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BRAND STORY 004 I 005

reliable VRF solutions.

From the moment when LG introduced Korea's first residential air conditioner in 1968, the company has continuously enhanced its technological innovation and credibility. As a result of sustained improvement, LG VRF launched the first generation of MULTI V in 2006 and achieved significant development. With world's top class compressor and innovative technology

competency applied on every part, cycle and controlling solutions, it has evolved to be one of the world's most efficient and

# **DESIGNED FOR THE ULTIMATE**





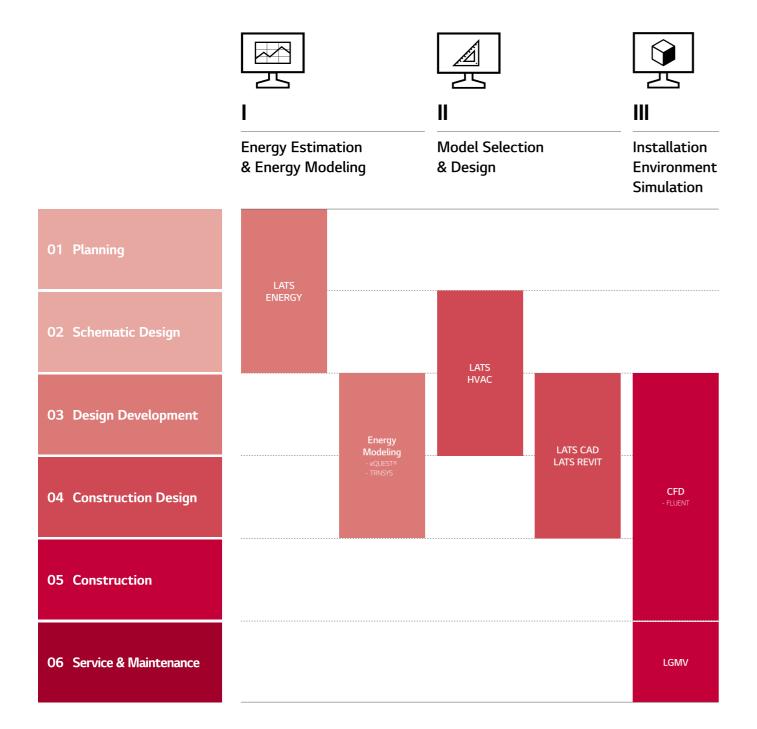
WHY LG MULTI V

# **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, during the overall lifecycle of a building, related to the three categories: I. Draft Energy Estimation & Energy Modeling, II. Model Selection & Design, and III. Installation Environment Simulation. Among them, the LATS\* Program series has been developed to offer the best tool for LG HVAC systems, providing our customers a faster, easier, and a more accurate way in everyday duties of Model-selection, Draft Energy Estimation & Designing, and many more.

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



# 01 Draft Energy Estimation

#### LATS Energy

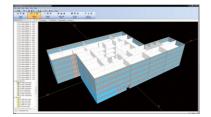
LATS Energy program is a draft energy estimation program, self-developed by LG. This program helps estimate the draft energy usage and analyzes the life cycle cost of LG VRF models during the early stage of a project.



# 02 Building Energy Modeling

#### eQuest, EnergyPro, Trace700 and More

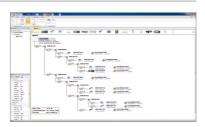
These are certified commercial programs which assess the HVAC system efficiency and building's annual energy saving for building standard or certification like LEED. LG HQ supports these programs for the project stages of Design Development and Construction Design wherein the overall designing is finished.



## 03 Model Selection

#### LATS HVAC

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



# 04 Design

#### LATS CAD

LATS CAD enables faster and more accurate 2D design of LG HVAC products. It also enables modules for quotation and installation review that minimize inherent problems appearing during installation.

※ AutoCAD program is required.

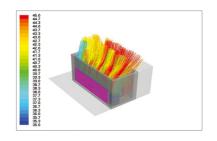
#### LATS REVIT

LATS REVIT is developed to make 3D design of LG HVAC products. \*\* AutoCAD REVIT program is required.

# 05 Environment Simulation

#### **CFD Analysis**

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



## 06 Service & Maintenance

#### LGMV

LGMV offers real-time MULTI V cycle monitoring. During start-up, it's possible to check whether it is normal operation or not. Also it helps to find causes of errors and solve the problem faster.



WHY LG MULTI V 008 | 009

# **BENEFITS OF LG MULTI V**

# **Benefits for Building Owners**



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

- Fault Detection Diagnosis enables easy maintenance.
- Requires no extra manpower does not require regular manpower for maintenance.
- With diverse control systems, maintenance cost is minimized.



## Reliability Guaranteed in Every Aspect

- Ultimate Inverter Compressor developed and manufactured in Korea.
- Corrosion resistant Ocean Black Fin for harsh condition operations.
- Smart Oil management (Auto Oil Balancing and Active Oil return) decreases compressor damage.



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

- Compatible option between Heat pump and Heat recovery system is possible.



# **Benefits for Consultants**



#### Versatile Solutions

- Air-cooled, Water-cooled, Heating, and Air Handing Unit interlocked solutions.



#### Professional Designing 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 Comfort in HVAC Designing

- Flexible and Longer piping length eases HVAC designing process.
- Meets any type of customer requirements of diverse environment, design condition, and building applications.



# Benefits for Developers / Construction Companies



#### **Green Solutions**

- Helps scoring LEED / BREEAM points.
- Renewable energy solution provided through geothermal application.



# **Maximizing Space Utilization**

Large Capacity in compact size enhances space utilization.



# **Smart Building Solutions**

- Easy interlock with Building Management System.
- Wi-Fi control available for anytime anywhere (via mobile app).
- Energy management and control according to usage and planning is possible with LG's centralized control solution.



# **Benefits for End-users**



#### **Operation Cost Saving**

- High efficiency is assured through all capacity and
- Maximum 31% of cost saved through MULTI V 5 Smart Load Control,\*



## Comfortable Cooling & Heating

- Smart Load Control maximizes indoor comfort level.
- Dual sensing offers pleasant and comfortable cooling and heating environment.
- Duration time of Continuous Heating is 11% longer than previous model.\*\*



#### **Convenient Functions**

- Low-noise operation provides a restful environment.
- \* Dual Smart Load Control ESEER based, below 50% humidity, model ARUM260LTE5 \*\* LG internal test result





WHY LG MULTI V

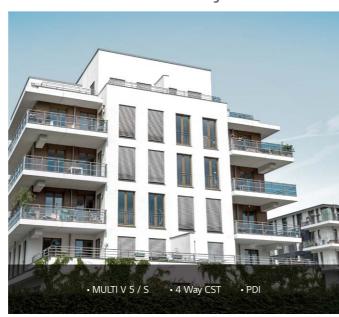
# **APPLICATION SOLUTIONS**

**Office** Supporting efficiency with flexibility

High Rise Office Building



Small to Medium sized Office Building



MULTI V series vitalizes the workspace with fresh air at all time, combined with its various indoor selection. The intelligent control solutions add comfort to the space.

# **Commercial** Maximize business, minimize costs

**Shopping Mall** 



Retail



QSR



The highly efficient, energy saving MULTI V 5 and MULTI V M reduces operation costs, and provides comfort that suits any purpose and any space, helping to invest the extra space and expense to your business.

# **Residential** Home is where your comfort is

## Condominium & Apartments

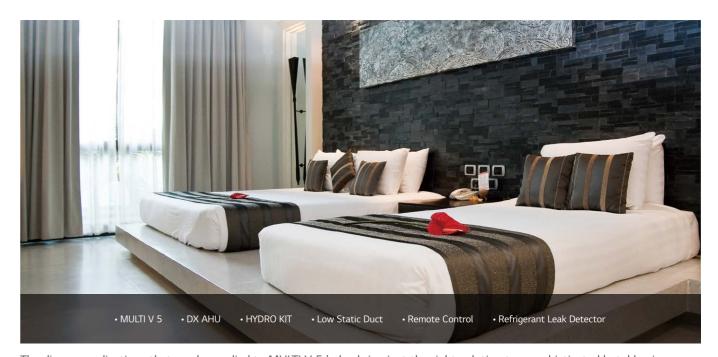


Single Family House & Villa



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

# **Hospitality** Meeting diverse needs in every aspect



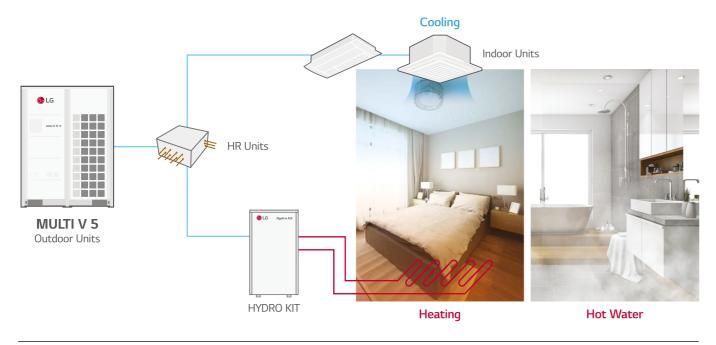
The diverse applications that can be applied to MULTI V 5 helps bring just the right solution to a sophisticated hotel business.

 WHY LG MULTI V

# **DIVERSE INTEGRATED SOLUTION**

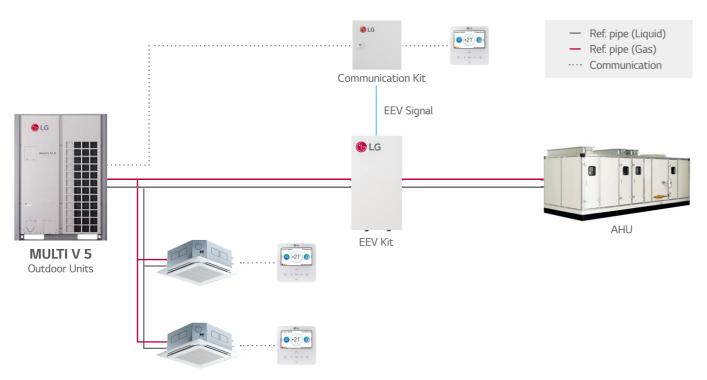
# **Hot Water Solution**

In order to save costs of providing hot water, using heat pump system is advised as water heating by heat pump is highly efficient compared to a boiler system. The HYDRO KIT can be connected to MULTI V 5, and hot water temperatures up to 80°C can be provided. Also, energy savings can be increased when HYDRO KIT is combined with MULTI V 5 Heat Recovery.



# Air Handling Unit(AHU) Solution

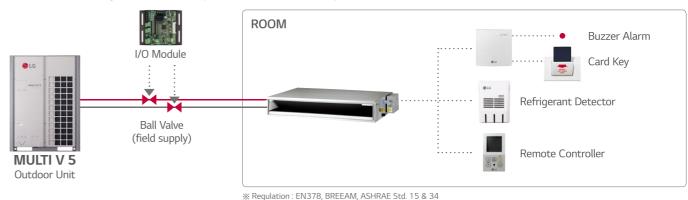
An AHU is a solution that can control all air conditioning factors in a large space. With an LG AHU Comm. Kit (for both return air / supply air control) connected to the DX coil of the AHU, LG VRF system can be applied to deliver conditioned air.



# Refrigerant Leak Detection Solution

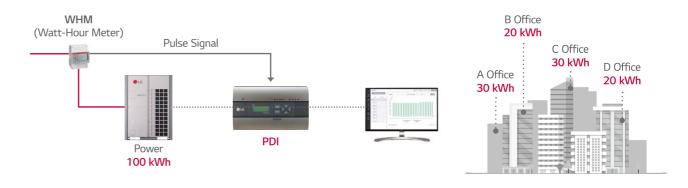
Real time refrigerant leak detection is needed for a safe environment. When the refrigerant concentration exceeds 6,000ppm for 5 seconds the indoor unit will stop operation and can also give an alarm using a buzzer or a light with the dry contact (option). The central controller can also display an error signal.

\* When the solution for refrigerant leak detection is required, contact LG and discuss the requirement



# **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 to Excel.



# Total Control on Any of Devices

In order to manage multiple spaces and multiple buildings, the administrators should be able to control systems from wherever they are. The LG central controller can be controlled from any web browser that supports HTML5. Now through the implementation of HTML5, the interface will look great and perform well on any of your devices.



WHY LG MULTI V 014 | 015

# **DIVERSE INTEGRATED SOLUTION**

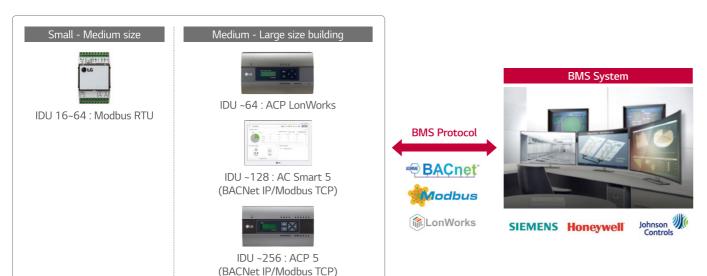
# **Energy Management Solution**

Since HVAC systems have a significant portion of any building's total amount of energy, the energy saving functions of a controller can make a big difference. The energy navigation function enables you to set target values for energy consumption over a certain period of time. In addition, to achieve that value, the administrator can set the energy saving logic in 7 steps and predict the expected usage relative to the target value. Active self-management enables energy savings through out the building.



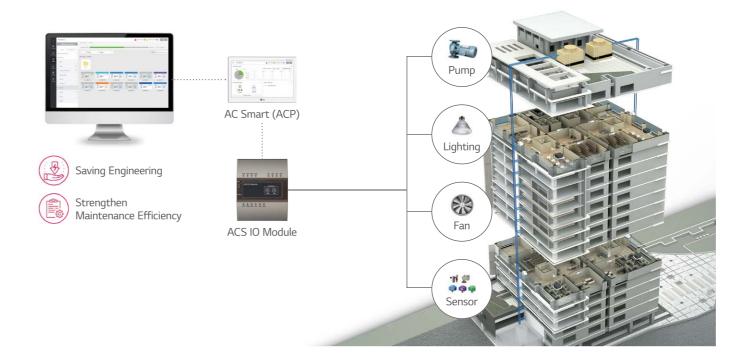
# Integration Solution with BMS

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 stand-alone central control capability to act as a back-up controller of the BMS if needed.



