max. 16 IDUs with single module / Max. 64 IDUs with 4 modules
- Power : DC 12V (250mA)
- No slave allowed in LGAP

#### Installation Scene

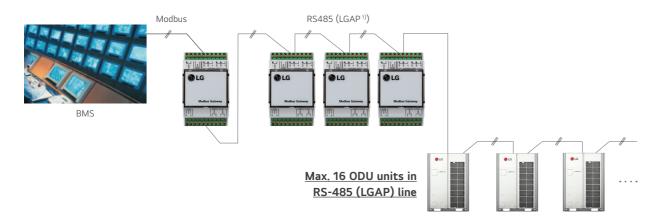
#### Single Module

Max. 16 indoor units with a single module



#### Multiple Module

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



<sup>1)</sup> LGAP is LG Protocol. Max. 16 ODU units in RS-485

## Modbus Gateway Memory Map

Baud Rate: 9,600 bps, Stop Bit: 1 stop bit, Parity: None Parity, Byte size: 8 bits

## Coil Register (0 x 01)

NO.		DATA BIT		FUNCTION	REGISTER
	AIR CONDITIONER	ERV / DX ERV	HYDRO KIT & THERMA V	FUNCTION	
1	Operate (On / Off)	Operate (On / Off)	Operate (On / Off)	0 : Stop / 1 : Run	
2	Auto Swing	Aircon Operate (On / Off)	Hot Water Mode (On / Off)	0 : Disable / 1 : Enable	
3	Filter Alarm Release	Filter Alarm Release 1)	Reserved	0 : Normal / 1 : Alarm Release	
4	Lock Remote Controller	Lock Remote Controller	Lock Remote Controller	0 : UnLock / 1 : Lock	
5	Lock Operate Mode	Lock Operate Mode 1)	Reserved	0 : UnLock / 1 : Lock	Register = N X 16 + ①
6	Lock Fan Speed	Lock Fan Speed 1)	Reserved	0 : UnLock / 1 : Lock	(N = Indoor Unit Central Address)
7	Lock Target Temp.	Lock Target Temp. 1)	Reserved	0: UnLock / 1: Lock	7 (ddi C33)
8	Lock IDU Address	Lock IDU Address 1)	Reserved	0 : UnLock / 1 : Lock	
9	Reserved	Quick Ventilate	Reserved	0 : Disable / 1 : Enable	
10	Reserved	Energy Save	Reserved	0 : Disable / 1 : Enable	

<sup>1):</sup> This register value is applied 'DX Ventilator' ONLY.

#### Discrete Register (0 x 02)

NO		DATA BIT		FUNCTION	DECICTED
NO.	AIR CONDITIONER	ERV / DX ERV	HYDRO KIT & THERMA V	FUNCTION	REGISTER
1	Connected IDU	Connected IDU	Connected IDU	0 : Disconnected / 1 : Connected	
2	Alarm	Alarm	Alarm	0 : Normal / 1 : Alarm	
3	Filter Alarm	Filter Alarm <sup>1)</sup>	Hot Water Only <sup>2)</sup>	O: Normal / Alarm Hydro Kit O: Normal / Hot Water Only	Register = N X 16 + ① (N = Indoor Unit Central Address)
4	Reserved	Reserved	Target Temp. Select	0 : Air / 1 : Water	
5	Reserved	Reserved	Error Division <sup>2)</sup>	0 : CH type error / 1 : BC type error	

<sup>1) :</sup> This register value is applied 'DX Ventilator' ONLY. 2) : This register value is applied 'Hydro Kit' ONLY.

# Holding Register (0 x 03)

NO.		DATA BIT	FUNCTION REGIS		DECICTED
NO.	AIR CONDITIONER	ERV / DX ERV	HYDRO KIT & THERMA V		REGISTER
1	Operate Mode	Operate Mode	Operate Mode	O: Cooling, 1: Dehumidifying, 2: Fan, 3: Auto, 4: Heating Hydro Kit (Middle Temp. DHW) / AWHP O: Cooling, 3: Auto, 4: Heating Hydro Kit (High Temp. DHW) DHW)	Register = N X 20 + ① (N = Indoor Unit Central
2	Fan Speed	Fan Speed	Target Temp. DHW 2)	1 : Low, 2 : Mid, 3 : High, 4 : Auto	Address)
3	Target Temp.	Target Temp. 1)	Target Temp. 2)	16.0 ~ 30.0 [°C] x 10	
4	Target Temp. Limit (Upper)	Target Temp. Limit 1) (Upper)	Reserved	16.0 ~ 30.0 [°C] x 10	
5	Target Temp. Limit (Lower)	Target Temp. Limit 1) (Lower)	Reserved	16.0 ~ 30.0 [°C] x 10	
6	Reserved	Vent. Operate Mode	Reserved	0 : HEX, 1 : Auto, 2 : Normal	

#### Input Register (0 x 04)

NO.		DATA BIT		FUNCTION REGISTER	
NU.	AIR CONDITIONER	ERV / DX ERV	HYDRO KIT & THERMA V		REGISTER
1	Error Code	Error Code	Error Code	0 ~ 255 ** Please refer to the product error table.	
2	Room Temp.	RA Temp.	Room Temp.	-99.0 ~ 99.0 [°C] x 10	Register = N X 20 + ①
3	Pipe In Temp.	OA Temp. 1)	Water Inlet Temp.	-99.0 ~ 99.0 [°C] x 10	(N = Indoor Unit Central
4	Pipe Out Temp.	SA Temp. 1)	Water Outlet Temp.	-99.0 ~ 99.0 [°C] x 10	Address)
5	Reserved	Pipe In Temp. 1)	Sanitary Tank Temp.	-99.0 ~ 99.0 [°C] x 10	
6	Reserved	Pipe Out Temp. 1)	Solar Temp. <sup>2)</sup>	-99.0 ~ 99.0 [°C] x 10	

<sup>1) :</sup> This register value is applied 'DX Ventilator' ONLY. 2) : This register value is applied 'AWHP' ONLY.

<sup>1):</sup> This register value is applied 'DX Ventilator' ONLY.
2): This value range can be between 0 ~ 127 [°C]. And it would be limited by upper & lower value according to the setting of remote controller.

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ONTROL

# **KNX Gateway**

Technical and service support must come from Intesis directly. LG Electronics Inc. warrants and assumes no liability for this product.

This is the landing page of INTESIS MAPS: https://www.intesis.com/products/intesis-maps-h

## INKNXLGE0160036 (Indoor Unit ~16) / INKNXLGE0640036 (Indoor Unit ~64)

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



#### Key features

- 2 model types
- Up to 64 connectable indoor units
- Direct connection to KNX TP1 bus
- Independent management of communications
- Power supply: 9 to 36V DC or 24V AC (not included)
- KNX Power consumption : 5mA
- Standard DIN-Rail 6 modules enclosure
- LG Slave Central controller (for example, AC Smart) and PDI can be operated with KNX gateway

#### Key benefits

- Easy & quick installation : user comfort
- Flexible integration (Intesis MAPS & KNX) Export Group Address by "csv" file to ETS5/6
- Compatibility with all LG products (Air-Conditioning, ERV, Hydrokits and AWHP)
- Ergonomic & friendly user interface (using the supplied software Intesis MAPS)
- One single tool for settings, commissioning, SW update and troubleshooting

#### Key messages

- Manage your building with an advanced building automation solution
- Energy savings
- Power consumption measurement using additional LG PDI device
- Bidirectional communication between LG & KNX
- Your system diagnostics accessible through LG Error codes

MODEL NAME	MAX. CONNECTION INDOOR UNITS
INKNXLGE0160036	16
INKNXLGE0640036	64

#### Intesis MAPS is Configuration Software for Intesis KNX Gateway Series

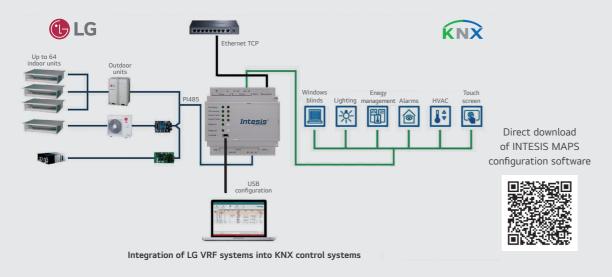
Easy to use tool for the configuration of Intesis gateway, in a fast and effective way.

It offers the maximum integration possibilities with a minimal knowledge required on the system to be integrated.



- Only needed during configuration.
- One single tool for the configuration of the whole range of Intesis KNX gateway series.
- Supplied with Intesis gateway 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 Intesis gateway's datapoints.
- Includes powerful and useful features for configuration, setup and troubleshooting.

#### Installation Scene



# INKNXLGE001R000 (For Indoor Unit)

LG-KNX gateway allows fully bi-directional communication between LG VRF systems and KNX installations.

One gateway, one AC unit: This is the solution of ONE-TO-ONE integration. All required KNX DPT objects are fully compatible with all KNX thermostats in the market. The gateway is wired directly to an indoor unit. This allows not only the control of the main AC functions such as operating mode, fan speed, temperature setpoint, but also the monitoring of errors and alarms.



#### Key features

- KNX certified.
- Configured by ETS standard configuration tool.
- KNX database available on ETS5 / 6
- Reduced dimensions allowing a quick installation inside the Air Conditioner unit.
- All the required DPT objects are 100% compatible with all KNX termostats in the market.
- Energy efficiency functions, such as "timeout", "open window" or "occupancy".
- Smooth integration of KNX thermostats allowing the control of the AC unit by the thermostat's own temperature sensor (Virtual Temperature)
- Simultaneous control of the AC unit by LG remote controller and KNX.

#### Key benefits

- Optimization cost for small or medium installations.
- Decentralized device control: one gateway connected to each indoor unit.
- Easy integration on KNX installations
- Intuitive configuration

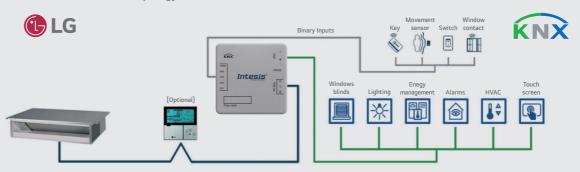
#### Key messages

- Total control and monitoring of the AC unit from KNX, including AC unit's internal variables, running hours counter (for filter maintenance control) and error indication (CH Error Codes).
- Fully integrated solution on Engineering Tool Software ETS5 / 6 by database product

#### KNX LG solution concept



#### Installation Scene & LG Topology



#### **KNX Product**

Database available directly on ETS5/6 under INTESIS manufacturer



# Configuration by ETS Data Base

Send READs for Control\_objects on bus recovery (T & U flags must be active)

Web landing page of the product



ENTRALIZED

CONTROL

# **PI485**

PI485 converts LG Air conditioner's protocol to the RS485 protocol for the central controller.

# PMNFP14A1

Easy to manage up to 64 indoor units.



- Power : Single phase AC 220V 50 / 60Hz
- 1 for Each Outdoor Unit
- Multi V MINI (ARUN40GS2A / ARUV40GS2A Only needs PI485)
- Single Split
- Multi Split

## PP485A00T



- Power : Single phase AC 220V 50 / 60 Hz
- 1 for Each Indoor Unit
- Therma V

# PHNFP14A0



- Power : Connected with the Indoor Units
- 1 for Each Indoor Unit

# PSNFP14A0 (with case)



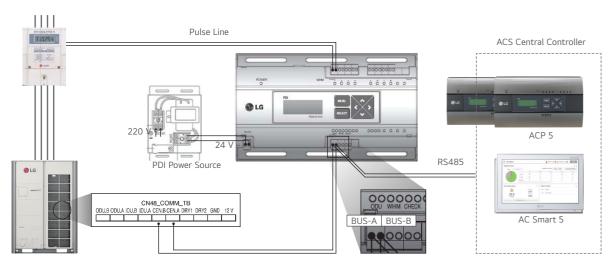


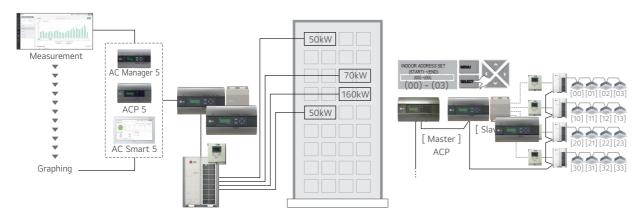
- Power : Connected with the Indoor Units
- 1 for Each Indoor Unit
- ERV



DEVICE







- Note:

  1. Power cable and type could be different from this scene depending on the Outdoor unit's specification.

  2. Measured power consumption could be different between PDI and Watt meter.

  3. Applicable Central Controller: ACP 5, ACP LonWorks, AC Smart 5, AC Ez Touch

  (Combination: we recommend to connect separated watt meter for Outdoor units to have correct power distribution value)

# **PDI (Power Distribution Indicator)**

# PQNUD1S40 (Premium, 8 ports) / PPWRDB000 (Standard, 2 ports)

PDI shows the distributed power consumption of up to 128 indoor units.













Energy monitoring



ELECTRICITY / GAS DISTRIBUTION

# Features & Benefits

- Enables total and indoor power consumption monitoring.
- With LG central control connectivity, energy monitoring, energy savings operations and target usage setting functions are enabled.
- Enables gas consumption and electricity distribution.