# Interlocking Solution by Using ACS IO Module

It is costly to introduce a BMS system to control multiple devices or systems in a small building. With the ACS IO module, various IO contact points (DI, DO, UI, AO) can be interlocked and integrated 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 by 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 control 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 things 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 etc. so that the air conditioner is automatically operated depending on situation. In addition, the dry contact option settings enable operation of 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.





# OUTDOOR UNITS

- MULTI V 5
- MULTI V S

- MULTI V M
- MULTI V WATER IV (HEAT PUMP / HEAT RECOVERY)



# **OUTDOOR UNITS LINE-UP**

Туре	Features	Appearance	4	5	6	8	10	12	14	16	18	20
						• • • • •	• • • • •	• • • •				
	Dual sensing control     Large capacity ODU (Up to 26HP)								Ο Δ	• О <u>А</u>	• • • • •	<ul><li>○</li><li>△</li><li>△</li></ul>
MULTI V 5	<ul> <li>Continuous Heating</li> <li>Ocean black fin heat exchanger</li> <li>Ability to function as HP or HR</li> <li>Flexible installation with heat recovery unit and large capacity</li> </ul>											
	<ul> <li>For large space, high rise building a individual control building</li> </ul>											
MULTI V S*	Saves floor space Flexible design applications Slim, light and wide line up	0	•	•								
MOLIT V 5	(4 ~ 12HP) - Combination of indoor unit (Up to 20 Units) • For Small / Medium building	0		•	•	•	•	•				
MULTI V S* Heat Recovery					•							
MULTI V M*	High flexibility of installation     Quiet operation     Various indoor unit combinations & Long distance between modules	• is		•								
	High officional authors reportless	91.0				•	•		•			•
MULTI V WATER IV	<ul> <li>High efficiency system regardless external conditions</li> <li>Indoor installation product</li> <li>Quiet unit noise level (No fans)</li> <li>For Water sourced system, High rise</li> </ul>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								•	•	
Heat Pump / Heat Recovery	<ul> <li>building and Aesthetic building</li> <li>Cooling and heating at the same time</li> <li>Minimizing energy cost by water sourced heat recovery system</li> <li>For individual control building</li> </ul>											
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Non Tropical High Efficiency model
 Non Tropical Standard model
 ▲ Tropical High Efficiency
 △ Tropical Standard model

<sup>\* 220</sup>V, 1Ø= MULTI V S (4, 5HP), MULTI V S Heat Recovery (5, 6HP), MULTI V M (6HP)

# OCEAN BLACK FIN HEAT EXCHANGER

LG's exclusive "Ocean Black Fin" heat exchanger is specially designed for durable and long-lasting performance even in corrosive environments. The black coating is applied for protection from various corrosive external conditions and the hydrophilic film keeps water from accumulating on the heat exchanger's fin, minimizing moisture buildup. This improvement in durability prolongs the product's lifespan and lowers both the operational and maintenance costs.

# Ocean Black Fin

# Heat Exchanger with Ocean Black Fin for Corrosion Resistance

The black coating is applied for protection from various corrosive external conditions and the hydrophilic film keeps water from accumulating on the heat exchanger's fin, minimizing moisture buildup.

# Hydrophilic film (Water flow) $0.2 \sim 0.3 \mu$ m

The hydrophilic coating minimizes moisture buildup on the fin.

# Epoxy resin (Corrosion resistant) 1.6 ~ 2.0 µm

The black coating provides strong protection from corrosion.

Aluminum fin



Strong Durability
Regardless of External
Environment

# Corrosion Resistance Proven by Certified Tests

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

# Condition of salt spray test

Heat	Alleria	Test Period (hr)	
Exchanger	1,000	2,000	3,000
Previous Fin			
Black Fin			(

- Based on in-house testing
- $\mbox{\@sc W}$  Test conditions : KS (D 9502), ASTM B117, Temp. : 35+°C / NaCl Concentration : 5% / Avg. spray rate : 1.5 + 0.5 ml / hr

# **DUAL SENSING CONTROL**

**LG** 

MULTI V. 5

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



# **Smart Load Control (SLC)**

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

# ESEER Up to 21%

(vs. standard mode at 26HP)



ESEER Up to 15% ~ ESEER Up to 31%

(High humidity)

(Low humidity)



Lower load and her evaporation

Higher evaporation temperature results in higher efficiency.

**Energy Savings and Optimized Cooling** through Temperature and Humidity Control

# Hot & Dry day



Hot & Wet day

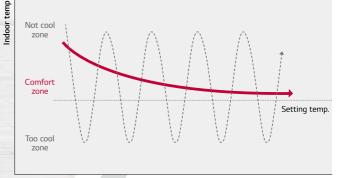
Humidity

Temperature

# **Comfort Cooling**

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

Previous Model MULTI V. 5



# BIOMIMETICS TECHNOLOGY FAN

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



# Larger Capacity ODU with Biomimetics Technology Fan









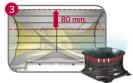
# Humpback Whale Design

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



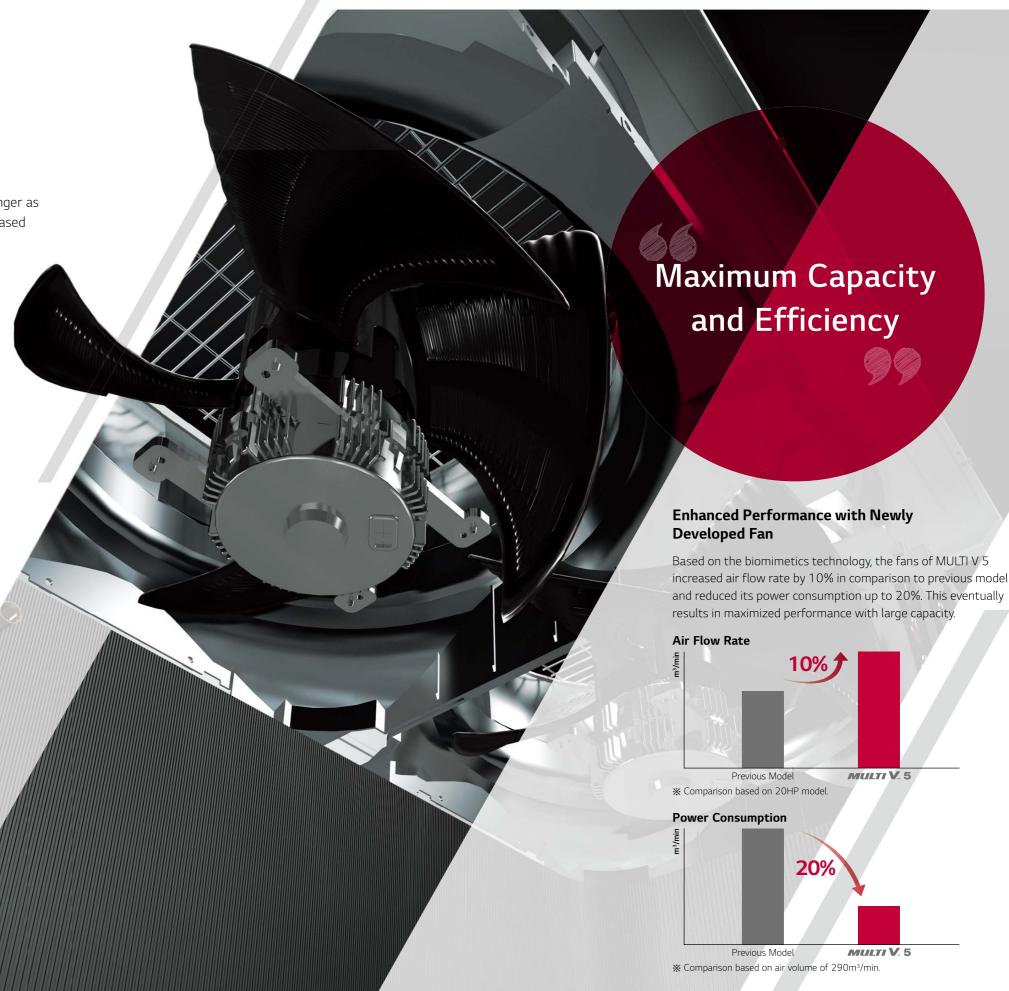
## **Clam Shell Pattern**

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



## **Increased Air Flow Rate**

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





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



- 01. HiPOR™ (High Pressure Oil Return)
- 02. Smart Oil Management
- 03. Wide Operation Range from 10 to 165Hz  $\,$
- 04. Enhanced Bearing with PEEK Material
  - Up to 15% Operating time without oil supply
  - Down to 3dB Noise Level (Max. Sound Pressure)
- 05. Vapor Injection
  - 10% Improved Energy Efficiency



# **CONTINUOUS HEATING**

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



# **Delayed Defrost via Humidity Sensor of Dual Sensing Control**

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



※ Outside humunity sensing

# **Smart Oil Management**

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

Oil recovery operation only if necessary Heating operation time per day up to 12%

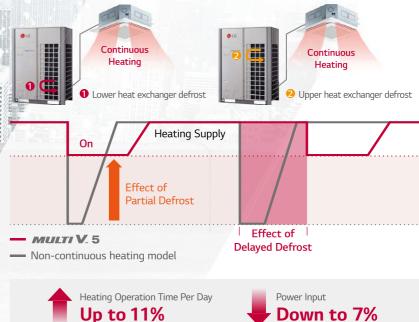
Non-oil sensor model | MULTI V. 5

MULTI V. 5

Efficient even in Low-Temperature, **High-Humidity** Environments

#### **Partial Defrost**

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



# **AUTO DUST REMOVAL**

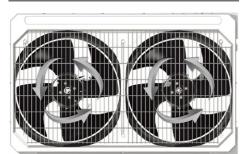
This feature in MULTI V 5 removes dust on outdoor unit heat exchanger. The outdoor unit fan(s) rotate reversely to blow off the dust. Once the accumulated dust on the heat exchanger is removed, the fan(s) rotates normally and unit goes back to normal operation.



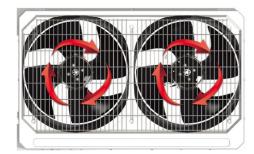
# **Technology Mechanism**

Fan rotates reversely to run sand dust free operation

# **Normal Operation**



# Auto Dust Removal







- Compatibility with various installation environments
- Strong durability
- Fast and easy installation
- Linkage with various indoor units
- Humidity detection
- Air purification
- Smart management
- Space efficiency

# ACTIVE REFRIGERANT CONTROL

# **Stable Operation &** Sustaining Most Efficient Operation



Part Load **Efficiency** 

Heating Efficiency

MULTI V 5 active refrigerant control algorithm goal is to minimize the amount of refrigerant in circulation. The lower the volume in circulation the lower the cost to move it around the system and the higher the stability of the refrigeration cycle.

## **VARIABLE PATH HEAT EXCHANGER**

# **Optimized System Efficiency & Continuous** Heating

# Full Load Cooling



**Heating - All Conditions** 

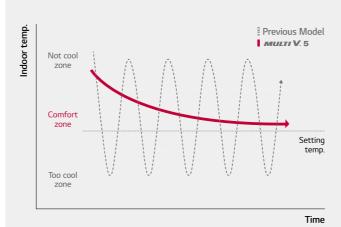
• Upper & Lower active

- Series circuited
- High velocity refrigerant flow
- Upper & Lower active
- Parallel circuited
  - Low velocity refrigerant flow

MULTI V 5 outdoor units are manufactured with horizontally split ODU coil consisting of two independently circuited sections. Each half the coil is independently controlled. This split coil feature makes it possible for MULTI V 5 to provide continuous heating during defrost.

#### **COMFORT COOLING**

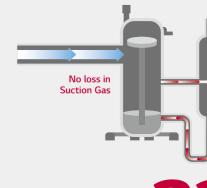
# Increased Indoor Comfort & **Enhanced Operating Efficiency**



MULTI V 5's comfort control algorithm monitors the outdoor air temperature and humidity conditions. When changing weather conditions are favorable to raising target superheat, target superheat is moderated.

#### HiPOR™

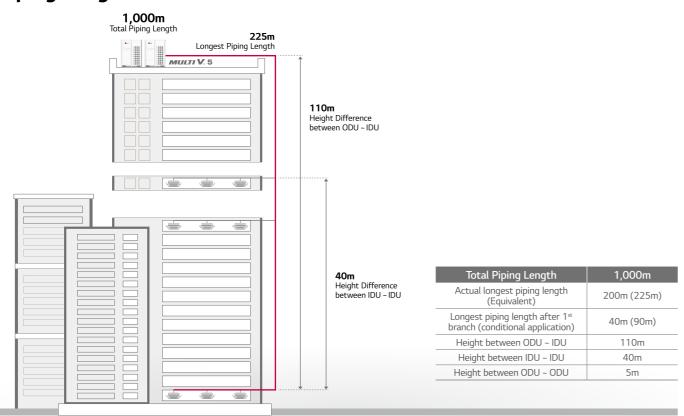
# Maximized Reliability & **Efficiency of Compressor**



Efficiency Increase Up to

HiPOR™ technology enables oil to return directly into the compressor, instead of returning through the refrigerant suction pipe. This does not waist energy when oil flows between the separator and the compressor.

# **Piping Length**



# **Active Refrigerant Control**

Stable operation & Sustaining most efficient operation

The accumulator in the outdoor unit has a storage tank mounted inside accumulator known as the receiver tank. The receiver tank is equipped with inlet and outlet valves that are electronically opened and closed. Refrigerant is being passed between the accumulator and the receiver tank on a continuous basis. MULTI V 5 active refrigerant control algorithm goal is to minimize the amount of refrigerant in circulation. The lower the volume in circulation the lower the cost to move it around the system and the higher the stability of the refrigeration cycle. It accomplishes this by constantly monitoring the system operating pressures and temperatures and a variety of other vital control metrics of the refrigeration cycle. When the cycle is out of balance, an adjustment in the amount of circulating refrigerant occurs.

#### What are the benefits?

Widens the ambient temperature range at which stable operation occurs.

Sustains most efficient system operation irrelevant of outdoor weather conditions, operating mode, or building load.

# Technology mechanism Amount of refrigerant in receiver Receiver Cooling Heating Part Load Accumulator Compressor

# Part Load 10% refrigerant type Heating Efficiency 3% Active Refrigerant Control Refrigerant Refrigerant Refrigerant

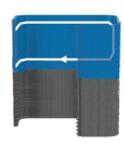
# Variable Path Heat Exchanger

Optimized system efficiency & Continuous heating

MULTI V 5 outdoor units are manufactured with horizontally split ODU coil consisting of two independently circuited sections. Each half the coil is independently controlled. This split coil feature makes it possible for MULTI V 5 to provide continuous heating during defrost. The coil circuiting and valve arrangement also makes it possible for the MULTI V 5 controller to change the flow path of refrigerant through one of the two coils only, or through both coils in either a series or parallel arrangement. Based on system pressures, ambient temperature conditions, and mode of operation, the system controller may modify the selected path at any time.

#### What are the benefits?

Optimizes system efficiency irrelevant of operating modes as ambient weather conditions change. Customizes the area of outdoor units heat transfer surface in use dynamically.



Low ambient cooling and / or light building load

- Half active
- Lower idle



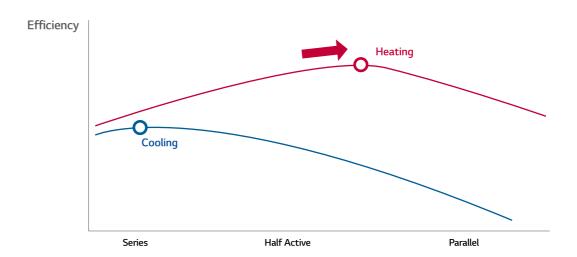
#### Full load cooling

- Upper & lower active
- Series circuited
- High velocity refrigerant flow



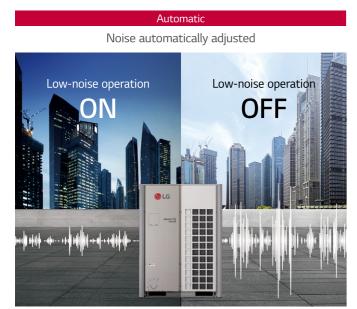
#### Heating - all conditions

- Upper & lower active
- Parallel circuited
- Low velocity refrigerant flow



# **Low-Noise Operation**

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



# Choose preferred settings with remote based on noise conditions Indoor setting

Manual

\* Indoor unit set up available with Standard III Remote Controlle

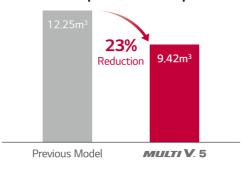
# Flexible Installation Space with Large Capacity Outdoor Units

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

## Comparison on installation space

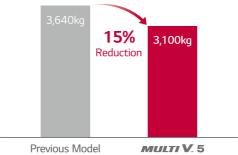


## Installation space area comparison





Product weight comparison



# **Dual Sensing SLC (Smart Load Control)**

Enhanced energy saving & Increased indoor comfort

Cooling loads vary according to both temperature and humidity. With Dual sensing SLC, the proper amount of work can be exerted to meet the load not only depending on current temperature, but also on humidity. As a result, less work will be needed at the same temperature when humidity is lower. It influences the VRF system main processor's decision on where to set the system's target high or low system pressure values.

# Smart Load Control monitors two inputs

1) Outdoor ambient dry bulb temperature 2) Relative humidity

# What are the benefits?

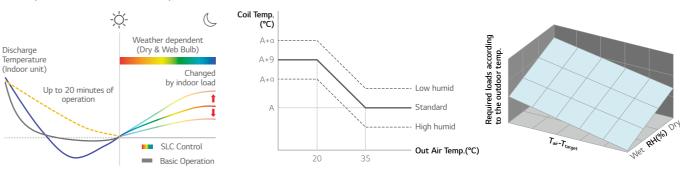
# Enhanced energy savings

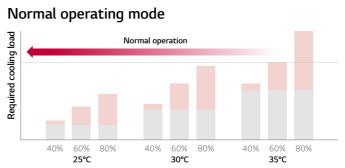
- Cooling Mode: By raising the target low pressure during off-peak cooling operation, the compressor lift is reduced. This slows compressor's speed which leads to a decrease in compressor's power consumption.
- Heating Mode: By lowering the target high pressure during off-peak heating operation, the compressor lift is reduced. This slows compressor's speed which leads to a decrease in compressor's power consumption.

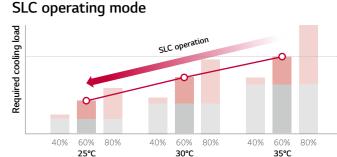
#### Increased indoor comfort

This function allows MULTI V 5 to maintain operation at mild cooling mode around the set temperature with adjusting compressor's speed by sensing both temperature and humidity.

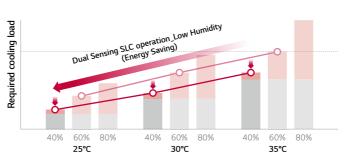
# SLC (Smart Load Control)





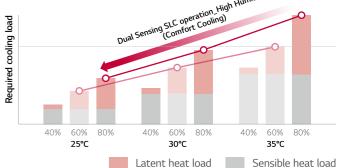


# SLC operating mode - Low Humidity





SLC operating mode - High Humidity



**OUTDOOR UNITS FEATURE** 038 | 039

# **MULTI V 5**

# **Comfort Cooling**

Increased indoor comfort & Enhanced operating efficiency

When the IDU is operating in a season when its load is less than design, the comfort cooling algorithm moderates the indoor unit's coil superheat, thus raising the leaving air temperature as the space temperature is approaching set point. MULTI V 5's comfort control algorithm monitors the outdoor air temperature and humidity conditions. When changing weather conditions are deteriorating and there is a high potential the indoor unit's load will remain stable or may increase, comfort cooling delays or abandons raising the target superheat as the room temperature approaches set-point. When changing weather conditions are favorable to raising target superheat, target superheat is moderated.

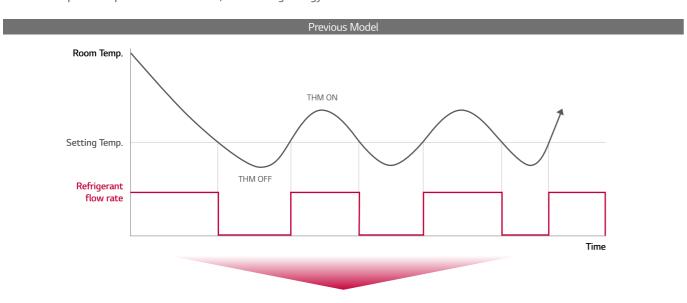
#### What are the benefits?

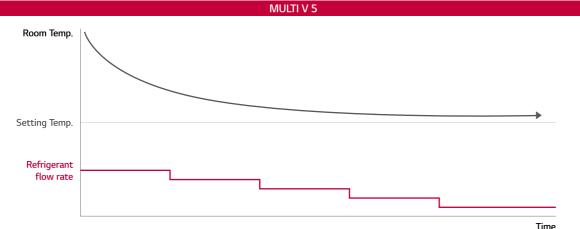
#### Increased indoor comfort

If comfort cooling is turned off, and the temperature of the leaving air is not raised, when the fan speed is reduced to low speed, there is a potential that occupants located directly under a cassette IDU or supply air registers could feel cold air falling on them resulting in a lower overall comfort experience. With comfort cooling turned on, the leaving air temperature is moderated. When the IDU controller reduces the fan speed, the potential for cold air falling on occupants located under the cassette IDU or supply air registers is reduced.

## Enhanced operating efficiency

Raising superheat reduces refrigerant volume flowing through the coil. As flow decreases, demand on the compressor decreases and the compressor speed will be reduced, thus saving energy.





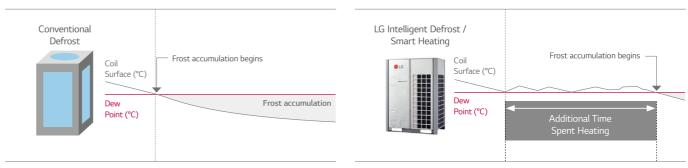
# **Intelligent Defrost**

# Increased heating run-hours

MULTI V 5 provides the same user selected defrost mode and method provided by LG's Intelligent Defrost based on current outdoor ambient temperature. With the addition of the outdoor air humidity sensor, MULTI V 5 Intelligent Defrost just got smarter. MULTI V 5 computes the current ambient air dew point temperature - the temperature at which frost will form on the outdoor unit coil in winter operation. MULTI V 5 makes continuous adjustments to the refrigeration cycle operating parameters to keep the outdoor coil surface temperature above actual dew point which can be calculated by using dry bulb Temp. and relative humidity. When the refrigeration cycle operating parameters can be adjusted no further without sacrificing heating comfort, further adjustment is stopped and frost is allowed to build on the coil.

## What are the benefits?

The Intelligent Defrost algorithm increases the VRF system's heating run-hours and reduces the number of defrost cycles required to maintain optimum heating performance irrelevant of the mode and method of defrost selected.



- \* Increased heating operation time per day: Up to 17%
- · LG Internal test result
- Test condition (MULTI V 5 vs MULTI V IV, 22HP) - Outdoor: 2/1°C, Indoor: 20/15°C - Humidity: 83%, Dew Point: -0.5°C

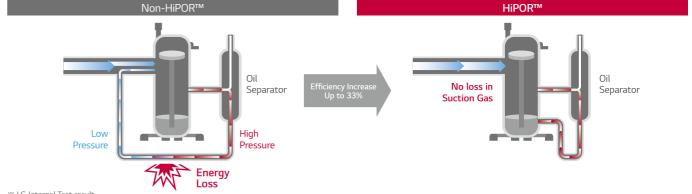
# HiPOR™

# Maximized reliability & Efficiency of compressor

HiPOR™ is a trademark for LG's High Performance Oil Return apparatus. It consists of an oil separator, oil drain line between the separator and the compressor, HiPOR™ technology enables oil to return directly into the compressor, instead of returning through the refrigerant suction pipe. This does not waist energy when oil flows between the separator and the compressor. Because the operating pressure in the chamber containing the oil sump of the compressor and the pressure in the oil separator are nearly equal, there is no loss in compressor efficiency.

#### What are the benefits?

Maximizes reliability and efficiency of the compressor



- \* LG Internal Test result
- \* Test condition 15Hz Rating Condition : TC = 37.9°C, Te : 7.2°C

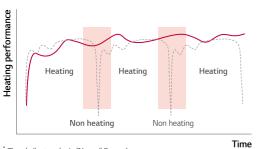
# **Smart Oil Management**

Energy saving, Enhanced heating & Increased compressor reliability

MULTI V 5 performs oil return on an as needed basis under normal operating conditions. An oil level sensor is provided in every LG VRF compressor. If the sensor indicates the compressor oil level is low, the main system processor is notified that an oil return cycle is necessary. Oil balancing cycle occurs every hour and does not hamper system performance. It balances the oil level deposit between both compressors in multi-compressor frames. Older VRF technology protects compressors from oil loss based on timed oil return logic because there was no way to know if the oil level in any one compressor was low. LG's unique oil level measuring sensor actively monitors the oil level in each compressor.

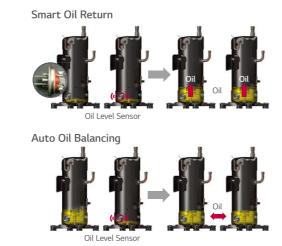
#### What are the benefits?

Energy savings compared with other systems. Fewer oil return cycles eliminates unnecessary energy consumption. Increases system heating run-time during winter operation. Increases compressor reliability.



Timed oil return logic (Non\_oil Sensor)

- · LG Internal Test result
- Test condition
- without oil level sensor: every 8hour oil recovery operation
- with oil level sensor : non oil recovery operation



# **Vapor Injection**

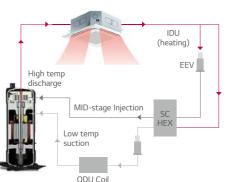
#### Increased heating performance

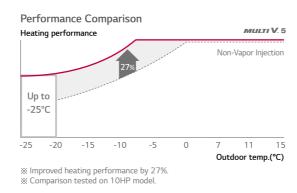
During low ambient operation down to -25°C, the sub-cooler provides medium temperature refrigerant gas to the compressor's vapor injection system. When injected into the compression chamber, system mass flow increases which stabilizes the system's suction pressure. In all cases the vapor injection increases the compressors cycle efficiency and reduces operating cost.

#### What are the benefits?

Provides stable refrigeration cycle operation over a wide range of outdoor ambient operating conditions. Increases compressor efficiency when compared to systems without vapor injection technology.







# Ocean Black Fin

#### Improved durability

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

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

#### What are the benefits?

This improvement in durability prolongs the product's lifespan and lowers both the operational and maintenance costs.









#### Condition of salt spray test

Temperature	35℃
Mist of 5% NaCl (Ma	ass fraction) solution

# Condition of gas exposure test

Tomp	Relative	Gas Volume Fraction							
Temp.	Humidity	NO <sub>2</sub>	SO <sub>2</sub>						
25°C	95%	10 x 10 <sup>-6</sup>	5 x 10 <sup>-6</sup>						

# **Biomimetic Fan**

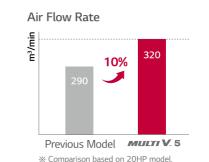
# Maximized performance

MULTI V 5 outdoor units fans have been upgraded. The moire pattern from external texture of clam shells has been applied on fans to create the range difference that results in reduction of noise level. At the same time, unlike the fans installed in previous products that generate separation of flow due to absence of tubercles, the bumpy back design inspired by the bumps on the humpback whale's flipper is applied as the tubercles on the back side of the fans, increasing wind power by reducing flacking. In addition to the biomimetic technology-based fans, extended shroud of MULTI V 5 allows more high static pressure and helps fans to blow higher air volume for efficient operation. With wider air quide, discharged air current is stabilized and noise level is reduced.