MODEL NAME	PQNUD1S40	PPWRDB000
Size (W x H x D, mm)	270 x 155 x 65	
Interfaceable Products	Air conditioner, ERV DX, Hydro kit, Thermal V	
Maximum Number of Power Meters	EHP: 8 Watt meter GHP: 4 Watt meter / 4 Gas meter	EHP: 2 Watt meter GHP: 1 Watt meter / 1 Gas meter
Maximum Number of Indoor Units	EHP : GHP	·
Data Backup When Power Outage	0	
Power Input	PDI : AC 24V, Trans	former : AC 220V

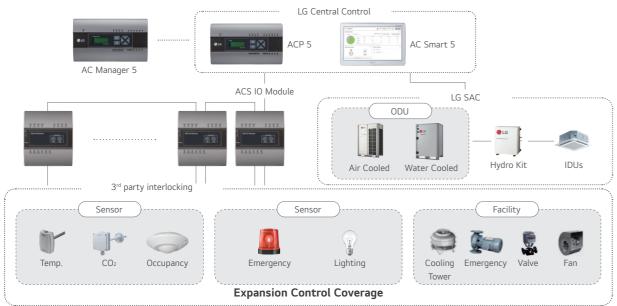
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# **ACS IO Module**



※ DI: Digital Input, DO: Digital Output, UI: Universal Input, AO: Analog Output



### PEXPMB000

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



#### Features & Benefits

- $\bullet$  Interlocking with  $3^{\rm rd}$  party equipment, LG Central controller can make operation scenario with
- 3<sup>rd</sup> party equipment by ACS IO Module.
- $\bullet \ \mathsf{Control} \ \mathsf{coverage} \ \mathsf{is} \ \mathsf{expanded}. \ \mathsf{(Air} \ \mathsf{conditioner} \ \mathsf{only} \to \mathsf{Sensors}, \mathsf{Fans}, \mathsf{Pumps}, \mathsf{Switches} \ ...)$
- Power : AC 24V (60Hz / 500mA)

	MODEL NAME	РЕХРМВООО
Linkable Products		PACS5A000, PACP5A000
Communication	RS-485	1 ch
	Digital Input	3 ports
1/0	Digital Output	3 ports
1/0	Universal Input 1)	4 ports
	Analog Output	4 ports
	VALUE SPEC	MIN

	VALUE SPEC	MIN.	MAX.
	NTC 10k	0.68kΩ	177kΩ
	PT 1000	803Ω	1,573Ω
Analog Input	Ni 1000	871.7Ω	1,675.2Ω
	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

※ O : Applied, - : Not Applied

 The type of UI (Universal Input) is selectable among Digital Input and Analog Input.
 Note : ACS IO & ACU IO are not a replacement for Direct Digital Controller(DDC) or PLC.

# **ACU IO Module**

## PEXPMB300, PEXPMB200, PEXPMB100

This module can be connected with ACP 5 or AC Smart 5 controller if additional I / O points such as UIO / UI / UO for 3<sup>rd</sup> party devices control and monitoring are needed.



PEXPMB300





PEXPMB200

ACU.UI

PEXPMB100

# Features & Benefits

- Interlocking with 3<sup>rd</sup> party equipment LG Central controller can make operation scenario with 3<sup>rd</sup> party equipment by ACU IO Module.
- $\bullet$  Applicable devices are expanded. (Air conditioner only  $\rightarrow$  Sensors, Fans, Pumps, Switches ...)
- Power: 12VDC / 250mA (External Power)

MODULE NAME	PEXPMB300	PEXPMB200	PEXPMB100
Linkable Products		PACS5A000, PACP5A000	
Communication RS-485	1 ch	1 ch	1 ch
Digital Input		-	3 ports
Digital Output	2 ports	6 ports	-
Universal Input 1)	4 ports	-	6 ports
Analog Output	2 ports	4 ports	

	VALUE SPEC	MIN.	MAX.
Analog Input	DC (Voltage)	OV	10V
Analog Output	DC (Voltage)	OV	10V
Digital Input	Binary Input (Non Voltage)	-	-
Digital Output	Normal Open	-	30VDC, 1A

<sup>%</sup> O : Applied, - : Not Applied 1) The type of UI (Universal Input) is selectable among Digital Input and Analog Input.

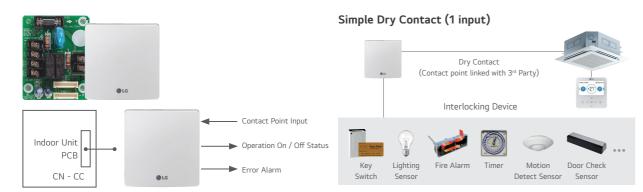
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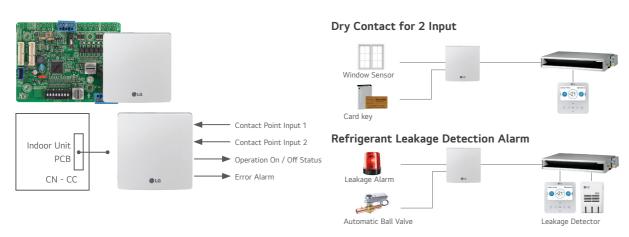
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# **DRY CONTACT**

# PDRYCB000



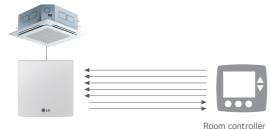
#### PDRYCB400



## PDRYCB320

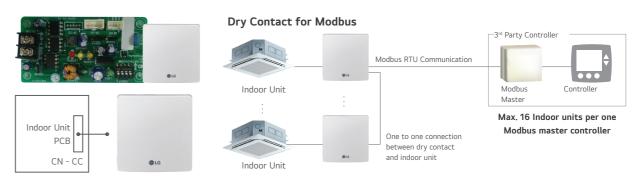


# Dry Contact for Thermostat



 $\ensuremath{\mathbb{X}}$  Please contact our regional office to have full compatible room controller list.

# PDRYCB500 / PDRYCB510\*



<sup>%</sup> Please contact our regional office to check the compatibility with 3rd party room controller. \*No case for PDRYCB510

#### Specification

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

	MODE	L NAME	PDRYCB000	PDRYCB400	PDRYCB320	PDRYCB500 / PDRYCB510*
					The second second	
Case			0	0	0	0
Input Por	:		1	2	8	-
Universal	Input port		-	-	1	-
Comm. Pr	otocol		-	-	-	Modbus RTU
Power			AC 220V	Connect	to Indoor unit PCB (CN_CC)	: DC 12V
II		On / Off	0	0	0	0
	IDU	Operation Mode	-	0	0	0
		Set Temp.	-	(Select & Fix)	(Select & Fix)	0
		Fan Speed	-	-	0	0
		Thermo-Off	-	(Select & Fix)	0	-
		Energy Saving	-	(Select & Fix)	-	-
		Lock / Unlock	-	(Select & Fix)	-	-
		On / Off	0	-	0	-
Control		DHW On / Off	-	-	0	-
Control	Heating	Thermo-Off	-	-	0	-
	ricuting	Operation Mode	-	-	0	-
		Silent Mode	-	-	0	-
		Emergency Mode	-	-	0	-
		On / Off	0	-	-	0
		Operation Mode	-	-	-	0
	ERV	Aircon Mode	-	-	-	0
		Additional Mode	-	-	-	0
		Fan Speed	-	-	-	0
		Operation Status	0	0	0	0
Output		Error	0	0	0	0
		Room Temp.	-	-	-	0

<sup>※ ○ :</sup> Applied, - : Not Applied \*No case for PDRYCB510

- Note:

  1. Compatibility of PDRYCB320

   Can use with all types of aircon indoor units after 2010.

  (Cassette, Ducted, Convertible, Applied PAC, Wall mounted, Console)

   Can use with new single package AK-W model after 2020. 1Q

  (The previous version Single package is not compatible)

   Heating: 3 series AWHP split and Monobloc models 4 generation Hydro Kit
- 2. Compatibility of PDRYCB400

   Can use with all types of air conditioner indoor units after 2010.
  (Cassette, Ducted, Convertible, Applied PAC, Wall mounted, Console)

   Can use with new single package AK-W model after 2020. 1Q
  (The previous version Single package is not compatible)

   Can not use with AWHP, Hydro Kit models.

  3. (Select & Fix): This function is preset by rotary switch.

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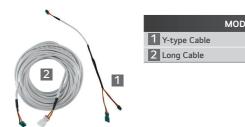
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# EGRATION DEVICE

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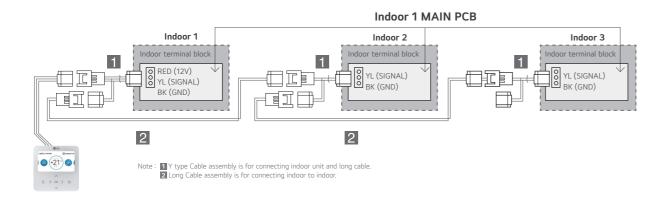
# **Group Control Wire**

#### PZCWRCG3



MODEL NAME	PZCWRCG3
1 Y-type Cable	0.25m Length
2 Long Cable	9.6m Length
2 Long Cable	9.6m Length

#### Installation Scene



# **Remote Temperature Sensor**

#### PQRSTA0

Sensor for detecting a room's temperature.

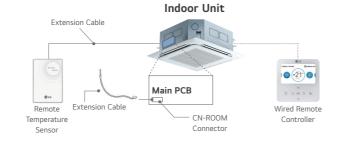


## Features & Benefits

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

# Installation Scene

- 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**

#### **ABZCA**

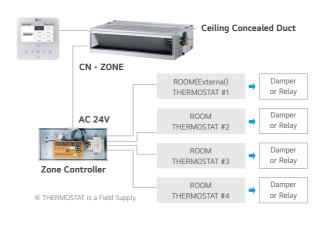
Controls air conditioning in up to 4 zones by external thermostat.

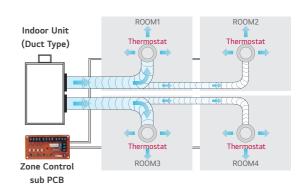


#### Features & Benefits

- Controls different zones (up to 4 zones) by external thermostat (AC 24V)
- Maintain proper air volume of each zone
- Auto variation of dampers
- Auto control of fan speed and On / Off operation

#### Installation Scene





# **IO Module**

#### PVDSMN000

Interface module between the outdoor unit of system air conditioner and the external device.



# Features & Benefits

# Function

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

#### Description

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

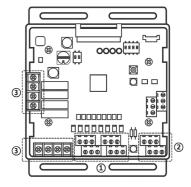
# Models Applied

- MULTI V IV, 5, *i* • MULTI V WATER 5
- MULTI V S

Note : IO Module is not compatible for MULTI V III and MULTI V S R32.

## Part Description

- 1) Digital Input Part (DI: Dry Contact Input)
- $\bullet$  Demand control by contact input (3 Step)
- Low Noise Operation input
- $\bullet$  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  $% \left( 1\right) =\left( 1\right) \left( 1\right)$
- 2) Analog Input Part (AI : DC 0 ~ 10V)
- Demand control by analog input (10 Step)
- 3) Digital Output Part (DO : AC 250V, Max. 1A)
- Error status relay output
- Operation status relay output
- Valve control



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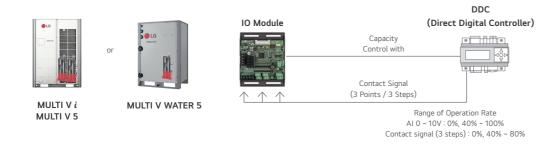
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# **IO Module**

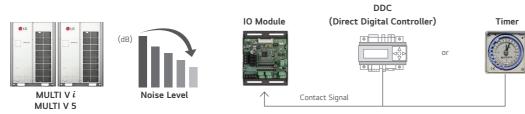
# **ODU Capacity Control**

Provides variable settings for ODU Capacity Control according to input method to reduce the power consumption. IO Module supports 2 types of input signal: Analog Inputs (0 ~ 10V, 10 steps) and contact signals (3 steps)



#### Low Noise Operation

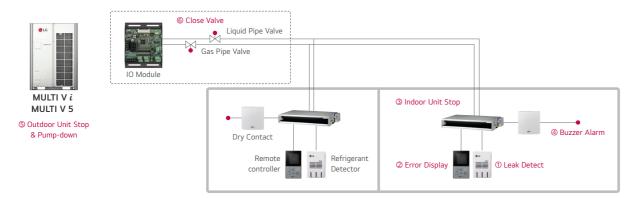
To reduce noise level, control outdoor unit's fan speed by dry contact input.



imes 8 HP (22.4kW) 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 closes refrigerant valve during Pump-down operation.



\*\* If the concentration of the refrigerant in the air exceeds 6,000 ppm more than 5 seconds, the function will be activated. (Refer to operation sequence which written in red, 1-6)

# Variable Water Flow Control Kit

# PWFCKN000 (MULTI V WATER 5)

Accessory for controlling the water flow.



#### **Features**

#### Function

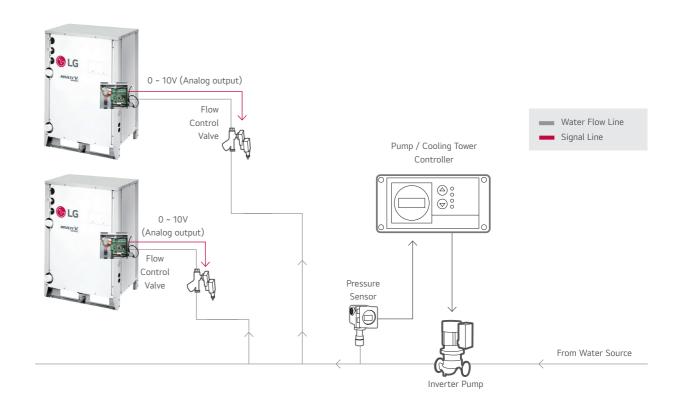
- Water pump or valve control (0 ~ 10V)
- Minimum output voltage setting available
- Operation, error output (AC 250V, Max. 1A)
- Dry contact input and analog output for demand control
- Digital output for operation, error status (AC 250V, Max. 1A)

#### Description

- 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.

#### Installation Scene

- 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.