#### What are the benefits?

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





**Power Consumption** Previous Model **MULTIV.** 5

\* Comparison based on air volume of 290m³/min.

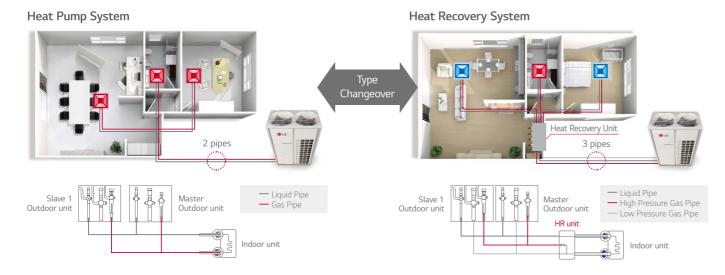
# One Unified Model

Heat pump / Heat recovery with one platform

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

## What are the benefits?

MULTI V 5 allows the building previously installed with heat pump system to switch to the heat recovery system for changing purpose of the building or remodeling reasons via simple piping construction.

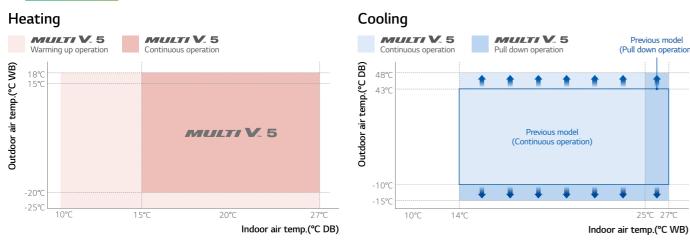


# **Wider Operation Range**

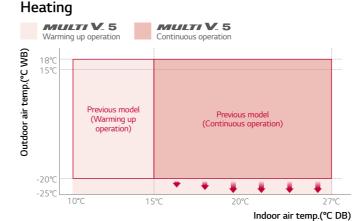
Able to operate at extreme conditions

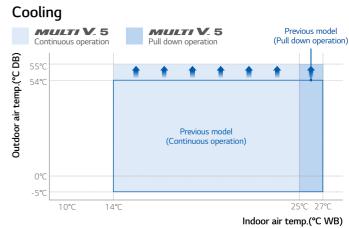
With enhanced inverter compressor and control technology coming from improved inverter cooling technology, sub-cooling and vapor injection, MULTI V 5 extended range of cooling and heating operations. For heating, it can operate at as low as -25°C to perform properly even at very cold environment. It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

# Non TROPICAL MODEL



# TROPICAL MODEL





% If it is not Tropical Model, please refer to the product spec sheet.

# Simple Test Run via LGMV

Increased overall efficiency in installation

To make sure that the product functions properly, conducting a test run is recommended. For previous product, professional engineer who is well aware of more than 40 different functional settings and more than 200 error codes had to check main parts in order to make sure that the test run had succeeded. With Mobile LGMV of MULTI V 5, fast and accurate auto test run can be executed and the professional installer running the test can receive test results via email, which shortens installation hours and increases overall efficiency in installation processes.













LG participates in the ECP programme for EUROVENT VRF program.

Check ongoing validity of certification

: www.eurovent-certification.com

Martin	HP			8	10	12	14	16
Coping   Rate()   KW   224   280   336   332   448	Model	Combination Unit		ARUM080LTE5	ARUM100LTE5	ARUM120LTE5	ARUM140LTE5	ARUM160LTE5
Capacity         Heating (Rated)         kW         22.24         28.0         33.6         39.2         44.8           Houting (Rated)         WW         52.2         31.5         37.8         44.1         50.4           Input         Heating (Rated)         WW         4.49         5.80         7.58         8.68         10.99           Heating (Rated)         WW         3.37         4.92         6.85         8.13         10.28           ER         Heating (Max)         WW         4.78         5.92         8.26         9.72         12.39           ER         Heating (Max)         WW         4.99         4.83         4.43         4.52         4.11           ESEER (NC)         9.946         9.15         8.60         8.26         7.79         7.79           COP(Max)         5.54         5.54         5.59         4.91         4.82         4.36           COP(Max)         ****         5.27         5.32         4.48         4.54         4.07           Compressor         Motor Output x         Warm Gray / Dawn Gray         Warm Gray /	Name	Independent Unit		ARUM080LTE5	ARUM100LTE5	ARUM120LTE5	ARUM140LTE5	ARUM160LTE5
Heating (Max)		Cooling (Rated)	kW	22.4	28.0	33.6	39.2	44.8
	Capacity	Heating (Rated)	kW	22.4	28.0	33.6	39.2	44.8
		Heating (Max.)	kW	25.2	31.5	37.8	44.1	50.4
Heating (Max)		Cooling (Rated)	kW	4.49	5.80	7.58	8.68	10.89
EBER	Input	Heating (Rated)	kW	3.97	4.92	6.85	8.13	10.28
SEER		Heating (Max.)	kW	4.78	5.92	8.26	9.72	12.39
Page	EER			4.99	4.83	4.43	4.52	4.11
COP         COP (Rated)         S.564         5.69         4.91         4.82         4.36           COP (Max)         S.27         5.32         5.32         4.58         4.54         4.07           Casing Color—Town Gray         Warm Gray / Dawn Gray         Pass of Pass	ESEER			8.41	8.13	7.47	7.33	6.59
COP         COP (Max)         5.27         5.32         4.58         4.54         4.07           Casing Color	ESEER (SLC)	)		9.46	9.15	8.60	8.26	7.79
COP         COP (Max)         S.27         S.32         4.58         4.54         4.07           Casing Color		COP (Rated)		5.64	5.69	4.91	4.82	4.36
Heat Exchanger    Motor Output x   Moto	COP			5.27	5.32	4.58	4.54	4.07
Heat Exchanger    Motor Output x   Moto	Casing Color			Warm Gray / Dawn Gray				
Compressor         Motor Output x Number         W x No. Number         4,200 x 1         5,300 x 1         70 x 1         20 x 1				, ,	, ,	, ,	, ,	, ,
Famour Processor         Air Flow Rate (High) bride         m²/min         240 x 1         240 x 1         240 x 1         320 x 1         320 x 1         320 x 1           Liquid Pipe		Motor Output x	W x No.	4,200 x 1	5,300 x 1	5,300 x 1	5,300 x 1	5,300 x 1
Drive   Drive   DC INVERTER   DC INVERTE   DC INVERTER   DC INVERTER   DC INVERTE   D		Туре		Propeller fan				
Liquid Pipe         mm (inch)         9.52 (3/8)         9.52 (3/8)         12.7 (1/2)         12.7 (1/2)         12.7 (1/2)           Low Pressure Gas Pipe         mm (inch)         19.05 (3/4)         22.2 (7/8)         28.58 (1-1/8)         28.22 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         23.7 x1         237 x1         237 x1         237 x1         237 x1         237 x1         26.5         20	Fan	Air Flow Rate (High)	m³/min	240 x 1	240 x 1	240 x 1	320 x 1	320 x 1
Low Pressure Gas Pipe         mm (inch)         19.05 (3/4)         22.2 (7/8)         28.58 (1-1/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         22.2 (7/8)         23.7 (1)         23.7 x1         23.2		Drive		DC INVERTER				
High Pressure	Liquid Pipe		mm (inch)	9.52 (3/8)	9.52 (3/8)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)
Dimensions (W x H x D)         mm         (930 x 1,690 x 760) x 1         (930 x 1,690 x 760) x 1         (1,240 x 1,690 x 760) x 1         (237 x 1         237 x 1	Low Pressur	e Gas Pipe	mm (inch)	19.05 (3/4)	22.2 (7/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)
Net Weight         kg         198 x 1         215 x 1         215 x 1         237 x 1         237 x 1           Sound Pressure Level         Cooling         dB(A)         58.0         58.0         59.0         60.0         60.5           Heating         dB(A)         59.0         59.0         60.0         61.0         61.5           Sound Power Level         Cooling         dB(A)         84.0         85.0         86.0         89.0         90.0           Power Level         Heating         dB(A)         87.0         88.0         89.0         93.0         94.0           Communication Cable         No. x mm² (VCTF-SB)         2C x 1.0 - 1.5         2C x 1	High Pressur	re Gas Pipe	mm (inch)	15.88 (5/8)	19.05 (3/4)	19.05 (3/4)	22.2 (7/8)	22.2 (7/8)
Cooling   Cool	Dimensions	(W x H x D)	mm	(930 x 1,690 x 760) x 1	(930 x 1,690 x 760) x 1	(930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1
Pressure Level   Heating   dB(A)   59.0   59.0   60.0   61.0   61.5	Net Weight		kg	198 x 1	215 x 1	215 x 1	237 x 1	237 x 1
Level         Heating         dB(A)         59.0         59.0         60.0         61.0         61.5           Sound Power Level         Cooling         dB(A)         84.0         85.0         86.0         89.0         90.0           Communication Cable         No. x mm² (VCTF-SB)         2C x 1.0 − 1.5         2C x 1.0	Sound	Cooling	dB(A)	58.0	58.0	59.0	60.0	60.5
Power Level   Heating   dB(A)   87.0   88.0   89.0   93.0   94.0		Heating	dB(A)	59.0	59.0	60.0	61.0	61.5
Power Level         Heating         dB(A)         87.0         88.0         89.0         93.0         94.0           Communication Cable         No. x mm² (VCTF-SB)         2C x 1.0 − 1.5         2C	Sound	Cooling	dB(A)	84.0	85.0	86.0	89.0	90.0
Refrigerant Name		Heating	dB(A)	87.0	88.0	89.0	93.0	94.0
Precharged Amount in factory   Refrigerant   Refrigerant	Communicat	tion Cable		2C x 1.0 ~ 1.5				
Refrigerant   Ibs   16.5   20.9   20.9   29.8   2		Refrigerant Name		R410A	R410A	R410A	R410A	R410A
Refrigerant		Precharged Amount	kg	7.5	9.5	9.5	13.5	13.5
FVC68D (PVE)   FVC6	5.61		lbs	16.5	20.9	20.9	29.8	29.8
Control   Electronic Expansion Valve   Elec	Refrigerant	GWP		2,087.5	2,087.5	2,087.5	2,087.5	2,087.5
Refrigerant Oil         Type         FVC68D (PVE)		t-CO <sub>2</sub> eq		15.7	19.8	19.8	28.2	28.2
Oil         Charge         cc         3,900         3,9		Control		Electronic Expansion Valve				
Oil         Charge         cc         3,900         3,900         3,900         3,900         3,900         3,900         3,900         3,900         3,900         3,900         3,900         3,900         3,900         3,000         3,380 - 415,50         3,380 - 415,50         3,380 - 415,50         3,380 - 415,50         3,380 - 415,50         3,380,60	Refrigerant	Туре		FVC68D (PVE)				
Power Supply Ø, V, Hz 3, 380, 60 3, 380, 60 3, 380, 60 3, 380, 60 3, 380, 60		Charge	СС	3,900	3,900	3,900	3,900	3,900
3, 380, 60 3, 380, 60 3, 380, 60 3, 380, 60 3, 380, 60	D C-		Ø 1/ 11-	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Number of Maximum Connectable Indoor Units         13 (20)         16 (25)         20 (30)         23 (35)         26 (40)	Power Suppl	ly	Ø, V, HZ	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
	Number of N	Maximum Connectable I	ndoor Units	13 (20)	16 (25)	20 (30)	23 (35)	26 (40)



## **HIGH EFFICIENCY**

ARUM180LTE5 / ARUM200LTE5 / ARUM220LTE5 ARUM221LTE5 / ARUM240LTE5



LG participates in the ECP programme for EUROVENT VRF program.

Check ongoing validity of certification





Vannus auromatica	: www.eurov						
НР			18	20	22	22'	24
Model	Combination Unit		ARUM180LTE5	ARUM200LTE5	ARUM220LTE5	ARUM221LTE5	ARUM240LTE5
Name	Independent Unit		ARUM180LTE5	ARUM200LTE5	ARUM220LTE5	ARUM120LTE5 ARUM100LTE5	ARUM240LTE5
	Cooling (Rated)	kW	50.4	56.0	61.6	61.6	67.2
Cit	Heating (Rated)	kW	50.4	56.0	61.6	61.6	67.2
Capacity	Hanting (Mass)	kW	56.7	63.0	69.3	69.3	74.3
	Heating (Max.)	Btu/h	193,500	215,000	236,500	236,500	253,400
	Cooling (Rated)	kW	10.91	12.77	15.70	13.4	17.40
Input	Heating (Rated)	kW	10.12	12.20	14.15	11.8	15.89
	Heating (Max.)	kW	11.94	14.69	16.76	14.2	18.80
EER			4.62	4.39	3.92	4.60	3.86
ESEER			7.40	7.03	6.68	7.76	6.57
ESEER (SLC)			8.11	7.70	7.87	8.84	8.05
	COP (Rated)		4.98	4.59	4.35	5.23	4.23
COP	COP (Max.)		4.75	4.29	4.13	4.89	3.95
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gra
Heat Exchan			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output x Number	W x No.	5,300 x 1 + 4,200 x 1	5,300 x 1 + 4,200 x 1	5,300 x 1 + 4,200 x 1	5,300 x 2	5,300 x 2
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Air Flow Rate (High)	m³/min	320 x 1	320 x 1	320 x 1	(240 x 1) + (240 x 1)	320 x 1
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Low Pressure	e Gas Pipe	mm (inch)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	34.9 (1-3/8)
High Pressur		mm (inch)	22.2 (7/8)	22.2 (7/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)
Dimensions (	(W x H x D)	mm	(1,240 x 1,690 x 760) x1	(1,240 x 1,690 x 760) x1	(1,240 x 1,690 x 760) x1	(930 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760)
Net Weight		kg	300 x 1	300 x 1	300 x 1	(215 x 1) + (215 x 1)	310 x 1
Sound	Cooling	dB(A)	61.0	62.0	64.5	61.5	65.0
Pressure Level	Heating	dB(A)	62.0	64.5	65.5	62.5	67.0
Sound	Cooling	dB(A)	92.0	93.0	93.0	88.5	95.0
Power Level		dB(A)	95.0	96.0	97.0	91.5	99.0
Communicat		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant Name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount	kg	16.0	16.0	16.0	19.0	17.0
	in factory	lbs	35.3	35.3	35.3	41.9	37.5
Refrigerant	GWP		2,087.5	2,087.5	2,087.5	2,087.5	2,087.5
	t-CO <sub>2</sub> eq		33.4	33.4	33.4	39.7	35.5
	Control		Electronic Expansion Valve		Electronic Expansion Valve		
			FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
Refrigerant Oil	Charge	CC	5.200	5,200	5,200	7,800	5,200
	cargc		3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Suppl	у	Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of N	Maximum Connectable I	ndoor Units	29 (45)	32 (50)	35 (44)	35 (44)	39 (48)
ivalliner of IV	naximium Connectable I	IUUUI UNITS	29 (45)	32 (50)	35 (44)	35 (44)	39 (48)