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• MULTI V WATER IV

• MULTI V WATER 5

# **Low Ambient Kit**

#### PRVC2

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





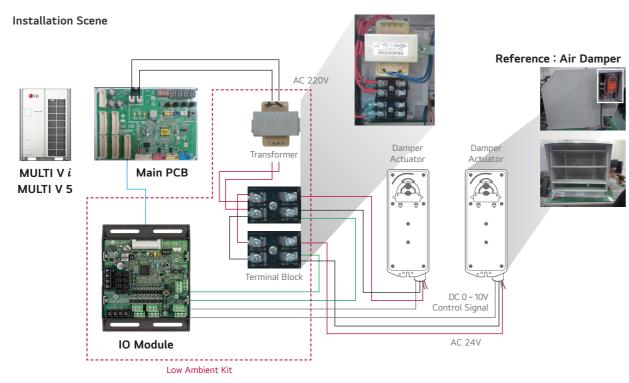
#### **Features**

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

- 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.

# **Models Applied**

- MULTI V i
- MULTI V 5



- 1. Damper Actuator can accept only AC 24V power input.
  2. Do not input DC power. Otherwise it will cause a serious damage.
  3. The IO Module can control maximum three actuators.
- 4. Case of one valve, the slave signal connector must not use. 5. The power (AC 24V) and signal (DC 0 ~ 10V) line is recommended by AWG22 (1/32 in, (0.644 mm), 0.016  $\Omega$  / ft (0.053  $\Omega$  / m)).

# **Cool / Heat Selector**

#### PRDSBM

Cooling only, heating only, and fan mode can be selected.

# **⊕** LG 紫上菜

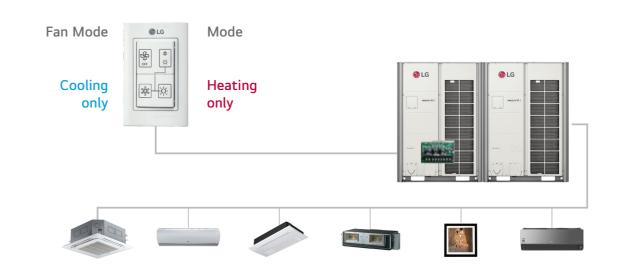
#### **Features**

- 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.

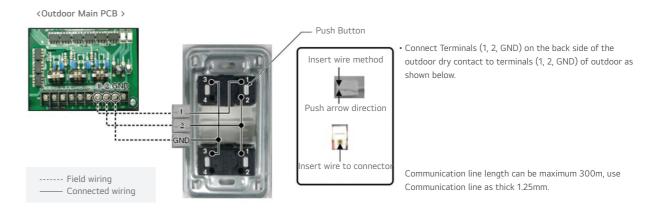
# Models Applied

- MULTI V WATER II • MULTI V i
- MULTI V S • MULTI V 5
- MUL TI V PLUS II, MULTI V PLUS • MULTI V IV
- MULTI V WATER S

Note: Cool / Heat Selector is not compatible for Multi V S R32.



# Installation Scene



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# **AHU Kit**

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

# **COMMUNICATION KIT**





PAHCMS000



**CONTROL KIT** 

PAHCNM000

PAHCMR000

**CONTROLLER MODULE** 





**EEV KIT** 



PRLK096A0

PRLK396A0



#### Specification

## Control Application Kit

TYPE	MODEL	DIME	NSIONS	(MM)	POWER SUPPLY	IP RATING	DESCRIPTION
TIPE	MODEL	W	н	D	POWER SUPPLI	IP KAIING	DESCRIPTION
Communication	PAHCMR000	300	300	155	1Ø, 220 ~ 240 V, 50 / 60 Hz	IP66	Return / Room air temperature control by DDC or LG individual / centralized controller.
Kit	PAHCMS000	380	300	155	1Ø, 220 ~ 240 V, 50 / 60 Hz	IP66	Discharge air / Supply air temperature control by DDC or LG individual / centralized controller
Controller	РАНСММ000	162	90	61	DC 12V	IP20	Main Controller module
Module	PAHCMC000	108	90	61	DC 12V	IP20	Communication Controller module
Control Kit	PAHCNM000	500	500	210	1Ø, 220 ~ 240 V, 50 / 60 Hz		Various AHU control functions with multiple DX coils (Maximum connectable ODU is 3 units)

#### **Expansion Application Kit**

TYPE	MODEL	DIMENSIONS (MM)			PIPE DIAMETER (MM)	CAPACITY INDEX RANGE	
TIPE	MODEL	W	н	D	LIQUID	CAPACITY INDEX RAINGE	
	PRLK048A0	217	404	83	12.7	3.6 ~ 28 kW	
EEV Kit	PRLK096A0	217	404	83	12.7	28.1 ~ 56 kW	
EEV KIL	PRLK396A0	349.5	345.5	180	19.05	56.1 ~ 112 kW	
	PRLK594A0	409.5	345.5	180	19.05	112.1 ~ 168 kW	

#### Communication Kit

## High Energy Efficiency

LG's DX AHU solutions' superior performance provides a highly efficient heat source system.

- High energy efficiency inverter system
- Large range of expansion application Kit : Max. 168 kW EEV Kit 1)
- $\bullet$  Connected to various heat sources : MULTI V, MULTI V WATER, MULTI V S, SINGLE SPLIT

1) Maximum connectable EEV capacity for PAHCMR000, PAHCMC000 is 112 kW.



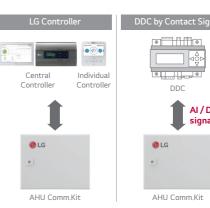
#### **Diverse Options for Control**

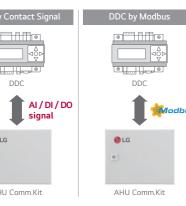
AHU communication kit can be connected to various control systems such as LG individual / central controller and DDC.<sup>1)</sup>

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.

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

1) DDC : Direct Digital Controller





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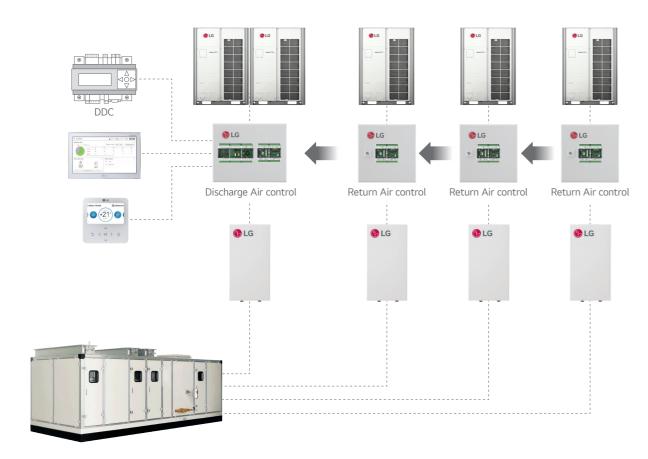
# **AHU Kit**

#### **Communication Kit**

#### 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 due to the AHU communication kit's modular design.

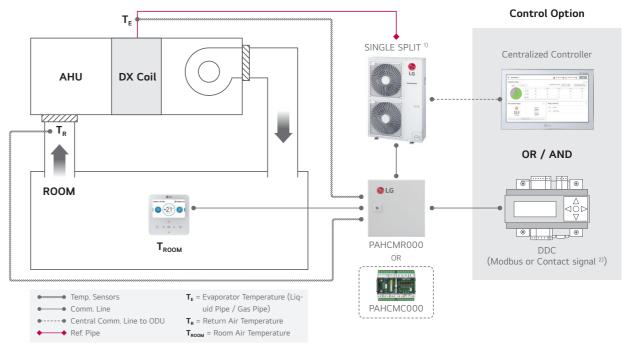
• Multiple module combination for large capacity AHU



#### Communication Kit & Controller Module

#### Single Split Application

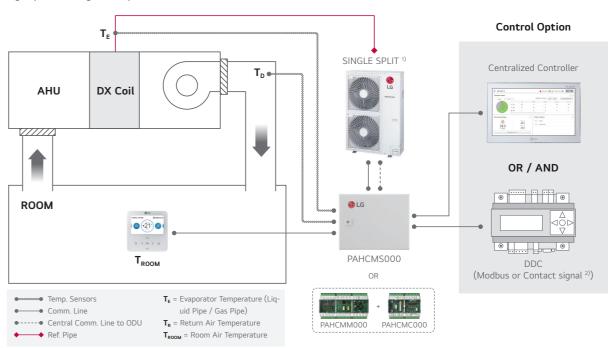
Single Split + Return / Room Air Temperature Control



- 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. Note: For more detail, please refer to the PDB.

## Single Split Application

Single Split + Discharge Air Temperature Control



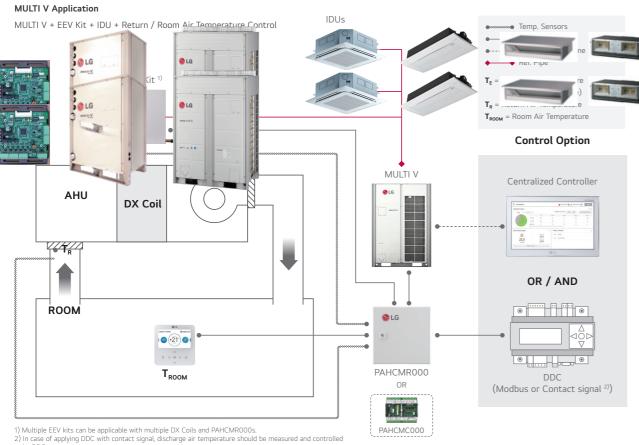
- 1) PI485 (PMNFP14A1) is required for centralized controller.
  2) In case of applying DDC with contact signal, discharge air temperature should be measured and controlled by DDC.
  Note: For more detail, please refer to the PDB.

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# **AHU Kit**

#### Communication Kit & Controller Module



by DDC.

Note: For more detail, please refer to the PDB.

# MULTI V Application •••• Temp. Sensors MULTI V + EEV Kit + Discharge Air Temperature Control Comm. Line ◆----- Central Comm. Line to ODU ◆ Ref. Pipe MULTI V ◆----- Comm. Line between modules $T_E$ = Evaporator Temperature (Liquid Pipe / Gas Pipe) EEV Kit 1) T<sub>D</sub> = Discharge Air Temperature T<sub>ROOM</sub> = Room Air Temperature **Control Option** T<sub>E</sub> Centralized Controller AHU DX Coil OR / AND ROOM **⊕** LG PAHCMS000 DDC $T_{ROOM}$ (Modbus or Contact signal 2) Multiple EEV kits can be applicable with multiple DX Coils and PAHCMR000s. In case of applying DDC with contact signal, discharge air temperature should be measured and controlled by DDC. Note: For more detail, please refer to the PDB.

PAHCMM000

PAHCMC000

#### **Communication Kit Function**

#### Communication with DDC via Contact Signal

	FUNCTION LIST	PAHCMR000 (PAHCMC000)	PAHCMS000 (PAHCMM000 + PAHCMC000)	ТҮРЕ	NOTE
	Operation On / Off	On / Off	On / Off	Digital Input (Non Voltage)	-
	Operation Mode	Cooling / Heating	Cooling / Heating	Digital Input (Non Voltage)	Available operation mode can vary depending on the settings of Communication Kit
	Return (Room) Air Temperature 2)	16 ~ 30 °C	-	Analog Input (DC 0 ~ 10 V / 20mA)	-
Control 1)	Discharge Air Temperature <sup>2)</sup>	-	-	-	Discharge air temperature should be controller directly by DDC using 'ODU Capacity Control
	Fan Speed 3)	-	High / Middle / Low	Digital Input (Non Voltage)	-
	Forced Thermal	On / Off	-	Digital Input (Non Voltage)	-
	ODU Capacity	-	10 ~ 100%	Analog Input (DC 0 ~ 10 V / 20mA)	-
	Emergency Stop	-	Stop / Normal	Digital Input (Non Voltage)	-
	Operation	On / Off	On / Off	Digital Output (Max.: DC 30 V / 1 A, AC 250V / 1 A)	For PACHMR000, dip sw1-3 DO Type should be set 'Off' (Status), In this case, 'fan speed' cannot be monitored by DO ports
	Operation Mode	-	-	-	It needs to be checked through control signal
Monitor	Fan Speed	High / Middle / Low	High / Middle / Low	Digital Output (Max. : DC 30 V / 1 A, AC 250V / 1 A )	For PACHMR000, dip sw1-3 DO Type should be set 'On' (Fan Mode) In this case, 'On / Off, defrost, error Status' cannot be monitored by DO ports
	Defrost Operation	Defrost / Normal	Defrost / Normal	Digital Output (Max. : DC 30 V / 1 A, AC 250V / 1 A )	For PACHMR000, dip sw1-3 D0 type should be set 'OFF' (Status),
	Error Alarm	Error / Normal	Error / Normal	Digital Output, Relay C contact (Max.: DC 30 V / 1 A, AC 250V / 1 A)	In this case, 'fan speed' cannot be monitored by DO ports
	Compressor On / Off	-	On / Off	Digital Output, (Max. : DC 30 V / 1 A, AC 250V / 1 A )	-

<sup>1)</sup> Control functions for LG individual and central controller are not available in case of using together with DDC via contact signal.

## Communication with DDC via Modbus protocol

	FUNCTION LIST	PAHCMR000 (PAHCMC000)	PAHCMS000 (PAHCMM000 + PAHCMC000)	NOTE
	Operation On / Off	On / Off	On / Off	
	Operation Mode	Cooling / Heating / Fan	Cooling / Heating / Fan	
	Return (Room) Air Temperature	16 ~ 30 °C	-	
Control 1)	Discharge Air Temperature <sup>2)</sup>	-	0	Dip SW1-2 Discharge Temp. Control Type should be set 'On' Standard II : 16 ~ 30 °C Standard III <sup>4)</sup> : 12 ~ 50 °C
	Fan Speed 3)	High / Middle / Low	-	
	Forced Thermal On / Off	-	-	
	ODU Capacity Control <sup>2)</sup>	-	10 ~ 100%	Dip SW1-2 Discharge Temp. Control Type should be set 'On'
	Emergency Stop	-	-	
	Operation	On / Off	On / Off	
	Operation Mode	Cooling / Heating / Fan	Cooling / Heating / Fan	
	Return (Room) Air Temperature	0	-	Corresponding air temperature sensor
M	Discharge Air Temperature	-	0	connected to AHU Comm.Kit is required
Monitor	Fan Speed	High / Middle / Low	High / Middle / Low	
	Defrost Operation	Defrost / Normal	Defrost / Normal	
	Error Alarm	Error / Normal, Error code	Error / Normal, Error code	
	Compressor On / Off	On / Off	On / Off	

<sup>2)</sup> The range of temp. is differ depending on the type of the controller.

3) To control fan speeds, DO port of the fan speed status should be connected to the fan control panel.

Note: For more detail information, please refer to the product data book.

<sup>1)</sup> Control functions for LG individual and central controller are not available in case of using together with DDC via contact signal.

2) In case of PAHCMS000, control type between "Discharge Air Temperature" and "ODU Capacity Control" is selectable.

3) To control fan speeds, DO port of the fan speed status should be connected to the fan control panel.

A) Standard III wired remote controller after version 2.10.5a.

Note: For the Modbus memory map and more detail information, please refer to the product data book.

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# **AHU Kit**

#### Communication Kit Function

# With LG Control System (Individual & Centralized Controller)

	FUNCTION LIST	PAHCMR000 (PAHCMC000)	PAHCMS000 (PAHCMM000 + PAHCMC000)	NOTE
	Operation On / Off	On / Off	On / Off	-
	Operation Mode	Cooling / Heating / Fan	Cooling / Heating / Fan	Available operation mode can vary depending on the settings of Communication Kit
	Return (Room) Air Temperature 2)	16 ~ 30 °C	-	-
Control 1)	Discharge Air Temperature <sup>2)</sup>	-	0	Standard II : 16 $\sim$ 30 °C Standard III $^4$ : 12 $\sim$ 50 °C Central Controllers : 12 $\sim$ 50 °C
	Fan Speed <sup>3)</sup>	High / Mid / Low	High / Mid / Low	To control the AHU fan, dip switch 1-3 'DO type' should be set 'On (Fan Speed)' (PAHCMR000)
	Operation	On / Off	On / Off	-
	Operation Mode	Cooling / Heating / Fan	Cooling / Heating / Fan	-
	Return (Room) Air Temperature	0	-	-
Monitor	Discharge Air Temperature		0	Standard III : 11 ~ 39.5 °C Standard III <sup>4)</sup> : 0 ~ 100.0 °C Central : -50.0 ~ 100.0 °C
	Fan Speed	High / Middle / Low	High / Middle / Low	-
	Defrost Operation	On / Off	On / Off	Only with Individual Controller
	Error Alarm	Error Code	Error Code	Error code will be displayed on the screen
	Compressor On / Off	On / Off	On / Off	Only with Individual Controller

- \*\* O: Applied, -: Not Applied

  1) Control functions for LG individual and central controller are not available in case of using together with DDC via contact signal.

  2) The range of setting temperature is different depending on the type of the controllers. And operation may different from setting range.

  3) To control fan speeds, DO port of the fan speed status should be connected to the fan control panel.

  4) Standard III wired remote controller after version 2.10.5a.

  Note: For more detail information, please refer to the product data book.

## Compatibility with LG HVAC Controllers

		INDIVIDUAL	CONTROLLER			CENTR	ALIZED CONTR	OLLER		PDI
	DELUXE	PREMIUM	STANDARD III	STANDARD II	AC EZ	AC EZ TOUCH	AC SMART 5	ACP 5	AC MANAGER 5 <sup>1)</sup>	PREMIUM STANDARD
CONTROLLER	26° 3° 000 000 000 000 000 000 000 000 000	250 = 0	9.6 S	(a) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	0/3 0 0			*** **********************************	• 30	• = EX
Model no.	PREMTA201	PREMTA000 PREMTA000A PREMTA000B	PREMTB101 PREMTBB11	PREMTB001	PQCSZ250S0	PACEZA000	PACS5A000	PACP5A000	PACM5A000	PQNUD1S40 PPWRDB000
PAHCMR000	0	0	0	0	0	0	0	0	0	0
PAHCMS000	-	-	0	-	-	-	0	0	0	-

※ O: Applied, -: Not Applied

 AC Manager 5 is an integrator, so the installation with AC Smart 5 or ACP 5 is required.
 Note: 1. Dry contact for indoor unit (PDRYCB000 / 400 / 300 / 500) is not applied.
 For more details, please refer to the product data book.

## **Outdoor Unit Compatibility**

## For Small Size Application (~ 15kW) - Single Split

ТҮРЕ	MODEL	UUA1 (2.5 ~ 5.0 KW) 1)	UUB1 (5.0 ~ 8.0 KW) 1)	UUC1 (7.1 ~ 10.0 KW) 1)	UUD1 / UUD3 (10.0 ~ 15.0 KW) <sup>1)</sup>
Communication Kit	PAHCMR000 (PAHCMC000)	-	0	0	0
(Controller Module)	PAHCMS000 (PAHCMM000 + PAHCMC000)	-	0	0	0
Control Kit	PAHCNM000	-	-	-	-

<sup>1)</sup> When connecting to Single Split outdoor unit, please check the compatibility to the regional sales office.

## For Medium-Large Size Application (~ 672 kW) - MULTI V

TYPE	MODEL		MULTI V					MULTI V WATER		
TYPE	MODEL	i	5	IV	III	S	5	IV	Ш	
Communication Kit	PAHCMR000 (PAHCMC000)	0	0	0	0	0	0	0	0	
(Controller Module)	PAHCMS000 (PAHCMM000 + PAHCMC000)	0	0	0	0	0	0	0	0	
Control Kit	PAHCNM000	0	0	0	0	0	0	0	0	

# **EEV Kit Compatibility**

FEV KIT	CAPACITY INDEX (KW)			U APPLICATION KIT M CONNECTABLE E	CONNECTION BY ODU SYSTEM			
MODEL			PAHCMR000 PAHCMS000			MULTI V		SINGLE
	MIN.	MAX.	(PAHCMC000)	(PAHCMM000 + PAHCMC000)		HEAT PUMP	HEAT RECOVERY	SPLIT
PRLK048A0	3.6	28	O (1)	O (1)	○ (6)	0	0	-
PRLK096A0	28.1	56	O (1)	O (1)	○ (6)	0	○ (Max. 33.7 kW)	-
PRLK396A0	56.1	112	O (1)	O (1)	○ (6)	0	-	-
PRLK594A0	112.1	168	-	O (1)	○ (3)	0	-	-

\*\* O : Applied, - : Not applied
 Note 1. Table of the outdoor unit compatibility is based on European regional model.
 2. When connecting outdoor units in other areas, please check whether they are compatible or not.
 3. Expansion application kit compatibility is based on capacity index of the system, it may changed according to system design condition.

DEVIC

# **AHU Kit**

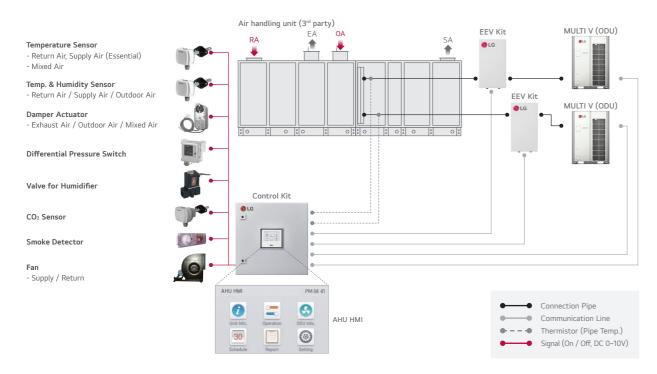
#### Control Kit

#### Field Supplied Item

LIST	REQUIRED SPECIFICATION	APPLY LOCATION
Temperature / Humidity Sensor	- Power : AC 24 V - Output signal : DC 0 ~ 10 V - Temperature range : -40 °C ~ 70 °C - Humidity range : 0 ~ 95 % RH	Supply air duct, Return air duct, Outdoor air duct
Temperature Sensor	- Power: AC 24 V - Output signal: DC 0 ~ 10 V - Temperature range: -50 °C ~ 50 °C	Supply air duct, Return air duct, Mixed air duct
Damper Actuator	- Power : AC 24 V - Input / output signal : DC 0 ~ 10 V - Torque : 15 N·m - Operation time : 150 s - Rotation Angle : 90°	Outdoor air damper, Exhaust air damper, Mixed damper
Filter Differential Pressure Sensor	- Power: AC 24 V - Output signal: DC 0 ~ 10 V - Range: 0 ~ 1,000 Pa	Filter
	- Switch type : Relay open / close	
Static Pressure Sensor	- Power : AC 24 V - Output signal : DC 0 ~ 10 V - Range : 0 ~ 1,000 Pa	Supply air duct
CO <sub>2</sub> Sensor	- Power: AC 24 V - Output signal: DC 0 ~ 10 V - Range: 0 ~ 2,000 ppm	Return air duct
Smoke Detector	- Power : AC 24 V - Type : Contact	Return air duct

#### Various Control with Control Kit - Multiple MULTI V + EEV Kits

Field Supplied Item



# **Water Communication Module**

## PAHCMW000

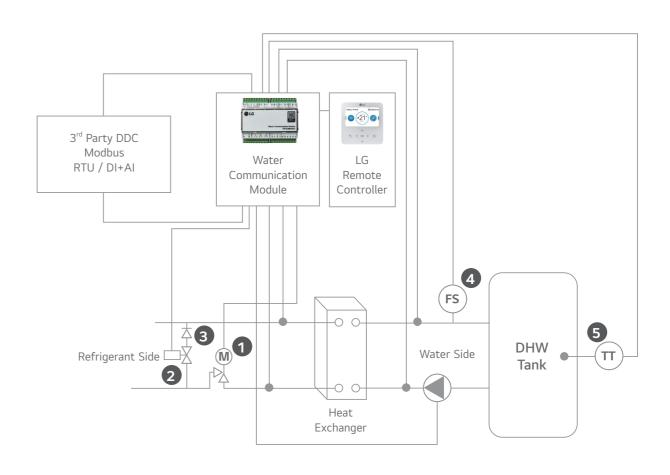
This module is intended to connect  $3^{rd}$  party plate heat exchangers to LG outdoor units with the ability to control water temperature from a  $3^{rd}$  party DDC or LG remote controller.



# Overview

Interlocking with 3<sup>rd</sup> parties can make various solutions with LG Multi V outdoor unit.

- 1. EEV
- 2. Solenoid Valve (NC)
- 3. Non-Return Valve
- 4. FS : Flow Switch
- 5. TT : DHW Temperature Transmitter



<sup>• 3&</sup>lt;sup>rd</sup> party solenoid, non-return valve, heat exchanger, flow switch and DHW temperature transmitter (Optional) must be purchased separately. (Field supplied items)

DEVIC

# **Water Communication Module**

#### Features & Benefits

Interlocking with  $3^{\rm rd}$  parties can make various solutions with LG MULTI V outdoor unit.

## Interlocking with 3<sup>rd</sup> Party Equipment

CONTENTS	COI	NNECTION PORT	FUNCTION
RS485	CH1 (A+ / B-)	Module Comm. Port	Communication Port Modbus
K3463	CH2 (A+ / B-)	IDU Comm. Port	Communication with Multi V Outdoor
	UI1	Flow Switch	Flow Switch Input by 3rd party
UNIVERSAL INPUT	UI2	0 ~ 10V Set Temp.	Target Temp. Setting
(Cooling / Heating Setting)	UI3	Cooling Thermostat Signal	Thermostat Cooling Signal
	UI4	Heating Thermostat Signal	Thermostat Heating Signal
	UI1	Flow Switch	Flow Switch Input by 3rd party
UNIVERSAL INPUT	UI2	0-10V Set Temp.	Target Temp. Setting
(DHW Only)	UI3	DHW Temperature Transmitter 0 ~ 10V	Measured Water Temp. Input by 3rd party 0 ~ 10 V sensor
	UI4	DHW Thermostat Signal	DHW Heating Signal
NTC	RI1	Water Inlet Sensor	PHEX Water Inlet Sensor
NIC	RI2	Water Outlet Sensor	PHEX Water Outlet Sensor
REMO	+12V / SIG / GND	LG Remote Controller	-
SINGLE	Reserved	-	-
	D01	Defrost / Mode	Output for defrost signal and / or cool mode
DIGITAL OUTPUT	D02	Pump	Output signal for pump on / off
	D03	Bypass	Output signal for PHEX Bypass Valve
NTC	RI3	Thermistor Pipe In	PHEX Ref. Inlet Pipe Sensor
NTC	RI4	Thermistor Pipe Out	PHEX Ref. Outlet Pipe Sensor
EEV	+12V / 1 / 2 / 3 / 4	Expansion Valve	EEV Control

# Compatibility & Accessory

#### EEV (LG MODEL)

MODEL	CAPACI	DALICANA/OOO	
MODEL	MIN.	MAX.	PAHCMW000
PAEEVC000	3.6	28	HP / HR
PRLK048A0	3.6	28	HP / HR
PRLK096A0	28.1	56	HP

Note: Water communication module can accept plate heat exchangers from 3, 6 to 112 kW for combination with Multi V Outdoor units.