## **HIGH EFFICIENCY**

ARUM241LTE5 / ARUM260LTE5 / ARUM261LTE5 ARUM280LTE5 / ARUM300LTE5



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







ш			241	26	261	20	20
HP			24'	26	26'	28	30
Model	Combination Unit		ARUM241LTE5	ARUM260LTE5	ARUM261LTE5	ARUM280LTE5	ARUM300LTE5
Name	Independent Unit		ARUM120LTE5 ARUM120LTE5	ARUM260LTE5	ARUM140LTE5 ARUM120LTE5	ARUM160LTE5 ARUM120LTE5	ARUM180LTE5 ARUM120LTE5
	Cooling (Rated)	kW	67.2	72.8	72.8	78.4	84.0
Caracitus	Heating (Rated)	kW	67.2	67.2	72.8	78.4	84.0
Capacity	(5.4	kW	75.6	74.3	81.9	88.2	94.5
	Heating (Max.)	Btu/h	257,900	253,400	279,400	300,900	322,400
Cooling (Rated)		kW	15.2	20.20	16.3	18.5	18.5
Input	Heating (Rated)	kW	13.7	15.99	15.0	17.1	17.0
	Heating (Max.)	kW	16.5	19.15	18.0	20.7	20.2
EER			4.43	3.60	4.48	4.24	4.54
ESEER			7.47	6.34	7.39	6.94	7.43
ESEER (SLC)			8.60	7.62	8.41	8.12	8.29
COD	COP (Rated)		4.91	4.20	4.86	4.58	4.95
COP	COP (Max.)		4.58	3.88	4.56	4.27	4.68
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchan	ger		Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output x Number	W x No.	5,300 x 2	5,300 x 2	5,300 x 2	5,300 x 2	(5,300 x 2) + (4,200 x 1)
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Air Flow Rate (High)	m³/min	(240 x 1) + (240 x 1)	320 x 1	(320 x 1) + (240 x 1)	(320 x 1) + (240 x 1)	(320 x 1) + (240 x 1)
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm (inch)	15.88 (5/8)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Low Pressure	e Gas Pipe	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)
High Pressur	e Gas Pipe	mm (inch)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)
Dimensions (	(W x H x D)	mm	(930 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x1	(1,240 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1
Net Weight		kg	(215 x 1) + (215 x 1)	310 x 1	(237 x 1) + (215 x 1)	(237 x 1) + (215 x 1)	(300 x 1) + (215 x 1)
Sound	Cooling	dB(A)	62.0	65.0	62.5	62.8	63.1
Pressure Level	Heating	dB(A)	63.0	67.0	63.5	63.8	64.1
Sound	Cooling	dB(A)	89.0	95.0	90.8	91.5	93.0
Power Level	Heating	dB(A)	92.0	99.0	94.5	95.2	96.0
Communicat	ion Cable	No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant Name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount	kg	19.0	17.0	23.0	23.0	25.5
Dofrigorant	in factory	lbs	41.9	37.5	50.7	50.7	56.2
Refrigerant -	GWP		2,087.5	2,087.5	2,087.5	2,087.5	2,087.5
	t-CO <sub>2</sub> eq		39.7	35.5	48.0	48.0	53.2
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant	Туре		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
Oil	Charge	СС	7,800	5,200	7,800	7,800	9,100
Dower Cumple	,	Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply	у	IJ, V, □Z	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of N	Maximum Connectable II	ndoor Units	39 (48)	42 (52)	42 (52)	45 (56)	49 (60)



## HIGH EFFICIENCY

ARUM320LTE5 / ARUM340LTE5 / ARUM360LTE5 ARUM380LTE5 / ARUM400LTE5





HP			32	34	36	38	40
	Combination Unit		ARUM320LTE5	ARUM340LTE5	ARUM360LTE5	ARUM380LTE5	ARUM400LTE5
Model Name	Independent Unit		ARUM200LTE5 ARUM120LTE5	ARUM220LTE5 ARUM120LTE5	ARUM240LTE5 ARUM120LTE5	ARUM240LTE5 ARUM140LTE5	ARUM240LTE5 ARUM160LTE5
	Cooling (Rated)	kW	89.6	95.2	100.8	106.4	112.0
	Heating (Rated)	kW	89.6	95.2	100.8	106.4	112.0
Capacity		kW	100.8	107.1	112.1	118.4	124.7
	Heating (Max.)	Btu/h	343,900	365,400	382,300	403,800	425,300
	Cooling (Rated)	kW	20.4	23.3	25.0	26.1	28.3
Input	Heating (Rated)	kW	19.1	21.0	22.7	24.0	26.2
	Heating (Max.)	kW	22.9	25.0	27.1	28.5	31.2
EER			4.40	4.09	4.04	4.08	3.96
ESEER	SEER		7.19	6.94	6.85	6.83	6.58
ESEER (SLC)			8.01	8.11	8.22	8.11	7.94
COD	COP (Rated)		4.70	4.53	4.43	4.43	4.28
COP	COP (Max.)		4.39	4.28	4.14	4.15	4.00
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	or Motor Output x Number W x No.		(5,300 x 2) + (4,200 x 1)	(5,300 x 2) + (4,200 x 1)	5,300 x 3	5,300 x 3	5,300 x 3
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Air Flow Rate (High)	m³/min	(320 x 1) + (240 x 1)	(320 x 1) + (240 x 1)	(320 x 1) + (240 x 1)	320 x 2	320 x 2
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe mm (inch)		mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Low Pressure	e Gas Pipe	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)
High Pressur	re Gas Pipe	mm (inch)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	34.9 (1-3/8)	34.9 (1-3/8)
Dimensions (	(W x H x D)	mm	(1,240 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1	(1,240 x1,690 x 760) x 2	(1,240 x1,690 x 760) x
Net Weight		kg	(300 x 1) + (215 x 1)	(300 x 1) + (215 x 1)	(310 x 1) + (215 x 1)	(310 x 1) + (237 x 1)	(310 x 1) + (237 x 1)
Sound	Cooling	dB(A)	63.8	65.6	66.0	66.2	66.3
Pressure Level	Heating	dB(A)	65.8	66.6	67.8	68.0	68.1
Sound	Cooling	dB(A)	93.8	93.8	95.5	96.0	96.2
Power Level	Heating	dB(A)	96.8	97.6	99.4	100.0	100.2
Communicat		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant Name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount	kg	25.5	25.5	26.5	30.5	30.5
5.61	in factory	lbs	56.2	56.2	58.4	67.2	67.2
Refrigerant	GWP		2,087.5	2,087.5	2,087.5	2,087.5	2,087.5
	t-CO <sub>2</sub> eq		53.2	53.2	55.3	63.7	63.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valv
Refrigerant	Туре		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
Oil	Charge	СС	9,100	9,100	9,100	9,100	9,100
D 6 1		a v	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply	У	Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of Maximum Connectable Indoor Units		52 (64)	55 (64)	58 (64)	61 (64)	64	

Non TROPICAL MODEL

# **HIGH EFFICIENCY**

ARUM420LTE5 / ARUM440LTE5 / ARUM460LTE5 ARUM480LTE5 / ARUM500LTE5





НР			42	44	46	48	50
	Combination Unit		ARUM420LTE5	ARUM440LTE5	ARUM460LTE5	ARUM480LTE5	ARUM500LTE5
Model Name	Independent Unit		ARUM240LTE5 ARUM180LTE5	ARUM240LTE5 ARUM200LTE5	ARUM240LTE5 ARUM220LTE5	ARUM240LTE5 ARUM240LTE5	ARUM240LTE5 ARUM140LTE5 ARUM120LTE5
	Cooling (Rated)	kW	117.6	123.2	128.8	134.4	140.0
	Heating (Rated)	kW	117.6	123.2	128.8	134.4	140.0
Capacity		kW	131.0	137.3	143.6	148.5	156.2
	Heating (Max.)	Btu/h	446,800	468,300	489,800	506,700	532,800
	Cooling (Rated)	kW	28.3	30.2	33.1	34.8	33.7
Input	Heating (Rated)	kW	26.0	28.1	30.0	31.8	30.9
	Heating (Max.)	kW	30.7	33.5	35.6	37.6	36.8
EER	R		4.15	4.08	3.89	3.86	4.16
ESEER			6.90	6.77	6.62	6.57	6.97
ESEER (SLC)			8.05	7.86	7.96	8.05	8.23
COP (Rated)  COP (Max.)			4.52	4.39	4.29	4.23	4.54
			4.26	4.10	4.04	3.95	4.25
Casing Color			Warm Gray / Dawn Gray				
Heat Exchan	ger		Ocean Black Fin				
Compressor	Motor Output v		(5,300 x 3) + (4,200 x 1)	(5,300 x 3) + (4,200 x 1)	(5,300 x 3) + (4,200 x 1)	5,300 x 4	5,300 x 4
Туре			Propeller fan				
Fan -	Air Flow Rate (High)	m³/min	320 x 2	320 x 2	320 x 2	320 x 2	(320 x 2) + (240 x 1)
	Drive		DC INVERTER				
Liquid Pipe		mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Low Pressure	e Gas Pipe	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)
High Pressur	e Gas Pipe	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)
Dimensions (	(W x H x D)	mm	(1,240 x1,690 x 760) x 2	(1,240 x 1,690 x 760) x 2 + (930 x 1,690 x 760) x 1			
Net Weight		kg	(310 x 1) + (300 x 1)	(310 x 1) + (300 x 1)	(310 x 1) + (300 x 1)	310 x 2	(310 x 1) + (237 x 1) + (215 x 1)
Sound	Cooling	dB(A)	66.5	66.8	67.8	68.0	67.0
Pressure Level	Heating	dB(A)	68.2	68.9	69.3	70.0	68.6
Sound	Cooling	dB(A)	96.8	97.1	97.1	98.0	96.4
Power Level	Heating	dB(A)	100.5	100.8	101.1	102.0	100.3
Communicat	ion Cable	No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5				
	Refrigerant Name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount	kg	33.0	33.0	33.0	34.0	40.0
D. 61	in factory	lbs	72.8	72.8	72.8	75.0	88.2
Refrigerant	GWP		2,087.5	2,087.5	2,087.5	2,087.5	2,087.5
	t-CO₂eq		68.9	68.9	68.9	71.0	83.5
	Control		Electronic Expansion Valve				
Refrigerant	Туре		FVC68D (PVE)				
Oil	Charge	СС	10,400	10,400	10,400	10,400	13,000
D 6 '		<i>a</i>	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply	у	Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
	Maximum Connectable II	ndoor I Inite	64	64	64	64	64



# HIGH EFFICIENCY

ARUM520LTE5 / ARUM540LTE5 / ARUM560LTE5 ARUM580LTE5 / ARUM600LTE5





HP			52	54	56	58	60
	Combination Unit		ARUM520LTE5	ARUM540LTE5	ARUM560LTE5	ARUM580LTE5	ARUM600LTE5
Model Name	Independent Unit		ARUM240LTE5 ARUM160LTE5 ARUM120LTE5	ARUM240LTE5 ARUM180LTE5 ARUM120LTE5	ARUM240LTE5 ARUM200LTE5 ARUM120LTE5	ARUM240LTE5 ARUM220LTE5 ARUM120LTE5	ARUM240LTE5 ARUM240LTE5 ARUM120LTE5
	Cooling (Rated)	kW	145.6	151.2	156.8	162.4	168.0
c :	Heating (Rated)	kW	145.6	151.2	156.8	162.4	168.0
Capacity		kW	162.5	168.8	175.1	181.4	186.3
	Heating (Max.)	Btu/h	554,300	575,800	597,300	618,800	635,700
Cooling (Rated)		kW	35.9	35.9	37.8	40.7	42.4
Input	Heating (Rated)	kW	33.0	32.9	34.9	36.9	38.6
	Heating (Max.)	kW	39.4	39.0	41.7	43.8	45.9
EER			4.06	4.21	4.15	3.99	3.96
ESEER			6.76	7.02	6.91	6.78	6.73
ESEER (SLC)			8.08	8.17	8.01	8.08	8.15
000	COP (Rated)		4.41	4.60	4.49	4.40	4.35
COP	COP (Max.)		4.12	4.33	4.19	4.14	4.06
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray			
Heat Exchan	ger		Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Ssor Motor Output x W x No.		5,300 x 4	(5,300 x 4) + (4,200 x 1)	(5,300 x 4) + (4,200 x 1)	(5,300 x 4) + (4,200 x 1)	5,300 x 5
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan -	Air Flow Rate (High)	m³/min	(320 x 2) + (240 x 1)	(320 x 2) + (240 x 1)			
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Low Pressure	e Gas Pipe	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)
High Pressur	e Gas Pipe	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)
Dimensions (	(W x H x D)	mm	(1,240 x 1,690 x 760) x 2 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 2 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 2 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 2 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x + (930 x 1,690 x 760) x
Net Weight		kg	(310 x 1) + (237 x 1) + (215 x 1)	(310 x 1) + (300 x 1) + (215 x 1)	(310 x 1) + (300 x 1) + (215 x 1)	(310 x 1) + (300 x 1) + (215 x 1)	(310 x 2) + (215 x 1)
Sound	Cooling	dB(A)	67.1	67.2	67.4	68.3	68.5
Pressure Level	Heating	dB(A)	68.7	68.8	69.5	69.8	70.4
Sound	Cooling	dB(A)	96.6	97.1	97.4	97.4	98.3
Power Level		dB(A)	100.5	100.8	101.0	101,4	102.2
Communicat		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5			
	Refrigerant Name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount	kg	40.0	42.5	42.5	42.5	43.5
	in factory	lbs	88.2	93.7	93.7	93.7	95.9
Refrigerant	GWP		2,087.5	2,087.5	2,087.5	2,087.5	2,087.5
	t-CO <sub>2</sub> eq		83.5	88.7	88.7	88.7	90.8
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valv
Refrigerant	Туре		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
Oil	Charge	СС	13,000	14,300	14,300	14,300	14,300
			3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply	у	Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
	Maximum Connectable II		64	64	64	64	64