#### LG Controllers

	INDIVIDUAL CONTROLLER	CENTRALIZED	DRY CONTACT	
CONTROLLER	HEATING STANDARD III	AC EZ TOUCH	AC SMART 5	DRY CONTACT
	PREMTW101	PACEZA000	PACS5A000	PDRYCB000

# Specification for field supply item

 $\bullet$  The  $3^{\text{rd}}$  party can select the for best usable version

# Solenoid valve for Bypass

CAPACI	TY (KW)	EEV TYPE	SYSTEM	KV VALUE OF SOLENOID AND	PIPE SIZE
MIN.	MAX.	EEVITPE	SISIEM	NON-RETURN VALVE	PIPE SIZE
3.6	28	PAEEVC000	HP / HR	0.95	2 / 0" / 0 52
3.0	28	PRLK048A0	пР/пк	0.95	3 / 8" / 9.52mm
28	56	PRLK096A0	HP	1.9	1 / 2" / 12.7mm

#### Flow switch

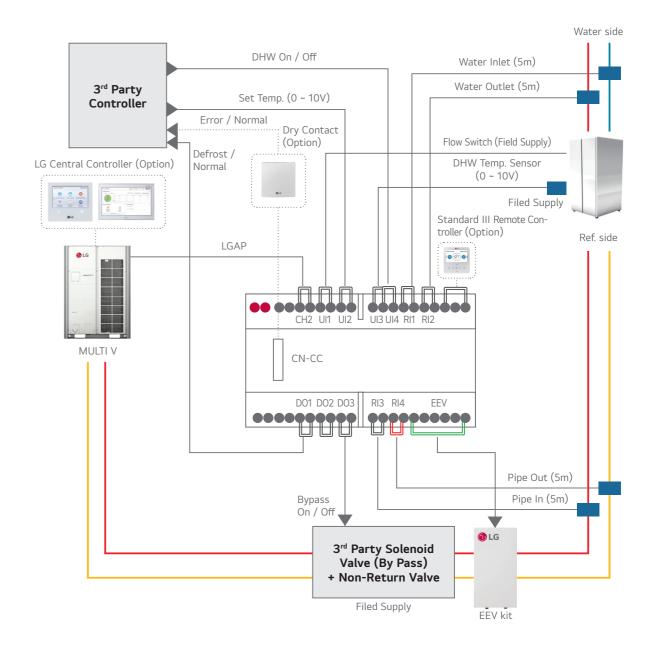
• The nominal flow and cut of flow can be calculated using the values below.

CONTROLLER	NOMINAL FLOW	FLOW SWITCH CUT OFF
L / min*kW	3.29	1.23

<sup>\*</sup> Example : ODU nominal Cooling Capacity 28 kW, 28 x 3.29 = 92.12 L / min. nominal flow, 28 x 1.23 = 34.44 L / min. flow switch cut off

## **Installation Scene with Contact Connection**

Contact signal + DHW Only Setting



DEVIC

# **Water Communication Module**

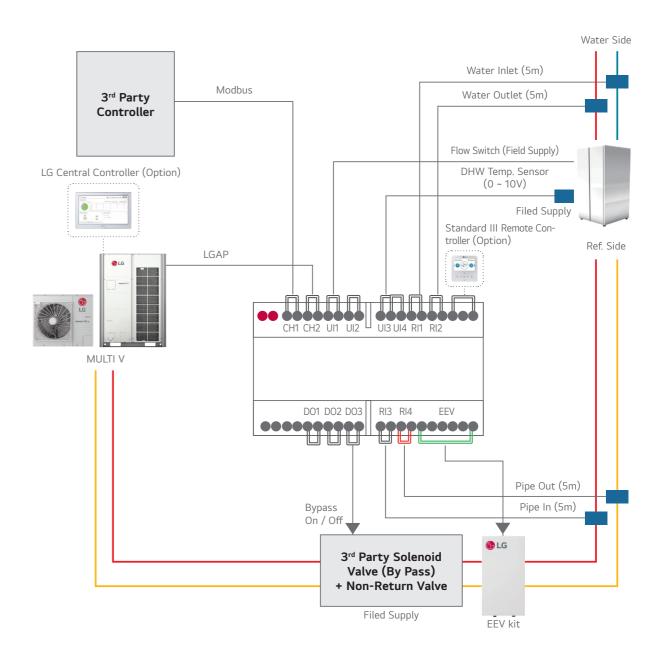
#### Installation Scene with Contact Connection

Contact signal + Heating / Cooling Setting

# Water Side Heating On / Off Cooling On / Off 3rd Party Water Inlet (5m) Set Temp. (0 ~ 10V) Controller Water Outlet (5m) Error / Normal :Dry Contact (Option) Defrost / LG Central Controller (Option) Flow Switch (Field Supply) Standard III Remote Controller (Option) LGAP • (†) • (†) CH2 UI1 UI2 UI3 UI4 RI1 RI2 MULTI V CN-CC RI3 RI4 DO1 DO2 DO3 Pump On / Off Pipe Out (5m) Pipe In (5m) Bypass On / Off **LG** 3<sup>rd</sup> Party Solenoid Valve (By Pass) + Non-Return Valve Filed Supply EEV kit

# Installation Scene with Modbus / LG Control (Optional) Connection

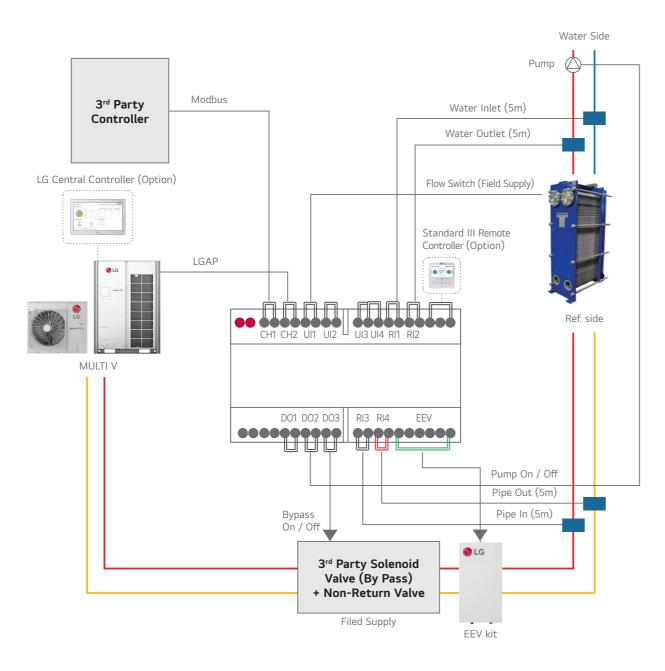
Modbus + DHW Only Setting



Installation Scene with Modbus / LG Control (Optional) Connection

**Water Communication Module** 

Modbus + Heating / Cooling Setting





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# **Hotel Control Solution**



# **Design Proposal**





#### Input

· Operation On / Off

# Output

- Operation On / Off status
- · Error alarm



Integrated control of

air conditioner with the

hotel room controller

#### PDRYCB500 / PDRYCB510 (w/o case)

# Function

- Operation
- Indoor temperature
- Error alarm
- Set temperature
- Set fan speed

# (Low / Middle / High)

Input

 Universal Input • Operation On / Off

• Thermo On / Off

(Fan / Heat / Cool)

GUEST ROOM

#### Output Operation On / Off status



Control with existing

hotel thermostat

PDRYCB320 8 contact point

• 5,000ppm • 6,000ppm

Guest safety is

the first priority



PREMTB101 Wired remote controller

• 4.3 inch color LCD



Air conditioner control

in conjunction with

check-in or check out

PACS5A000

AC Smart 5

ACP 5

BMS Integration



PLDRNV1S PRLDNVS0 R32 Refrigerant Refrigerant

leak detector leak detector



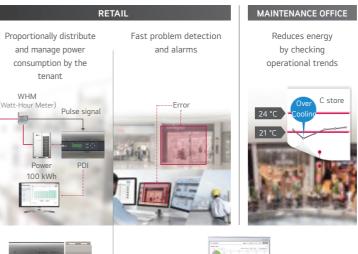
PACP5A000

BMS Integration

# **Shopping Mall Control Solution**



# **Design Proposal**





PPWRDB000 PDI Standard (2 ports)





PQNUD1S40 PDI Premium (8 ports) • Max. 128 IDU



PACS5A000

AC Smart 5

PACP5A000 ACP 5

BMS Integration

• BMS Integration

(BACnet IP, Modbus TCP)









• Discharge air

Integrated management of AHU applied to large spaces

Chiller and VRF integrated control





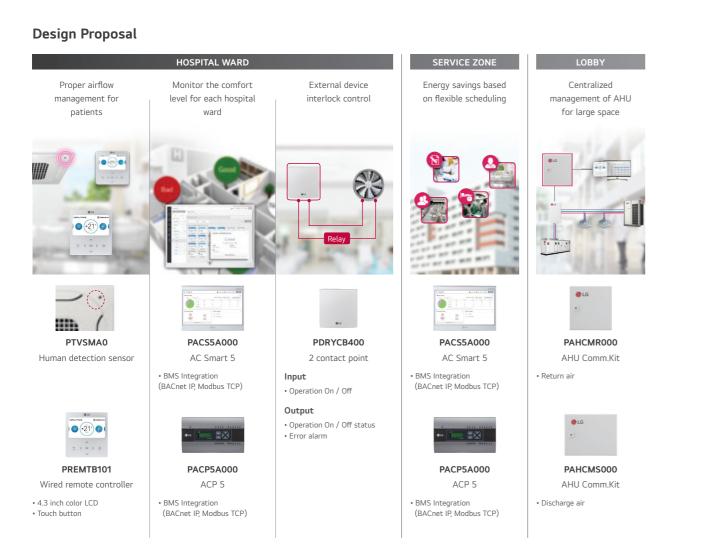




PAHCMS000 AHU Comm.Kit

# **Hospital Control Solution**





# **Academic Institution Control Solution**

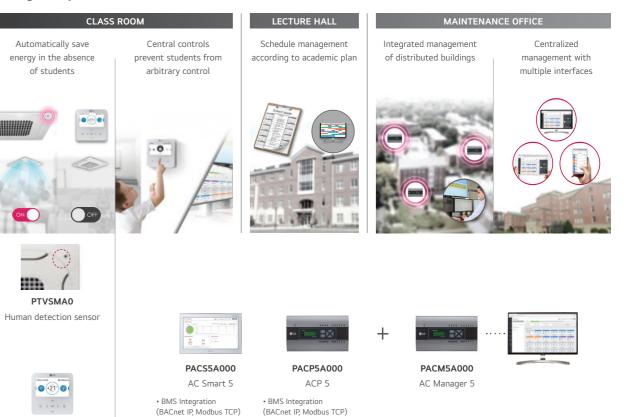


# **Design Proposal**

PREMTB101

Wired remote controller

• 4.3 inch color LCD



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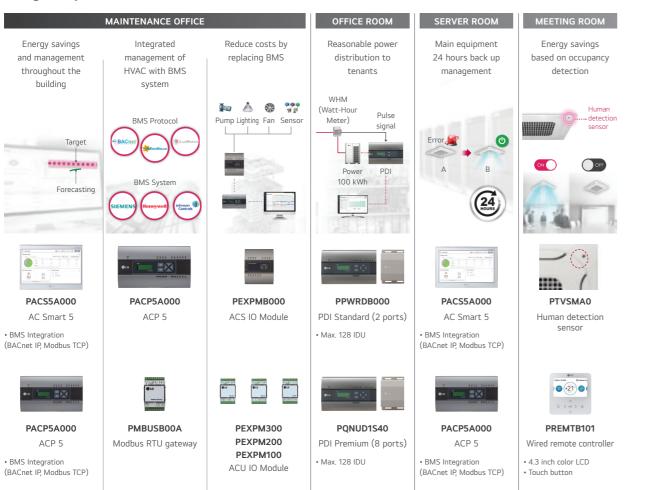
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# **Office Control Solution**

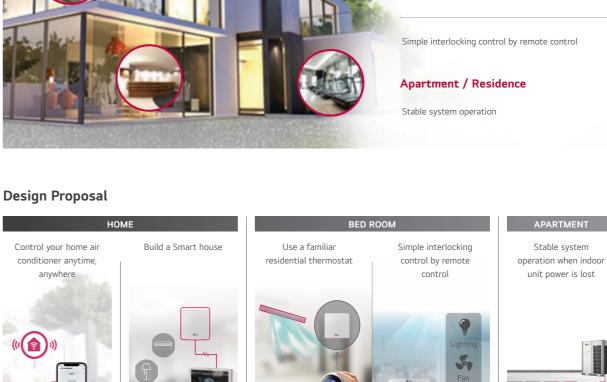


## **Design Proposal**



# **Residential Control Solution**











Multi-tenant Power Module



328 329

Function

· On / Off

330 ~ 355

# ACCESSORIES

MECHANICAL ACCESSORIES
PIPING ACCESSORIES

MECHANIC

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# **Cassette Panel**

The independent vane operation ensures comfortable air flow.



#### Model Name & Applied Products

4 Way Cassette (Mini, 570x570) PT-QAGW0

2 Way Cassette PT-USC

1 Way Cassette (Grill Type) PT-UAHG0 / PT-TAHG0 (Glossy) PT-UAHW0 / PT-TAHW0 (Non-Glossy)

1 Way Cassette (Air Purification) PT-UPHG0 / PT-TPHG0 (Glossy)

## **Key Features**

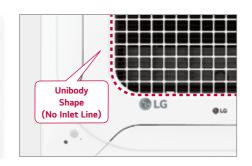
- Independent vane operation uses separate motors, making it possible to control all 1, 2, and 4 vanes independently.
- The detachable corner design makes it easy to adjust the hanger during installation and to check for leakages in the drain pipe and refrigerant pipes.

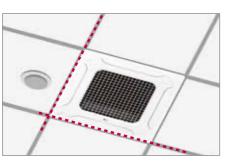
#### Compact and Stylish Design

PT-UPHG0, PT-TPHG0

- Mini 4 way cassette panel adapted unibody shape and matching with the ceiling.
- Panel size fits the ceiling tile.