Non TROPICAL MODEL

## **HIGH EFFICIENCY**

ARUM620LTE5 / ARUM640LTE5 / ARUM660LTE5 ARUM680LTE5 / ARUM700LTE5 / ARUM720LTE5



HP			62	64	66	68	70	72
	Combination Unit		ARUM620LTE5	ARUM640LTE5	ARUM660LTE5	ARUM680LTE5	ARUM700LTE5	ARUM720LTE5
Model Name	Independent Unit		ARUM240LTE5 ARUM240LTE5 ARUM140LTE5	ARUM240LTE5 ARUM240LTE5 ARUM160LTE5	ARUM240LTE5 ARUM240LTE5 ARUM180LTE5	ARUM240LTE5 ARUM240LTE5 ARUM200LTE5	ARUM240LTE5 ARUM240LTE5 ARUM220LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5
	Cooling (Rated)	kW	173.6	179.2	184.8	190.4	196.0	201.6
	Heating (Rated)	kW	173.6	179.2	184.8	190.4	196.0	201.6
Capacity		kW	192.6	198.9	205.2	211.5	217.8	222.8
	Heating (Max.)	Btu/h	657,200	678,700	700,200	721,700	743,200	760,100
	Cooling (Rated)	kW	43.5	45.7	45.7	47.6	50.5	52.2
Input	Heating (Rated)	kW	39.9	42.1	41.9	44.0	45.9	47.7
	Heating (Max.)	kW	47.3	50.0	49.5	52.3	54.4	56.4
EER			3.99	3.92	4.04	4.00	3.88	3.86
ESEER			6.73	6.58	6.78	6.70	6.60	6.57
ESEER (SLC)	)		8.09	7.98	8.05	7.92	7.99	8.05
COD	COP (Rated)		4.35	4.26	4.41	4.33	4.27	4.23
COP	COP (Max.)		4.07	3.98	4.14	4.05	4.01	3.95
Casing Color			Warm Gray / Dawn Gray					
Heat Exchan	ger		Ocean Black Fin					
Compressor	Motor Output x Number	W x No.	5,300 x 5	5,300 x 5	(5,300 x 5) + (4,200 x 1)	(5,300 x 5) + (4,200 x 1)	(5,300 x 5) + (4,200 x 1)	5,300 x 6
-	Туре		Propeller fan					
Fan	Air Flow Rate (High)	m³/min	320 x 3					
-	Drive		DC INVERTER					
Liquid Pipe		mm (inch)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)
Low Pressure	e Gas Pipe	mm (inch)	44.5 (1-3/4)	44.5 (1-3/4)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)
High Pressur	re Gas Pipe	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	44.5 (1-3/4)	44.5 (1-3/4)	44.5 (1-3/4)	44.5 (1-3/4)
Dimensions (	(W x H x D)	mm	(1,240 x1,690 x 760) x 3					
Net Weight		kg	(310 x 2) + (237 x 1)	(310 x 2) + (237 x 1)	(310 x 2) + (300 x 1)	(310 x 2) + (300 x 1)	(310 x 2) + (300 x 1)	310 x 3
Sound	Cooling	dB(A)	68.6	68.7	68.8	69.0	69.6	69.8
Pressure Level	Heating	dB(A)	70.5	70.6	70.6	71.1	71.3	71.8
Sound	Cooling	dB(A)	98.5	98.6	99.0	99.2	99.2	99.8
Power Level	Heating	dB(A)	102.5	102.6	102.8	103.0	103.0	103.8
Communicat	ion Cable	No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5					
	Refrigerant Name		R410A	R410A	R410A	R410A	R410A	R410A
	Precharged Amount	kg	47.5	47.5	50.0	50.0	50.0	51.0
	in factory	lbs	104.7	104.7	110.2	110.2	110.2	112.4
Refrigerant	GWP		2,087.5	2,087.5	2,087.5	2,087.5	2,087.5	2,087.5
	t-CO <sub>2</sub> eq		99.2	99.2	104.4	104.4	104.4	106.5
	Control		Electronic Expansion Valve					
Refrigerant	Туре		FVC68D (PVE)					
Oil	Charge	СС	14,300	14,300	15,600	15,600	15,600	15,600
Power Suppl	V	Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
. over suppl	,	D, V, 112	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of N	Maximum Connectable II	ndoor Units	64	64	64	64	64	64



# HIGH EFFICIENCY

ARUM740LTE5 / ARUM760LTE5 / ARUM780LTE5 ARUM800LTE5 / ARUM820LTE5 / ARUM840LTE5



HP			74	76	78	80	82	84
	Combination Unit		ARUM740LTE5	ARUM760LTE5	ARUM780LTE5	ARUM800LTE5	ARUM820LTE5	ARUM840LTE5
Model Name	Independent Unit		ARUM240LTE5 ARUM240LTE5 ARUM140LTE5 ARUM120LTE5	ARUM240LTE5 ARUM240LTE5 ARUM160LTE5 ARUM120LTE5	ARUM240LTE5 ARUM240LTE5 ARUM180LTE5 ARUM120LTE5	ARUM240LTE5 ARUM240LTE5 ARUM200LTE5 ARUM120LTE5	ARUM240LTE5 ARUM240LTE5 ARUM220LTE5 ARUM120LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM120LTE5
	Cooling (Rated)	kW	207.2	212.8	218.4	224.0	229.6	235.2
	Heating (Rated)	kW	207.2	212.8	218.4	224.0	229.6	235.2
Capacity		kW	230.4	236.7	243.0	249.3	255.6	260.6
	Heating (Max.)	Btu/h	786,200	807,700	829,200	850,700	872,100	889,100
	Cooling (Rated) kW		51.1	53.3	53.3	55.2	58.1	59.8
Input	Heating (Rated)	kW	46.8	48.9	48.8	50.8	52.8	54.5
Heating (Max.)		kW	55.6	58.2	57.8	60.5	62.6	64.7
EER			4.06	3.99	4.10	4.06	3.95	3.93
ESEER			6.84	6.70	6.88	6.80	6.72	6.69
ESEER (SLC)	)		8.17	8.07	8.13	8.02	8.07	8.12
COD	COP (Rated)		4.43	4.35	4.48	4.41	4.35	4.31
COP	COP (Max.)		4.15	4.06	4.20	4.12	4.08	4.03
Casing Color			Warm Gray / Dawn Gray					
Heat Exchan	iger		Ocean Black Fin					
Compressor	Motor Output x Number	W x No.	5,300 x 6	5,300 x 6	(5,300 x 6) + (4,200 x 1)	(5,300 x 6) + (4,200 x 1)	(5,300 x 6) + (4,200 x 1)	5,300 x 7
	Туре		Propeller fan					
Fan	Air Flow Rate (High)	m³/min	(320 x 3) + (240 x 1)	(320 x 3) + (240 x 1				
	Drive		DC INVERTER					
Liquid Pipe		mm (inch)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)
Low Pressure	e Gas Pipe	mm (inch)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)
High Pressur	re Gas Pipe	mm (inch)	44.5 (1-3/4)	44.5 (1-3/4)	44.5 (1-3/4)	44.5 (1-3/4)	44.5 (1-3/4)	44.5 (1-3/4)
Dimensions (	(W x H x D)	mm	(1,240 x 1,690 x760) x 3 + (930 x 1,690 x760) x 1	(1,240 x 1,690 x760) x 3 + (930 x 1,690 x760) x 1	(1,240 x 1,690 x760) x 3 + (930 x 1,690 x760) x 1	(1,240 x 1,690 x760) x 3 + (930 x 1,690 x760) x 1	(1,240 x 1,690 x760) x 3 + (930 x 1,690 x760) x 1	(1,240 x 1,690 x760 x 3 + (930 x 1,690 x760) x 1
Net Weight		kg	(310 x 2) + (237 x 1) + (215 x 1)	(310 x 2) + (237 x 1) + (215 x 1)	(310 x 2) + (300 x 1) + (215 x 1)	(310 x 2) + (300 x 1) + (215 x 1)	(310 x 2) + (300 x 1) + (215 x 1)	(310 x 3) + (215 x 1
Sound	Cooling	dB(A)	69.1	69.2	69.2	69.4	70.0	70.1
Pressure Level	Heating	dB(A)	70.9	70.9	71.0	71.4	71.6	72.1
Sound	Cooling	dB(A)	98.8	98.9	99.2	99.4	99.4	99.9
Power Level	Heating	dB(A)	102.7	102.8	103.0	103.2	103.4	103.9
Communicat	ion Cable	No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5					
	Refrigerant Name		R410A	R410A	R410A	R410A	R410A	R410A
	Precharged Amount	kg	57.0	57.0	59.5	59.5	59.5	60.5
	in factory	lbs	125.7	125.7	131.2	131.2	131.2	133.4
Refrigerant	GWP		2,087.5	2,087.5	2,087.5	2,087.5	2,087.5	2,087.5
	t-CO <sub>2</sub> eq		119.0	119.0	124.2	124.2	124.2	126.3
	Control		Electronic Expansion Valve					
Refrigerant	Туре		FVC68D (PVE)					
Oil	Charge	СС	18,200	18,200	19,500	19,500	19,500	19,500
Dower Cor-I		Ø V II=	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Suppl	у	Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
	Maximum Connectable II	adaar Haita	64	64	64	64	64	64

# 052 | 053

# **MULTI V 5**



# **HIGH EFFICIENCY**

ARUM860LTE5 / ARUM880LTE5 / ARUM900LTE5 ARUM920LTE5 / ARUM940LTE5 / ARUM960LTE5



НР			86	88	90	92	94	96
	Combination Unit		ARUM860LTE5	ARUM880LTE5	ARUM900LTE5	ARUM920LTE5	ARUM940LTE5	ARUM960LTE5
Model Name	Independent Unit		ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM140LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM160LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM180LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM200LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM220LTE5	ARUM240LTE5 ARUM240LTE5 ARUM240LTE5 ARUM240LTE5
	Cooling (Rated)	kW	240.8	246.4	252.0	257.6	263.2	268.8
	Heating (Rated)	kW	240.8	246.4	252.0	257.6	263.2	268.8
Capacity		kW	266.9	273.2	279.5	285.8	292.1	297.0
	Heating (Max.)	Btu/h	910,600	932,000	953,500	975,000	996,500	1,013,400
	Cooling (Rated)	kW	60.9	63.1	63.1	65.0	67.9	69.6
Input	Heating (Rated)	kW	55.8	58.0	57.8	59.9	61.8	63.6
	Heating (Max.)	kW	66.1	68.8	68.3	71.1	73.2	75.2
EER			3.96	3.91	3.99	3.96	3.88	3.86
ESEER			6.68	6.57	6.72	6.66	6.60	6.57
ESEER (SLC)			8.07	8.00	8.04	7.95	8.00	8.05
COD	COP (Rated)		4.32	4.25	4.36	4.30	4.26	4.23
COP	COP (Max.)		4.04	3.97	4.09	4.02	3.99	3.95
Casing Color			Warm Gray / Dawn Gray					
Heat Exchan	ger		Ocean Black Fin					
Compressor	Motor Output x Number	W x No.	5,300 x 7	5,300 x 7	(5,300 x 7) + (4,200 x 1)	(5,300 x 7) + (4,200 x 1)	(5,300 x 7) + (4,200 x 1)	5,300 x 8
	Туре		Propeller fan					
Fan	Air Flow Rate (High)	m³/min	320 x 4					
	Drive		DC INVERTER					
Liquid Pipe		mm (inch)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)
Low Pressure	e Gas Pipe	mm (inch)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)
High Pressur	e Gas Pipe	mm (inch)	44.5 (1-3/4)	44.5 (1-3/4)	44.5 (1-3/4)	44.5 (1-3/4)	44.5 (1-3/4)	44.5 (1-3/4)
Dimensions (	(W x H x D)	mm	(1,240 x1,690 x 760) x 4					
Net Weight		kg	(310 x 3) + (237 x 1)	(310 x 3) + (237 x 1)	(310 x 3) + (300 x 1)	(310 x 3) + (300 x 1)	(310 x 3) + (300 x 1)	310 x 4
Sound	Cooling	dB(A)	70.2	70.3	70.3	70.4	70.9	71.0
Pressure Level	Heating	dB(A)	72.1	72.2	72.2	72.5	72.7	73.0
Sound	Cooling	dB(A)	101.1	100.2	100.4	100.6	100.6	101.0
Power Level	Heating	dB(A)	104.1	104.2	104.3	104.4	104.6	105.0
Communicat	ion Cable	No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5					
	Refrigerant Name		R410A	R410A	R410A	R410A	R410A	R410A
	Precharged Amount	kg	64.5	64.5	67.0	67.0	67.0	68.0
	in factory	lbs	142.2	142.2	147.7	147.7	147.7	149.9
Refrigerant	GWP		2,087.5	2,087.5	2,087.5	2,087.5	2,087.5	2,087.5
	t-CO₂eq		134.6	134.6	139.9	139.9	139.9	142.0
	Control		Electronic Expansion Valve					
Refrigerant	Туре		FVC68D (PVE)					
Oil	Charge	СС	19,500	19,500	20,800	20,800	20,800	20,800
D C		Ø 1/11	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply	у	Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of M	Maximum Connectable II	ndoor Units	64	64	64	64	64	64

# NOTE

- 1. Eurovent Test Condition: For more info regarding program consult www.eurovent-certification.com
- 2. Capacities are based on the following conditions:
- $\bullet \ \, \text{Cooling Temperature: Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB, Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB}$
- Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB, Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
- Piping Length : Interconnected Pipe Length = 7.5m
- Difference Limit of Elevation (Outdoor ~ Indoor Unit) is Zero.
- $\ensuremath{\mathsf{3}}.$  Wiring cable size must comply with the applicable local and national code.
- 4. Sound Level Values can be increased owing to ambient conditions during operation.
- 5. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- 6. ESEER calculation corresponds with below conditions and power input of indoor units is not included.
- Indoor temperature : 27°C(80.6°F) DB / 19°C(66.2°F) WB
- Outdoor temperature conditions.