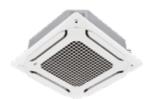




## Specification

		Suction	Color		Weight	Dim	ension (	mm)		Applied	d Model	Capacity	y (kW)*	
	Model	Type	(RAL)	Gloss	(kg)	w	н	D	Single	Split	Multi	Split	Mu	lti V
		1,700	(NAL)		(kg)	vv	П		R32	R410A	R32	R410A	R32	R410A
4 Way	PT-QAGW0	Grid	White (RAL 9003)	X	2.9	620	35	620	2.5-5.0	2.5-5.0	1.5-5.3	1.5-5.3	1.6-6.2	1.6-6.2
2 Way	PT-USC	Grid	Morning Fog (RAL 9001)	X	4.7	1,100	28	690					2.8-7.1	2.8-7.1
	PT-UAHG0	Grill	White (RAL 9003)	0	3.9	1,160	34	500			2.6-3.5	2.6-3.5	2.2-3.6	2.2-3.6
	PT-TAHG0	Grill	White (RAL 9003)	0	4.8	1,480	34	500					5.6-7.1	5.6-7.1
1 Way	PT-UAHW0	Grill	White (RAL 9003)	X	3.3	1,100	34	500			2.6-3.5	2.6-3.5	2.2-3.6	2.2-3.6
I Way	PT-TAHW0	Grill	White (RAL 9003)	X	4.5	1,420	34	500					5.6-7.1	5.6-7.1
	PT-UPHG0	Grill	White (RAL 9003)	0	4.1	1,160	34	500			2.6-3.5	2.6-3.5	2.2-3.6	2.2-3.6
	PT-TPHG0	Grill	White (RAL 9003)	0	4.9	1,480	34	500					5.6-7.1	5.6-7.1

# **Dual Vane Cassette Panel**



Model Name PT-AAGW0 PT-AFGW0

# **Key Features**

		Function						
Model	Dual Vane	Wi-Fi	Floor Temperature Sensor	Air Purification	Human Detection Sensor			
DT AACIMO	0	Optional	Optional	X	Optional			
PT-AAGW0 PT-AFGW0	0	Optional	Optional	Optional (Dust Sensor, Tact Switch)	Optional			

#### Specification

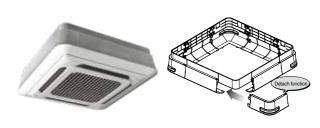
Model	Suction	Color	Class	Weight		Dimension (mm)	
Model	Туре	(RAL)	Gloss	(kg)	W	Н	D
PT-AAGW0	Grid	White (RAL 9003)	-	7.1	950	35	950
PT-AFGW0	Grid	White (RAL 9003)	-	7.5	950	35	950

# **Air Purification Kit**

Model	Туре	lmage	Model name	Dielectric Dust collecting filter	Photocatalytic Deodorizing filter	HVPS	lonizer
	4 Way		PTAHMP0	0	0	0	0
Air Purification Kit	1 Way		РТАНТРО	0	0	0	0
	Round	(S-7;	PTAHYP0	0	0	0	Х

# **Cassette Cover**

Cover in case of exposed cassette installation.



#### **Key Features**

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

#### Specification

-р							
Model	Frank Day	Front Panel		nt (kg)	Dime	ensions	(mm)
моцеі	FIOIIL Pai	NET	Gross	w	н	D	
DTDCA	PT-AAGW0 /	TP-B	6.1	9.5	1,157	266	1,157
PTDCA	PT-AFGW0	TM-A	6.1	9.5	1,157	308	1,157

#### Model Name

PTDCA

# **Applied Products**

4 Way Cassette (for chassis TP-B, TM-A)

## **Included Parts**

- Cover A, Cover B
  - Cover C, Cover D
  - Installation Manual



Cover C (4 units)









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Installation Manual

MECHANICAL

ACCESSORIES

# 4 Way CST Elevation Grille Panel with Air Purification Kit

Easy-to-clean automatic elevating grille panel, The function of automatic lifting panel and Air purification are implemented in one panel, providing customers with comfortable air as well as maintenance convenience.





## Specification

Ca	Category		Catalag Sana
Major	Minor	Unit	Catalog Spec
Model Name	-	-	PTVK440 ENCXLEU
Panel Type	-	-	Air Purifying & Elevation Grille Kit
Panel Dimension	Net (W x H x D)	mm	842 x 55 x 842
Patiet Differision	Shipping (W x H x D)	mm	902 x 150 x 917
Daniel Wainht	Net	kg	5.6
Panel Weight	Shipping	kg	9.2
Panel Accessory	Elevation Grille Kit	-	0

	Category		
Major	Minor	Unit	Catalog Spec
Model Name			PT-AEGW0 ENCXLEU
Panel Type	-	-	Front Panel
	Glossy / Matt	-	Matt
Panel Exterior	Color	-	White
Pallet Exterior	RAL (Classic)	-	RAL 9003
	Grille Type (Grille / Grid)	-	Grid
Panel Dimension	Net (W x H x D)	mm	950 x 35 x 950
Patiet Diffielision	Shipping (W x H x D)	mm	1,006 x 117 x 1,006
Panel Weight	Net	kg	10.5
Pariet Weight	Shipping	kg	12.4
Panel Function	PM1.0 Sensor	-	0
	Air Purification Kit	-	0
Danel Assessant	Elevation Grille Kit	-	PTVK440
Panel Accessory	Floor Detection Sensor	-	0
	Human Detection Sensor	-	PTVSAA0

<sup>\*</sup> This product will be available in 2H '24 (This function application schedule may be changed without notification).

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# **Refrigerant Leak Detector**

R410A refrigerant leak detector ensures room safety.



# Model Name

PRLDNVS0

#### **Applied Products**

MULTI V i MULTI V 5 MULTI V IV Heat Pump & Heat Recovery MULTI V WATER 5

#### **Key Features**

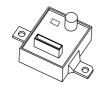
- This detector senses refrigerant leakage when the refrigerant concentration exceeds 6,000ppm. (The green and red LED lights blink simultaneously.)
- $\bullet$  Alarm is "on" when refrigerant leaks out more than 6,000ppm for 5 seconds. If it is reduced less than 6,000ppm for 5 seconds, alarm is "off".
- When the alarm of the refrigerant leak detector is switched on the user must ventilate the room until the alarm is disabled.
- The detector has to be installed inside the room and it should be installed 300 ~ 500mm above the floor.

#### Specification

Parts	Specifi	cation
	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
Sensor	Detected concentration (ppm)	0 / 6,000 Alarm Off / On
	Operating temperature range (oC)	-10 ~ 50
	Preserved temperature range (oC)	-40 ~ 60
	Average power consumption (mA)	35
Connecting cable	Cable length (m)	10
Sensor protective	Dimensions of Front Plate (W x H x D, mm)	80 x 110 x 44.6
cover	Dimension of Backplate (W x H x D, mm)	80 x 110 x 6.5

This function available for ARU\*\*\*\*L\*\*5 and 4 (MULTI V i MULTI V 5, MULTI V IV H/P, H/R model)

## Included Parts



Sensor



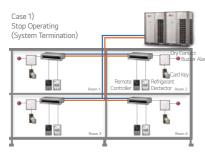


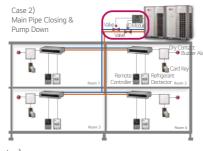
Connecting Cable

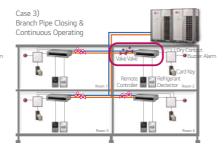
Sensor Protective

## **Key Application**

Refrigerant leak detector has three application methods.







Accessory Specification (To realize the case 2 application)



PVDSMN000









1) Please contact to subsidiary to get the recommended specification. (LG Electronic don't provide this accessory



[Optional / Field Supply]

for central control room

(Direct connection DC 30V, ~ 1A)





Central Control

# **R32 Refrigerant Leak Detector**

R32 refrigerant leak detector should be needed to ensure occupant's safety by IEC 60335-2-40 because of R32's low-flammability.



#### Model Name

PLDRNV1S

# **Applied Products**

MULTI V i R32 MULTI V S R32 (ZRU\*\*\*)

## **Key Features**

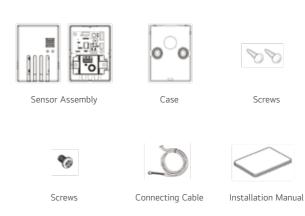
- The green LED turns on in normal mode. If the detector is abnormal such as "Leakage", "Malfunction" and "Lifetime", the red LED blink and buzzer sounds simultaneously with error display on indoor units, wired remote controller or central controller.
- "Leakage" alarm is "on" with "CH230" error display when refrigerant leaks out more than 5,000ppm for 5 seconds. "Leakage" alarm is "off" only when the system reset.
- "Malfunction" alarm is "on" with "CH228" error display when the detector determines failure.
- "Lifetime" Alarm is "on" with "CH229" error display when the used time exceeds 3650 days.
- When the alarm of the refrigerant leak detector is switched on, the occupants should be away from the site and supervisor must ventilate the room until the alarm is disabled.
- The detector has to be installed inside the room and it should be installed 0.3~0.5m above the floor.

# Specification

Parts	Specification						
	Size (W x H x D, mm)	53.8 x 30 x 22					
	Weight (g)	12					
	Power Supply Voltage (V)	5.0 DC ± 5%					
	Average Power Consumption (mA)	40 (Max. 80)					
Sensor	Certificate	RoHS2, JRA 4068:2016R, IEC60335-2-40 Ed6.0					
	Detectable Refrigerant	R32					
	Alarming	Leakage (5,000ppm) / Malfunction / Lifetime					
	Operation Temperature (°C)	-25 ~ 60					
	Buzzer Noise Level (dB(A))	85					
PCB Assembly	LED	Green (Normal) / Red (Alarming)					
Connecting Cable	Length (m)	10					
Sensor	Plate Dimension (Front / Back)	66 x 89 x 46 /					
Protective Case	(W x H x D, mm)	66 x 89 x 16					

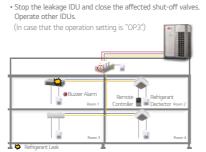
\* Error can be displayed on some indoor units such as Wall-mounted, Ceiling Mounted Cassette etc.

## **Included Parts**



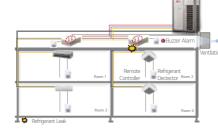
# **Key Application**

Refrigerant leakage detector has application methods. (LG system complies with IEC 60335-2-40)

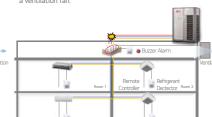








Enhanced Tightness Refrigerating System



• Close all shut-off valves inside the HR unit and operate

Enhanced Tightness Refrigerating System + Safety Devices (Alarm + Ventilation)

+ Safety Devices (Alarm + Ventilation)

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# CO<sub>2</sub> Sensor

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

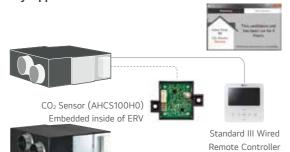


## **Key Features**

- Applied Model : ERV (Embeded), ERV DX (Option)
- Supply voltage : DV12V  $\pm$  5%
- Output: 0.6 ~ 4.4V (Linear output, 240 ~ 1,760 ppm CO<sub>2</sub>)
- Accuracy : ± 10% (2 days after installation)

- The product is especially designed to detect CO<sub>2</sub>.
- This model requires Standard III Wired Remote Controller for display.

#### Key Application



# Model Name

AHCS100H0

#### **Applied Products**

LZ-H025GBA4

LZ-H035GBA5 / LZ-H050GBA5

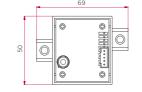
LZ-H080GBA5 / LZ-H100GBA5 LZ-H150GBA5 / LZ-H200GBA5

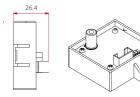
# **Applicable Products**

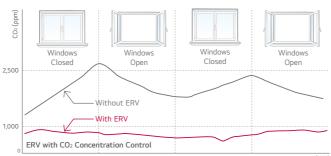
LZ-H050GXN0 / LZ-H080GXN0 LZ-H100GXN0 / LZ-H050GXH0

LZ-H080GXH0 / LZ-H100GXH0

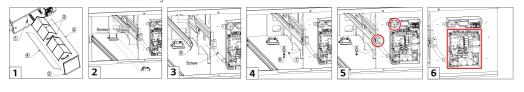
#### Dimensions (Unit:mm)





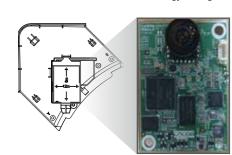


- 1. Remove a screw on the service cover. Pull the service cover fixing bracket (①), then remove the service cover(②). Remove two elements (③) and two air
- 2. Install the sensor with two screws.
- 2. Install the sensor with two screws.
  3. Remove a screw, then remove the right side of element rail (⑤).
  4. Press the holder (⑥) into the hole to fix the CO<sub>2</sub> sensor cable (⑦).
- 5. Connect the wire terminal to the  $\text{CN-CO}_2$  port of PCB.
- \* Airflow can be controlled by concentration of CO<sub>2</sub>, after setting automatic operation mode at remote controller.
- \* Use the screwdriver whose total length is less than 250mm.



# **Human Detection Kit**

Human Detection Kit ensures energy saving and controls wind direction.



#### **Model Name**

PTVSMA0

PT-AFGW0

## **Applied Products**

PT-AAGW0 (For Dual Vane Cassette Panel)

(For Dual Vane Cassette Panel)

#### **Key Features**

- Human Detection Control provides two functions. 'Saving Operation' for energy savings and 'Wind Direction Operation' for comfort.
- Detection Range : ~ height 4.2m
- Installation Height 2.7m  $\rightarrow$  Detection area 12m x 6m
- Installation Height 3.2m → Detection area 15m x 8m
- Installation Height  $4.2m \rightarrow$  Detection area  $18m \times 9m$

# **EEV KIT (for Indoor Unit)**

MULTI V EEV KIT is specially designed to reduce noise and ensure a comfortable environment.



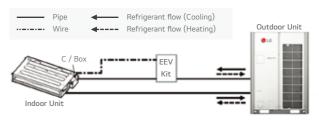
#### Model Name

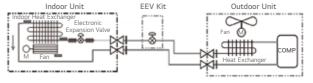
PRGK024A0

#### Key Features

• Decreasing noise level of MULTI V Indoor units and easy installation.