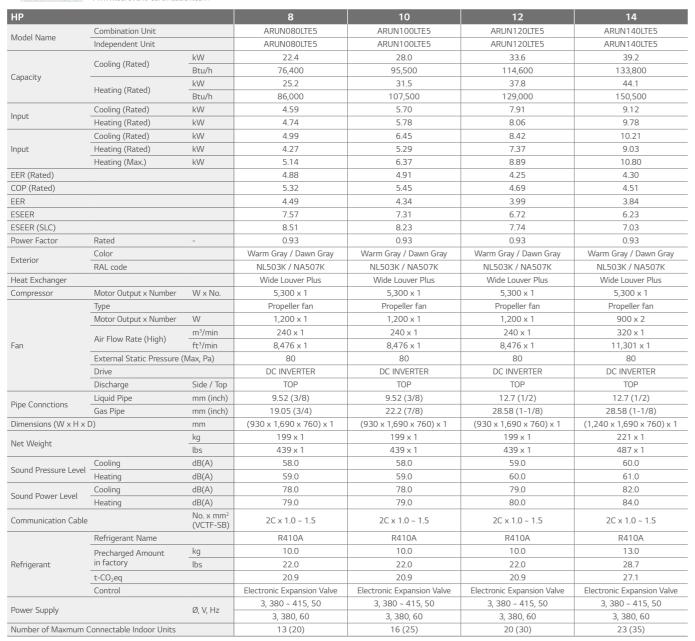
Part Load Ratio	Outdoor Air Temp. (°C (°F)DB)	Weighting Coefficients
100%	35 (95)	0.03
75%	30 (86)	0.33
50%	25 (77)	0.41
25%	20 (68)	0.23

- Formula : 0.03 x EER100% + 0.33 x EER75% + 0.41 x EER50% + 0.23 x EER25%
- $7. \ Due \ to \ our \ policy \ of \ innovation \ some \ specifications \ may \ be \ changed \ without \ notification.$
- 8. Power factor could vary less than 1% according to the operating conditions.
- 9. This product contains fluorinated greenhouse gases.

# Non TROPICAL MODEL

#### **STANDARD**





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

Eurovent test Condition



#### **STANDARD**

ARUN160LTE5 / ARUN180LTE5 / ARUN200LTE5 / ARUN220LTE5



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



HP			16	18	20	22
	Combination Unit		ARUN160LTE5	ARUN180LTE5	ARUN200LTE5	ARUN220LTE5
Model Name	Independent Unit		ARUN160LTE5	ARUN180LTE5	ARUN200LTE5	ARUN220LTE5
	0 11 (0 11)	kW	44.8	50.4	56.0	61.6
	Cooling (Rated)	Btu/h	152,900	172,000	191,100	210,200
Capacity		kW	50.4	56.7	63.0	69.3
	Heating (Rated)	Btu/h	172,000	193,500	215,000	236,500
	Cooling (Rated)	kW	10.80	10.96	12.31	14.84
Input	Heating (Rated)	kW	11.59	12.06	15.52	17.54
	Cooling (Rated)	kW	12.80	12.82	15.01	18.44
Input	Heating (Rated)	kW	11.43	11.25	13.56	15.71
	Heating (Max.)	kW	13.77	13.27	16.32	18.62
EER (Rated)			4.15	4.60	4.55	4.15
COP (Rated)			4.35	4.70	4.06	3.95
EER			3.50	3.93	3.73	3.34
ESEER			5.61	6.30	5.98	5.68
ESEER (SLC)			6.63	6.90	6.55	6.70
Power Factor	Rated	-	0.93	0.93	0.93	0.93
	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Exterior	RAL code		NL503K / NA507K	NL503K / NA507K	NL503K / NA507K	NL503K / NA507K
Heat Exchanger	TVAL COUC		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output x Number	W x No.	5.300 x 1	5,300 x 1 + 4,200 x 1	5.300 x 2	5,300 x 2
Compressor	Туре	VV A IVO.	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 2	900 x 2	900 x 2	900 x 2
	Iviotor Output x rvumber	m³/min	320 x 1	320 x 1	320 x 1	320 x 1
Fan	Air Flow Rate (High)	ft³/min	11.301 x 1	11,301 x 1	11.301 x 1	11,301 x 1
rdii			80	80	80	80
	External Static Pressure (Max, Pa)  Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
		Side / Top	TOP	TOP	TOP	TOP
	Discharge					
Pipe Connctions	Liquid Pipe	mm (inch)	12.7 (1/2)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Dii (1M 11 1	Gas Pipe	mm (inch)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)
Dimensions (W x H x I	U)	mm	(1,240 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x
Net Weight		kg	221 x 1	261 x 1	281 x 1	281 x 1
	C 1'	lbs	487 x 1	575 x 1	619 x 1	619 x 1
Sound Pressure Level	Cooling	dB(A)	60.5	61.0	62.0	64.5
	Heating	dB(A)	61.5	62.0	64.5	65.5
Sound Power Level	Cooling	dB(A)	83.0	85.0	86.0	86.0
	Heating	dB(A)	85.0	86.0	87.0	88.0
Communication Cable		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant Name		R410A	R410A	R410A	R410A
	Precharged Amount	kg	13.0	13.0	14.0	14.0
Refrigerant	in factory	lbs	28.7	28.7	30.9	30.9
	t-CO <sub>2</sub> eq		27.1	27.1	29.2	29.2
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valv
Dower Cupple		Ø V 11=	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of Maxmum (	Connectable Indoor Units		26 (40)	29 (45)	32 (50)	35 (56)

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

<sup>2.</sup> 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> Power factor could vary less than  $\pm 1\%$  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.

<sup>6.</sup> The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.

<sup>7.</sup> This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

<sup>2.</sup> 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> Power factor could vary less than  $\pm 1\%$  according to the operating conditions

<sup>4.</sup> 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.

<sup>6.</sup> The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.

<sup>7.</sup> This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

## Non TROPICAL MODEL

#### **STANDARD**

ARUN240LTE5 / ARUN260LTE5 / ARUN221LTE5 / ARUN241LTE5







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

HP			24	26	22'	24'
	Combination Unit		ARUN240LTE5	ARUN260LTE5	ARUN221LTE5	ARUN241LTE5
Model Name	Independent Unit		ARUN240LTE5	ARUN260LTE5	ARUN120LTE5 ARUN100LTE5	ARUN120LTE5 ARUN120LTE5
	Cli (D-+l)	kW	67.2	72.8	61.6	67.2
Cit	Cooling (Rated)	Btu/h	229,300	248,400	210,100	229,200
Capacity	Heating (Rated)	kW	74.3	74.3	69.3	75.6
	Heating (Rateu)	Btu/h	253,400	253,400	236,500	258,000
Innut	Cooling (Rated)	kW	16.76	19.41	13.60	15.81
Input	Heating (Rated)	kW	18.85	19.49	13.80	16.12
	Cooling (Rated)	kW	14.9	20.49	16.8	23.79
Input	Heating (Rated)	kW	12.7	17.64	14.7	17.78
	Heating (Max.)	kW	15.3	20.87	17.8	21.29
EER (Rated)			4.01	3.75	4.53	4.25
COP (Rated)			3.94	3.81	5.01	4.69
EER			3.28	3.06	4.14	3.99
ESEER			6.98	5.58	6.72	5.38
ESEER (SLC)			7.95	6.83	7.74	6.47
Power Factor	Rated	-	0.93	0.93	0.93	0.93
- · ·	Color		Warm Gray / Dawn Gray			
Exterior	RAL code		NL503K / NA507K	NL503K / NA507K	NL503K / NA507K	NL503K / NA507K
Heat Exchanger			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output x Number	W x No.	5,300 x 2	5,300 x 2	5,300 x 2	5,300 x 2
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 2	900 x 2	(1,200 x 1) + (1,200 x 1)	(1,200 x 1) + (1,200 x 1)
	A. 51 . 5 . (III.1)	m³/min	320 x 1	320 x 1	(240 x 1) + (240 x 1)	(240 x 1) + (240 x 1)
Fan	Air Flow Rate (High)	ft³/min	11,301 x 1	11,301 x 1	(8,476 x 1) + (8,476 x 1)	(8,476 x 1) + (8,476 x 1)
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
D: C ::	Liquid Pipe	mm (inch)	15.88 (5/8)	19.05 (3/4)	15.88 (5/8)	15.88 (5/8)
Pipe Connctions	Gas Pipe	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	28.58 (1-1/8)	34.9 (1-3/8)
Dimensions (W x H x D	))	mm	(1,240 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1	(930 x 1,690 x 760) x 2	(930 x 1,690 x 760) x 2
		kg	283 x 1	283 x 1	199 x 2	199 x 2
Net Weight		lbs	624 x 1	624 x 1	439 x 2	439 x 2
6 10 1 1	Cooling	dB(A)	65.0	65.0	61.5	62.0
Sound Pressure Level	Heating	dB(A)	67.0	67.0	62.5	63.0
Causal Danies Laurel	Cooling	dB(A)	88.0	88.0	81.5	82.0
Sound Power Level	Heating	dB(A)	90.0	90.0	82.5	83.0
Communication Cable		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant Name		R410A	R410A	R410A	R410A
	Precharged Amount	kg	16.0	16.0	10.0 + 10.0	10.0 + 10.0
Refrigerant	in factory	lbs	35.3	35.3	22.0 + 22.0	22.0 + 22.0
	t-CO <sub>2</sub> eq		33.4	33.4	41.8	41.8
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
		3,1,1.12	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of Maxmum C	onnectable Indoor Units		39 (61)	42 (64)	35 (44)	39 (48)

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. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%. 7. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

Eurovent test Condition



#### **STANDARD**

ARUN261LTE5 / ARUN280LTE5 / ARUN300LTE5 / ARUN320LTE5



HP			26'	28	30	32
	Combination Unit		ARUN261LTE5	ARUN280LTE5	ARUN300LTE5	ARUN320LTE5
Model Name	Independent Unit		ARUN140LTE5 ARUN120LTE5	ARUN160LTE5 ARUN120LTE5	ARUN180LTE5 ARUN120LTE5	ARUN200LTE5 ARUN120LTE5
		kW	72.8	78.4	84.0	89.6
	Cooling (Rated)	Btu/h	248,400	267,500	286,600	305,700
Capacity		kW	81.9	88.2	94.5	100.8
	Heating (Rated)	Btu/h	279,500	301,000	322,500	344,000
	Cooling (Rated)	kW	17.02	18.70	18.86	20.21
Input	Heating (Rated)	kW	17.84	19.65	20.12	23.58
	Cooling (Rated)	kW	18.6	21.2	21.2	23.4
Input	Heating (Rated)	kW	16.4	18.8	18.6	20.9
	Heating (Max.)	kW	19.7	22.7	22.2	25.2
EER (Rated)			4.28	4.19	4.45	4.43
COP (Rated)			4.59	4.49	4.70	4.28
EER			3.91	3.69	3.95	3.82
ESEER			6.45	6.04	6.46	6.24
ESEER (SLC)			7.34	7.06	7.20	6.94
Power Factor	Rated		0.93	0.93	0.93	0.93
Power Factor		-				
Exterior	Color		Warm Gray / Dawn Gray			
	RAL code		NL503K / NA507K	NL503K / NA507K	NL503K / NA507K	NL503K / NA507K
Heat Exchanger			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output x Number	W x No.	5,300 x 2	5,300 x 2	(5,300 x 2) + (4,200 x 1)	(5,300 x 2) + (4,200 x 1)
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(900 x 2) + (1,200 x 1)			
	Air Flow Rate (High)	m³/min	(320 x 1) + (240 x 1)			
Fan		ft³/min	(11,301 x 1) + (8,476 x 1)	(11,301 x 1) + (8,476 x 1)	(11,301 x 1) + (8,476 x 1)	(11,301 x 1) + (8,476 x 1
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
Pipe Connctions	Liquid Pipe	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Pipe Confictions	Gas Pipe	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)
Dimensions (W x H x I	D)	mm	(1,240 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 7 + (930 x 1,690 x 760) x 7
NI-+ 10/-:-h-		kg	(221 x 1) + (199 x 1)	(221 x 1) + (199 x 1)	(261 x 1) + (199 x 1)	(281 x 1) + (199 x 1)
Net Weight		lbs	(487 x 1) + (439 x 1)	(487 x 1) + (439 x 1)	(575 x 1) + (439 x 1)	(619 x 1) + (439 x 1)
C d D 1 1	Cooling	dB(A)	62.5	62.8	63.1	63.8
Sound Pressure Level	Heating	dB(A)	63.5	63.8	64.1	65.8
C 1D	Cooling	dB(A)	83.8	84.5	86.0	86.8
Sound Power Level	Heating	dB(A)	85.5	86.2	87.0	87.8
Communication Cable		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant Name		R410A	R410A	R410A	R410A
	Precharged Amount	kg	13.0 + 10.0	13.0 + 10.0	13.0 + 10.0	14.0 + 10.0
Refrigerant	in factory	lbs	28.7 + 22.0	28.7 + 22.0	28.7 + 22.0	30.9 + 22.0
	t-CO <sub>2</sub> eq		48.0	48.0	48.0	50.1
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valv
			3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of Maxmum Connectable Indoor Units		5, 550, 60	3, 330, 00	3, 330, 00	3, 300, 00	