#### **Key Application**





#### **Applied Products**

- P P · · · · · ·			
Indoor Unit	Model	Chassis	Applicable
	1 Way Cassette	TU	0
	2 May Casastta	TT	N/A
	2 Way Cassette	TS	○ (~5.6kW)
Cassette		TR	0
Cassette		TQ	○ (~4.5kW)
	4 Way Cassette	TP	N/A
		TN	N/A
		TM	-
		BG	-
	High Sensible	BR	-
		B8	-
	High Static	B8	-
High Static  Duct Middle Static  Low Static		M1	○ (~5.6kW)
	Middle Static	M2	-
	M3	-	
		L1	0
	Low Static	L2	-
		L3	-
	Floor Standing	CE	0
	3	CF	-
	Convertible	VE	0
	Ceiling Suspended	V1	-
Etc	Ceiling Suspended	V2	-
		SJ	0
	Wall Mounted	SK	0
		SV	-
	Art Cool	SF	0
	Console	QA	0
	Hydro kit	K2	-
	TIYUTU KIL	K3	-

※ ○ : Applied. - : Not applied. N/A : Not Applicable

# EEV Kit can be applied for the space which requires a quiet environment and



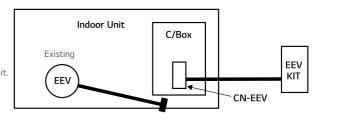


Note: If you don't use EEV of same specification, Cooling (Heating) capacity could be de-

## How to Install

Open Indoor unit's control box cover.

- ① Open fully indoor unit's EEV through vacuum mode of ODU setting.
- ② Detach the Indoor unit's EEV connector from PCB and then push the reset button of Outdoor unit's PCB.
- ③ After connecting indoor unit's EEV CONNECTOR, repeat the process ① & ②. Then, connect the EEV CONNECTOR of EEV KIT in PCB of indoor unit.
- @ Finally connect the lead wire of the EEV Kit to the indoor unit's PCB.
- ⑤ Assemble the control box cover.



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# **IR Receiver**

IR RECEIVER can be connected to ceiling concealed ducts and floor standing units which the customer wants to control by wireless remote controller.



# Model Name

PWLRVN000

#### **Applied Products**

MULTI V Indoors (Ceiling Concealed Duct, Floor Standing Units)

#### **Key Features**

- Designed for wireless control
- Indication lamps (3 colors) and self-diagnosis function

# **Key Application**

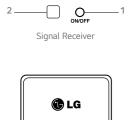
 ${\tt Note: Do\ not\ install\ both\ the\ IR\ Receiver\ and\ Wired\ Remote\ Controller.\ This\ may\ cause\ malfunctions.}$ 





## Operation of Indication Lamps

- ① Emergency Operation button: Turns the indoor unit on or off when remote controller is not working.
- ② Signal Detector: Receives the signal from remote controler.
- ③ Timer lamp (Green): Lights up during the timer operation.
- Hotstart lamp (Orange): Lights up during the pre-heating operation, defrost operation as well as latent heat removal operation in heat mode. Available only for the heat pump models, not cooling only models.
- (\$) System On / Off lamp (Red): Lights up during system controller operation.
- © Filter Sign lamp (Green): Lights up after 2,400 hours from the time of first power on operation.



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#### Test Run Mod

After installing the product, you must run a Test Run mode. Press the Emergency Operation button for 5 seconds, until the LED flickers. Then the indoor unit, duct runs cooling mode for 18 minutes, where the setting temperature is 18°C and the fan speed is high.

# **Multi-tenant Power Module**

System operation remains stable when indoor unit power is lost.



#### Model Name

PINPMB001

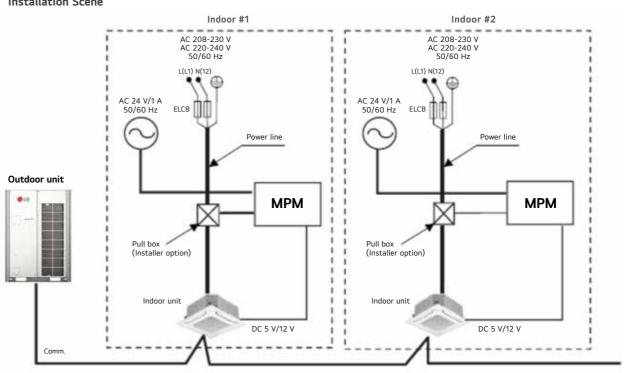
#### Applied Products

MULTI V Indoor Units

## **Key Features**

- Multi-tenant site IDUs are powered separately, some of IDU power is gone by each tenant. In this case, system operation is not stable without Multitenant Power Module.
- This module power each EEV for stabilizing system operation.

## Installation Scene



\*\* When Multi-tenant Power Module is adopted, CN-EXT must used for it. Instead of being used CN-EXT, PDRYCB000 (220Vac input) / PDRYCB100 (24Vac Input) Module are being used for Single contact.

NOTE

# **Auxiliary Heater Relay Kit**

Providing an efficient way to add auxiliary heat.



# Model Name

PRARS1

## **Applied Products**

Wall Mounted, Art Cool Mirror, Art Cool Gallery

#### Model Name

PRARH1

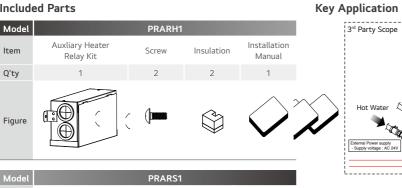
# **Applied Products**

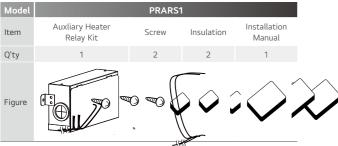
1, 2, 4 Way Ceiling Cassette, High Static Ducted, Low Static Ducted, Ceiling Suspended

## Key Features

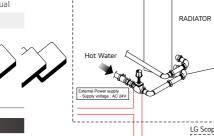
- $\bullet$  Provides two stages of auxiliary heat for indoor unit.
- Provides ability to use the two stage auxiliary heater as the primary or secondary heating source.

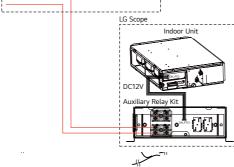
# **Included Parts**



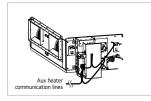


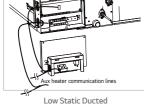
# 3<sup>rd</sup> Party Scope

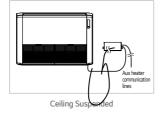


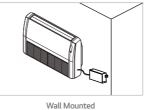


## How to Install

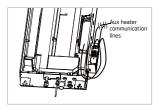








High Static Ducted







1 Way Cassette

2 Way Cassette

4 Way Cassette



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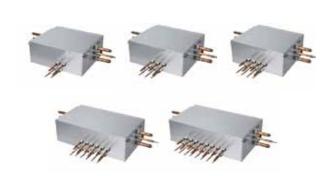
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# **Heat Recovery**



# **Applied Products**

MULTI V i MULTI V 5 MULTI V IV MULTI V WATER 5

# Model Name (R410A)

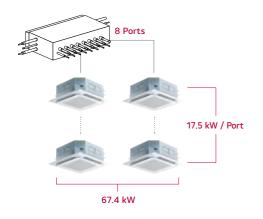
PRHR023 (2 Branch Unit) PRHR033 (3 Branch Unit) PRHR043 (4 Branch Unit) PRHR063 (6 Branch Unit) PRHR083 (8 Branch Unit)

## Key Features

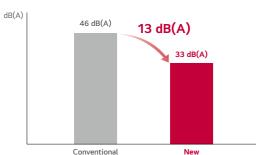
- Max. 64 indoor units can be connected. (Max. 8 indoor units per branch)
- It is easy to install due to the automatic search algorithm for piping detection.
- Subcooling cycle in the HR unit ensures maximum system efficiency.

#### Connection Capacity

Maximum number of connectable indoor units : 64 IDUs / HR unit (in case of 8 ports model)



# Reduce Noise



- Test Condition (ISO Standard)
   Temp.: (Cooling) 27°C DB / 19°C WB, 35°C DB / 24°C WB
  (Heating) 20°C DB / 15°C WB, 7°C DB / 6°C WB
- Operating : cooling → heating switching operation





## **Applied Products**

MULTI V i MULTI V 5 MULTI V IV MULTI V WATER 5

# Model Name (R32)

PRHRZ020 PRHRZ030 PRHRZ040

## **Key Features**

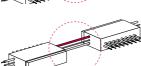
- When a refrigerant leak is detected, a ventilation fan is operated by the
- There is a shut-off valve inside the HR Unit, allowing for quick and easy installation.
- $\bullet$  The remaining indoor units can be operate, thanks to close only the leaked
- There is no limitation on a minimum room area due to safety devices. (Ventilation Fan, Shut-off Valves, Alarm) (\* Excluding cases where it is installed on the lowest basement floor.)
- Max. 32 indoor units can be connected. (Max. 4 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.

#### Flexible Connection

Series connection can be installed without pipes crossing.







#### **Included Parts**

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

## Specification (R410A)

	Model		Unit	PRHR023	PRHR033	PRHR043	PRHR063	PRHR083
Number of Brancl	h		EA	2	3	4	6	8
Maximum Connec Units (Per branch		ity of Indoor	kW	17.5 / 35	17.5 / 52.5	17.5 / 67.4	17.5 / 67.4	17.5 / 67.4
Maximum Numbe Units Per Branch	r of Connect	able Indoor	EA	8	8	8	8	8
Name and Invest	Cooling		kW	0.040	0.040	0.040	0.076	0.076
Nominal Input	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	786 x 218 x 657	786 x 218 x 657	786 x 218 x 657	1,113 x 218 x 657	1,113 x 218 x 657
	Indoor	Liquid	mm (inch)	9.52 (3/8) - 6.35 (1/4)	9.52 (3/8) - 6.35 (1/4)	9.52 (3/8) - 6.35 (1/4)	9.52 (3/8) - 6.35 (1/4)	9.52 (3/8) - 6.35 (1/4
	Unit	Gas	mm (inch)	15.88 (5/8) - 12.7 (1/2)	15.88 (5/8) - 12.7 (1/2)	15.88 (5/8) - 12.7 (1/2)	15.88 (5/8) - 12.7 (1/2)	15.88 (5/8) - 12.7 (1/2
Piping		Liquid	mm (inch)	9.52 (3/8)	12.7 (1/2)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Connections	Outdoor Unit	Low Pressure	mm (inch)	22.2 (7/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)
	Onic	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				

## Specification (R32)

	Model		Unit	PRHRZ020	PRHRZ030	PRHRZ040
Number of Branch	า		EA	2	3	4
Maximum Connec Units (Per branch		ity of Indoor	kW	17.5 / 35	17.5 / 52.5	17.5 / 67.4
Maximum Numbe Units Per Branch	r of Connect	table Indoor	EA	8	8	8
Naminal Innut	Cooling		kW	0.040	0.040	0.040
Nominal Input	Heating		kW	0.040	0.040	0.040
Net. Weight			kg	21.0	23.0	25.0
Dimensions (W x	H x D)		mm	786 x 235 x 918	786 x 235 x 918	786 x 235 x 918
Indoor Li		Liquid	mm (inch)	9.52 (3/8) - 6.35 (1/4)	9.52 (3/8) - 6.35 (1/4)	9.52 (3/8) - 6.35 (1/4)
	Unit	Gas	mm (inch)	15.88 (5/8) - 12.7 (1/2)	15.88 (5/8) - 12.7 (1/2)	15.88 (5/8) - 12.7 (1/2)
Piping		Liquid	mm (inch)	9.52 (3/8)	12.7 (1/2)	15.88 (5/8)
Connections	Outdoor	Low Pressure	mm (inch)	22.2 (7/8)	28.58 (1-1/8)	28.58 (1-1/8)
	H	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

#### Reducers for Indoor Unit and HR Unit

(Unit:mm)

	Model	Liquid	High Pressure	Low Pressure
Indoor unit reducer		OD9.52 Ø6.35		OD15.88 Ø12.7
IID with and ware	PRHR023 / PRHRZ020	OD9.52 Ø6.35	OD19.05 Ø15.88 Ø12.7	ODIS88 Ø12.7
HR unit reducer	PRHR033 / PRHRZ030 PRHR043 / PRHRZ040 PRHR063 PRHR083	OD15.88 Ø127 Ø952	O0222 Ø19.65 Ø15.88	OD19.05 Ø15.88

ACCESSORIES

# Y Branch and Header Branch

For refrigerant distribution of indoor units.



## Model Name

Refer to specifications

## **Applied Products**

MULTI V i

MULTI V 5 MULTI V IV

MULTI V III, MULTI V PLUS II, MULTI V PLUS

MULTI V S

MULTI V WATER 5

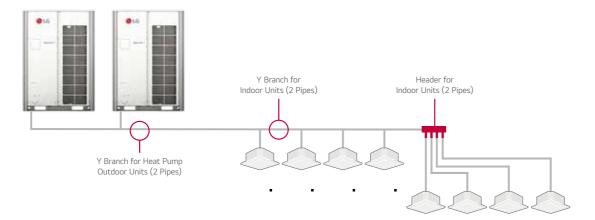
MULTI V WATER IV

MULTI V WATER II MULTI V WATER S

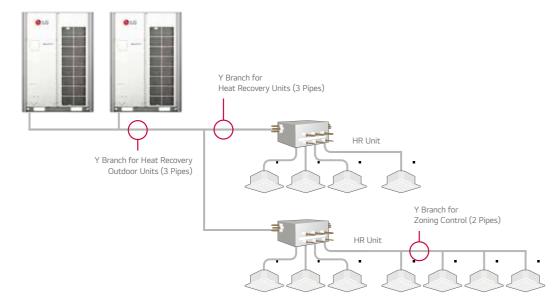
# **Key Features**

- 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.

# Key Application Heat Pump System



## Heat Recovery System



## Specification Header Branch

R410A

R410A				(Unit:mm)
Model  ARBL054 (4 Branch)	912.7 915.88 919.05	OD19.05 15.88 12.7	Liquid Pipe  06.35  09.52  012.7	OD12.7 9.52
ARBL057 (7 Branch)	012.7 015.88 015.88 019.05	OD19.05 15.88 12.7	06.35 09.52 09.52 06.35	OD12.7 9.52
ARBL104 (4 Branch)	012.7 015.88 019.05	OD28.58 22.2	06.35	OD12.7 9.52
ARBL107 (7 Branch)	012.7 015.88 019.05 028.58	OD28.58 22.2	99.52 99.52 99.52 912.7	OD12.7 9.52
ARBL1010 (10 Branch)	<u>015.88</u> <u>012.7</u> <u>015.88</u> <u>019.05</u>	OD28.58 22.2	06.35 09.52 012.7	OD12.7 9.52
ARBL2010 (10 Branch)	Ø15.88 Ø19.05 Ø31.8 Ø38.1	OD38.1 34.9 28.58	06.35 09.52 09.52 015.88 019.05	OD19.05 15.88

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# **Piping Accessories**

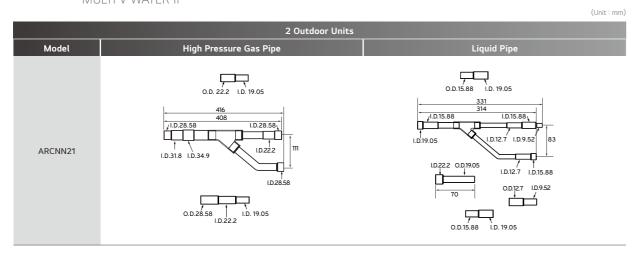
Y Branch pipe for the connection of outdoor units.

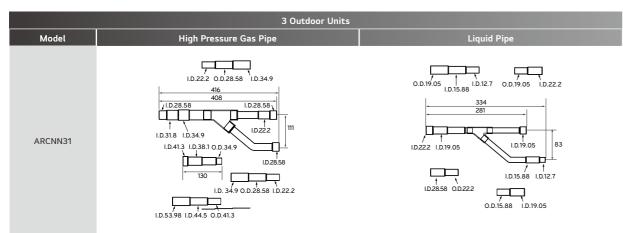
# Specification

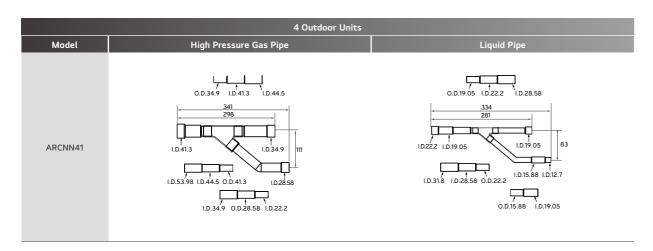
Heat Pump

R410A

MULTI V  $\emph{\textbf{i}}$ , MULTI V 5, MULTI V IV, MULTI V III, MULTI V WATER 5, MULTI V WATER IV, MULTI V WATER II





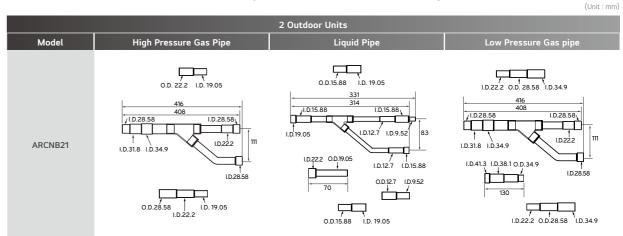


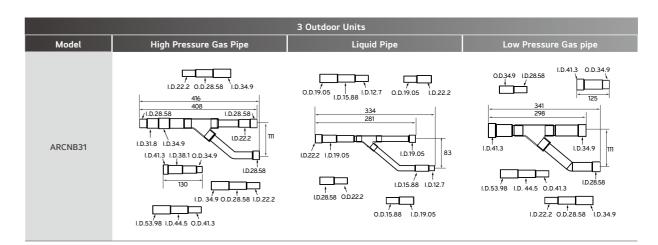
# Specification

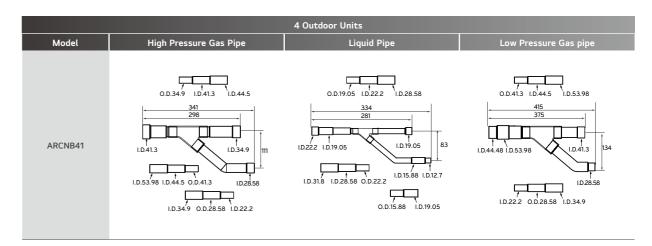
Heat Recovery

R410A

MULTI V *i*, MULTI V 5, MULTI V IV Heat Recovery, MULTI V III Heat Recovery, MULTI V WATER 5, MULTI V WATER IV Heat Recovery, MULTI V WATER II Heat Recovery







ACCESSORIES

# **Piping Accessories**

Y Branch pipe for the connection of outdoor units.

# Specification

Heat Pump, Heat Recovery Zone Control

 $\mathsf{MULTI} \lor \textit{\textbf{i}}, \mathsf{MULTI} \lor \mathsf{5}, \mathsf{MULTI} \lor \mathsf{IV}, \mathsf{MULTI} \lor \mathsf{III}, \mathsf{MULTI} \lor \mathsf{PLUS} \mathsf{II}, \mathsf{MULTI} \lor \mathsf{PLUS}, \mathsf{MULTI} \lor \mathsf{S}, \mathsf{MULTI} \lor \mathsf{MINI},$ MULTI V SPACE II, MULTI V WATER 5, MULTI V WATER IV, MULTI V WATER S, MULTI V WATER II

ARBLN01621 ARBLN03321

Model	Gas Pipe	Liquid Pipe
ARBLN07121	ID318 ID322 ID588 ID322 ID588 ID322 ID588 ID322 ID3588 ID322 ID3588 ID322 ID3588 ID322 ID32858 ID322 ID32858 ID322 ID32858 ID322 ID32858 ID322 ID32858 ID322 ID32858 ID322 ID32858 ID322 ID32858 ID32858 ID32858 ID322 ID32858 ID3	LD19.05 LD12.7 LD19.05 LD12.7 LD19.05 LD12.7 LD19.05 LD15.88 LD19.05 LD19.05 LD19.05 LD19.05 LD19.05
ARBLN14521	1D34.9 1D41.3 1D38.1 1D28.58 1D22.2 1D41.3 1D38.1 1D28.58 1D22.2 1D15.88 1D12.7 0.D28.5 1D19.05 1D19.05 1D19.05	LD15.88 LD19.05

Model	Gas Pipe	Liquid Pipe
ARBLN23220	D5398	D254  D254  D254  D254  D3905  D254  D3905  D254  D3905  D

# Specification

Heat Recovery

MULTI V i, MULTI V 5, MULTI V IV Heat Recovery, MULTI V III Heat Recovery, MULTI V WATER 5, MULTI V WATER IV Heat Recovery, MULTI V WATER II Heat Recovery

Pipe	

			(Unit:mm)
Model	High Pressure Gas Pipe	Liquid Pipe	Low Pressure Gas Pipe
ARBLB01621	ID. 15.88 ID. 12.7 ID. 15.88 ID. 12.7 ID. 15.88 ID. 12.7 ID. 15.88 ID. 12.7 ID. 15.88	UD5.52 UD5.55 UD5.35 UD	105.88 105.88 1075.00 1075.00 1075.00
ARBLB03321	ID. 15.88 ID. 15.88 ID. 19.05 ID. 19.05 ID. 9.05	1D9.52 1D8.55 1D8.35 1D	DPS05
ARBLB07121	ID. 19.05 ID. 28.58 ID. 28.58 ID. 19.05 ID. 19.05 ID. 19.05 ID. 19.05 ID. 19.05 ID. 12.7	1D12.7 1D15.88 1D15.88 1D12.7	1.078.58 1.079.05 1.071.88 1.0
ARBLB14521	ID. 28.58 ID. 22.58 ID. 25.54 ID. 28.58 ID. 25.54 ID. 25.54 ID. 22.55 ID. 22	0.015.88 1.09.52	10049 1005.88 10022 1006.88 1006

Model	High Pressure Gas Pipe	Liquid Pipe	Low Pressure Gas Pipe
ARBLB23220	1D34.9 1D41.3 1D38.9 1D32.2 125  1D36.1 1D36.1 1D38.9 1D32.2 125  1D36.5 1D36.5 1D36.5 1D32.2 125  1D36.5 1D36.5 1D36.5 1D36.5 1D36.5 1D36.1 1D36.5 1D36.1 1D36.5 1	1D25.4 1D222 1D222 1D25.4 1D19.05 96 364 1D19.05 96 379 1D5.58 1D3.27 0D127 1D6.35	1D.53.98 1D.44.48 1D.53.98 1D.54.48 1D.53.98 1D.54.58 1D.52.54 1D.

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# **Refrigerant Charging Kit**

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



# Model Name

PRAC1

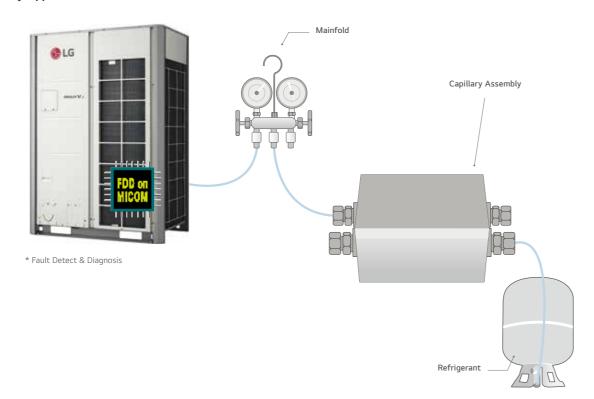
#### **Applied Products**

MULTI V i
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

#### How to Use

- Arrange manifold, capillary assembly, refrigerant vessel and scale.
- Connect manifold to the gas pipe service valve of outdoor unit as shown in the figure.
- $\bullet$  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.

# **Key Application**



# **Drain Hose**

Easy drain installation.



#### Model Name

PHDHA05T PHDHA07T PHDHA05B PHDHA07B

# **Applied Products**

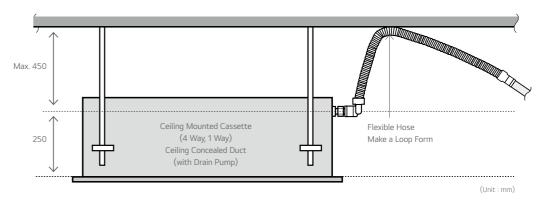
Multi V Indoor units

## **Key Features**

- $\bullet$  It reduces the installation time by over 40% with elbow-less drain hose.
- Drain pump covers maximum 700mm high, featuring easy piping installation.

#### **Key Application**

• Ceiling Mounted Cassette and Ceiling Concealed Duct. (Refer to PDB for applicable model)



## Specification

Model	Length	Quantity
PHDHA05T	500mm	30EA
PHDHA07T	700mm	30EA
PHDHA05B	500mm	5EA
PHDHA07B	700mm	5EA

AC

CE

SSORIE

# **Stopper Valves**



#### Model Name

PRVT120 (Under 12.7mm) PMVT780 (Under 22.2mm) PMVT980 (Under 28.58mm)

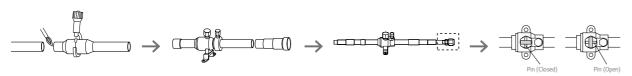
## **Key Features**

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

## Specification

Model	Specifica	tion
PRVT120	Input → 108.35 008.52 1012.7	→ Output(Indoor unit) ID12.7 ID6.35
PRVT780	Input → ID15.88 ID19.95 ID22.2	→ Output(Indoor unit)  ID22.2 ID19.05 ID15.88
PRVT980	Input →	Output(Indoor unit) 1028,58

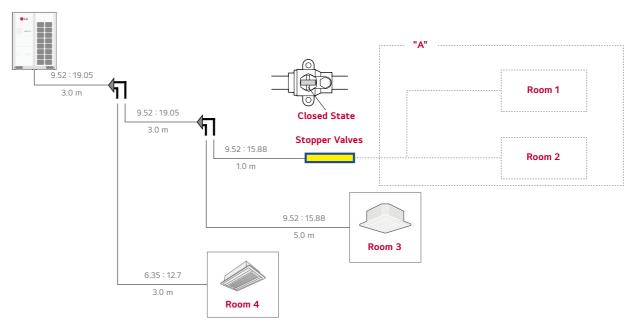
### How to Install



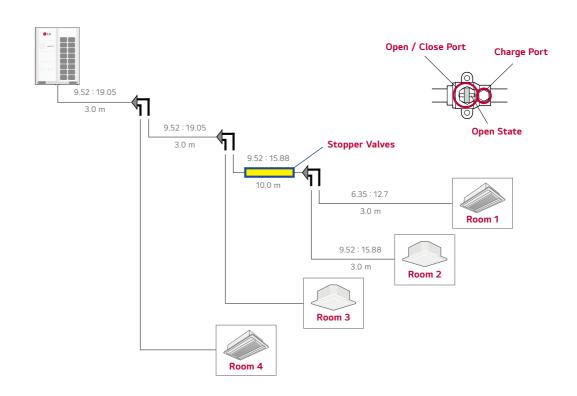
- 1. Cut the inlet side of the connector, and weld the pipe
- If installing additional indoor units, the outlet side connector should be cut according to installation pipe.
- When installing a stopper valve, the flare part should be facing towards additional indoor unit.
- When installing an additional indoor unit, the SVC valve should be in closed state.

#### Application

(Room 3 & 4: in use / Room 1 & 2: need to install indoor units)



- Refrigerant or oil may accumulate, if the pipe between the branch and stopper valves is long. Recommended distance within 1.0 m.
- 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.



<sup>\*</sup> When welding, service valve should be wrapped by wet cloth.