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

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

## Non TROPICAL MODEL

#### **STANDARD**

ARUN340LTE5 / ARUN360LTE5 / ARUN380LTE5 / ARUN400LTE5



НР			34	36	38	40
	Combination Unit		ARUN340LTE5	ARUN360LTE5	ARUN380LTE5	ARUN400LTE5
Model Name	Independent Unit		ARUN220LTE5 ARUN120LTE5	ARUN240LTE5 ARUN120LTE5	ARUN240LTE5 ARUN140LTE5	ARUN240LTE5 ARUN160LTE5
	Cli (D-+l)	kW	95.2	100.8	106.4	112.0
6	Cooling (Rated)	Btu/h	324,800	343,900	363,100	382,200
Capacity		kW	107.1	112.1	118.4	124.7
	Heating (Rated)	Btu/h	365,500	382,400	403,900	425,400
	Cooling (Rated)	kW	22.75	24.66	25.87	27.55
Input	Heating (Rated)	kW	25.60	26.91	28.62	30.43
	Cooling (Rated)	kW	26.9	28.9	30.7	33.3
Input	Heating (Rated)	kW	23.1	25.0	26.7	29.1
	Heating (Max.)	kW	27.5	29.8	31.7	34.6
EER (Rated)			4.18	4.09	4.11	4.06
COP (Rated)			4.18	4.16	4.13	4.10
EER			3.54	3.49	3.47	3.36
ESEER			6.01	5.92	5.80	5.59
ESEER (SLC)			7.03	7.11	6.89	6.75
Power Factor	Rated	_	0.93	0.93	0.93	0.93
1 01101 1 40001	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Exterior	RAL code		NL503K / NA507K	NL503K / NA507K	NL503K / NA507K	NL503K / NA507K
Heat Exchanger	TO IL COGC		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output x Number	W x No.	5.300 x 3	5.300 x 3	5.300 x 3	5.300 x 3
Compressor	Туре	** X 140.	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(900 x 2) + (1,200 x 1)	(900 x 2) + (1,200 x 1)	900 x 4	900 x 4
	Wotor Output x Number	m³/min	(320 x 1) + (240 x 1)	(320 x 1) + (240 x 1)	320 x 2	320 x 2
Fan	Air Flow Rate (High)	ft³/min	(11,301 x 1) + (8,476 x 1)	(11,301 x 1) + (8,476 x 1)	11,301 x 2	11,301 x 2
Tall	External Static Pressure (Max, Pa)		80	80	80	80
	Drive	(IVIAA, I A)	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
			19.05 (3/4)		19.05 (3/4)	
Pipe Connctions	Liquid Pipe	mm (inch)	` '	19.05 (3/4)	` '	19.05 (3/4)
Dimensions (W x H x	Gas Pipe  D)	mm (inch)	34.9 (1-3/8) (1,240 x 1,690 x 760) x 1	41.3 (1-5/8) (1,240 x 1,690 x 760) x 1	41.3 (1-5/8) (1,240 x1,690 x 760) x 2	41.3 (1-5/8) (1,240 x1,690 x 760) x 2
`	<u>'</u>	I	+ (930 x 1,690 x 760) x 1	+ (930 x 1,690 x 760) x 1		(2021) . (2211)
Net Weight		kg	(281 x 1) + (199 x 1)	(283 x 1) + (199 x 1)	(283 x 1) + (221 x 1)	(283 x 1) + (221 x 1)
	C !:	lbs	(619 x 1) + (439 x 1)	(624 x 1) + (439 x 1)	(624 x 1) + (487 x 1)	(624 x 1) + (487 x 1)
Sound Pressure Level	Cooling	dB(A)	65.6	66.0	66.2	66.3
	Heating	dB(A)	66.6	67.8	68.0	68.1
Sound Power Level	Cooling	dB(A)	86.8	88.5	89.0	89.2
Communication Cable	Heating	dB(A) No. x mm <sup>2</sup>	88.6 2C x 1.0 ~ 1.5	90.4 2C x 1.0 ~ 1.5	91.0 2C x 1.0 ~ 1.5	91.2 2C x 1.0 ~ 1.5
		(VCTF-SB)				
	Refrigerant Name		R410A	R410A	R410A	R410A
5.61	Precharged Amount	kg	14.0 + 10.0	16.0 + 10.0	16.0 + 13.0	16.0 + 13.0
Refrigerant	in factory	lbs	30.9 + 22.0	35.3 + 22.0	35.3 + 28.7	35.3 + 28.7
	t-CO <sub>2</sub> eq		50.1	54.3	60.5	60.5
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
		-,-,	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of Maxmum (	Connectable Indoor Units		55 (64)	58 (64)	61 (64)	64

- 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. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%. 7. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

Eurovent test Condition



## **STANDARD**

ARUN420LTE5 / ARUN440LTE5 / ARUN460LTE5 / ARUN480LTE5



HP			42	44	46	48
	Combination Unit		ARUN420LTE5	ARUN440LTE5	ARUN460LTE5	ARUN480LTE5
Model Name	Independent Unit		ARUN240LTE5 ARUN180LTE5	ARUN240LTE5 ARUN200LTE5	ARUN240LTE5 ARUN220LTE5	ARUN240LTE5 ARUN240LTE5
		kW	117.6	123.2	128.8	134.4
	Cooling (Rated)	Btu/h	401,300	420,400	439,500	458,600
Capacity		kW	131.0	137.3	143.6	148.5
	Heating (Rated)	Btu/h	446,900	468,400	489,900	506,800
	Cooling (Rated)	kW	27.71	29.07	31.60	33.52
Input	Heating (Rated)	kW	30.91	34.36	36.39	37.69
	Cooling (Rated)	kW	33.3	35.5	38.9	41.0
Input	Heating (Rated)	kW	28.9	31.2	33.4	35.3
	Heating (Max.)	kW	34.1	37.2	39.5	41.7
EER (Rated)			4.24	4.24	4.08	4.01
COP (Rated)			4.24	3.99	3.94	3.94
EER			3.53	3.47	3.31	3.28
ESEER			5.87	5.75	5.63	5.58
ESEER (SLC)			6.84	6.68	6.77	6.83
Power Factor	Rated		0.93	0.93	0.93	0.93
1 OWEI 1 detoi	Color		Warm Gray / Dawn Gray			
Exterior	RAL code		NL503K / NA507K	NL503K / NA507K	NL503K / NA507K	NL503K / NA507K
Heat Exchanger	TAL CODE		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Matar Output v Number	W x No.	(5,300 x 3) + (4,200 x 1)	5.300 x 4	5.300 x 4	5,300 x 4
Compressor	Motor Output x Number	VV X IVO.		,	,	,
	Type	10/	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 4	900 x 4	900 x 4	900 x 4
_	Air Flow Rate (High)	m³/min ft³/min	320 x 2	320 x 2	320 x 2	320 x 2
Fan			11,301 x 2	11,301 x 2	11,301 x 2	11,301 x 2
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive	C1 1 7	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
Pipe Connctions	Liquid Pipe	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
·	Gas Pipe	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)
Dimensions (W x H x I	D)	mm	(1,240 x1,690 x 760) x 2			
Net Weight		kg	(283 x 1) + (261 x 1)	(283 x 1) + (281 x 1)	(283 x 1) + (281 x 1)	283 x 2
		lbs	(624 x 1) + (575 x 1)	(624 x 1) + (619 x 1)	(624 x 1) + (619 x 1)	624 x 2
Sound Pressure Level	Cooling	dB(A)	66.5	66.8	67.8	68.0
oodiid i ressare zerei	Heating	dB(A)	68.2	68.9	69.3	70.0
Sound Power Level	Cooling	dB(A)	89.8	90.1	90.1	91.0
Souria i ovver Levet	Heating	dB(A)	91.5	91.8	92.1	93.0
Communication Cable		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant Name		R410A	R410A	R410A	R410A
	Precharged Amount	kg	16.0 + 13.0	16.0 + 14.0	16.0 + 14.0	16.0 + 16.0
Refrigerant	in factory	lbs	35.3 + 28.7	35.3 + 30.9	35.3 + 30.9	35.3 + 35.3
	t-CO <sub>2</sub> eq		60.5	62.6	62.6	66.8
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valv
D 6 1		Ø 1/ 11=	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of Maymum (	Connectable Indoor Units		64	64	64	64

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. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- 7. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

## Non TROPICAL MODEL

## **STANDARD**

ARUN500LTE5 / ARUN520LTE5 / ARUN540LTE5 / ARUN560LTE5



НР			50	52	54	56
	Combination Unit		ARUN500LTE5	ARUN520LTE5	ARUN540LTE5	ARUN560LTE5
Model Name	Independent Unit		ARUN240LTE5 ARUN140LTE5 ARUN120LTE5	ARUN240LTE5 ARUN160LTE5 ARUN120LTE5	ARUN240LTE5 ARUN180LTE5 ARUN120LTE5	ARUN240LTE5 ARUN200LTE5 ARUN120LTE5
	C !: (D . !)	kW	140.0	145.6	151.2	156.8
Comments	Cooling (Rated)	Btu/h	477,700	496,800	515,900	535,000
Capacity		kW	156.2	162.5	168.8	175.1
	Heating (Rated)	Btu/h	532,900	554,400	575,900	597,400
la acceta	Cooling (Rated)	kW	33.78	35.46	35.62	36.97
Input	Heating (Rated)	kW	36.68	38.49	38.97	42.42
	Cooling (Rated)	kW	39.1	41.7	41.7	43.9
Input	Heating (Rated)	kW	34.0	36.4	36.3	38.6
	Heating (Max.)	kW	40.6	43.5	43.0	46.1
EER (Rated)			4.14	4.11	4.24	4.24
COP (Rated)			4.26	4.22	4.33	4.13
EER			3.58	3.49	3.62	3.57
ESEER			6.00	5.82	6.04	5.94
ESEER (SLC)			7.08	6.95	7.02	6.89
Power Factor	Rated	-	0.93	0.93	0.93	0.93
F	Color		Warm Gray / Dawn Gray			
Exterior	RAL code		NL503K / NA507K	NL503K / NA507K	NL503K / NA507K	NL503K / NA507K
Heat Exchanger			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output x Number	W x No.	5,300 x 4	5,300 x 4	(5,300 x 4) + (4,200 x 1)	5,300 x 5
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(900 x 4) + (1,200 x 1)			
	A: EL D. (U: 1)	m³/min	(320 x 2) + (240 x 1)			
Fan	Air Flow Rate (High)	ft³/min	(11,301 x 2) + (8,476 x 1)			
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
Dina Connetions	Liquid Pipe	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Pipe Connctions	Gas Pipe	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)
Dimensions (W x H x	D)	mm	(1,240 x 1,690 x 760) x 2 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 2 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 2 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 2 + (930 x 1,690 x 760) x 1
Net Weight		kg	(283 x 1) + (221 x 1) + (199 x 1)	(283 x 1) + (221 x 1) + (199 x 1)	(283 x 1) + (261 x 1) + (199 x 1)	(283 x 1) + (281 x 1) + (199 x 1)
rvet vveignt		lbs	(624 x 1) + (487 x 1) + (439 x 1)	(624 x 1) + (487 x 1) + (439 x 1)	(624 x 1) + (575 x 1) + (439 x 1)	(624 x 1) + (619 x 1) + (439 x 1)
Sound Pressure Level	Cooling	dB(A)	67.0	67.1	67.2	67.4
Sound Pressure Level	Heating	dB(A)	68.6	68.7	68.8	69.5
Sound Power Level	Cooling	dB(A)	89.4	89.6	90.1	90.4
Sound Power Level	Heating	dB(A)	91.3	91.5	91.8	92.0
Communication Cable		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant Name		R410A	R410A	R410A	R410A
	Precharged Amount	kg	16.0 + 13.0 + 10.0	16.0 + 13.0 + 10.0	16.0 + 13.0 + 10.0	16.0 + 14.0 + 10.0
Refrigerant	in factory	lbs	35.3 + 28.7 + 22.0	35.3 + 28.7 + 22.0	35.3 + 28.7 + 22.0	35.3 + 30.9 + 22.0
	t-CO <sub>2</sub> eq		81.4	81.4	81.4	83.5
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
1 Ower Suppry		€J, V, I IZ	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of Maxmum (	Connectable Indoor Units		64	64	64	64

- 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. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%. 7. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)
- Eurovent test Condition



## **STANDARD**

ARUN580LTE5 / ARUN600LTE5 / ARUN620LTE5 / ARUN640LTE5



HP			58	60	62	64
	Combination Unit		ARUN580LTE5	ARUN600LTE5	ARUN620LTE5	ARUN640LTE5
Model Name	Independent Unit		ARUN240LTE5 ARUN220LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN140LTE5	ARUN240LTE5 ARUN240LTE5 ARUN160LTE5
	Cli (D-+1)	kW	162.4	168.0	173.6	179.2
Sik	Cooling (Rated)	Btu/h	554,100	573,200	592,400	611,500
Capacity		kW	181.4	186.3	192.6	198.9
	Heating (Rated)	Btu/h	618,900	635,800	657,300	678,800
no.ut	Cooling (Rated)	kW	39.51	41.42	42.63	44.31
nput	Heating (Rated)	kW	44.45	45.75	47.47	49.28
	Cooling (Rated)	kW	47.4	49.4	51.2	53.8
Input	Heating (Rated)	kW	40.7	42.6	44.3	46.7
	Heating (Max.)	kW	48.4	50.6	52.5	55.5
ER (Rated)			4.11	4.06	4.07	4.04
COP (Rated)			4.08	4.07	4.06	4.04
ER			3.43	3.40	3.39	3.33
ESEER			5.83	5.78	5.71	5.59
ESEER (SLC)			6.95	7.00	6.87	6.78
Power Factor	Rated	-	0.93	0.93	0.93	0.93
exterior	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
exterior	RAL code		NL503K / NA507K	NL503K / NA507K	NL503K / NA507K	NL503K / NA507K
Heat Exchanger			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output x Number	W x No.	5,300 x 5	5,300 x 5	5,300 x 5	5,300 x 5
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(900 x 4) + (1,200 x 1)	(900 x 4) + (1,200 x 1)	900 x 6	900 x 6
	Air Flow Rate (High)	m³/min	(320 x 2) + (240 x 1)	(320 x 2) + (240 x 1)	320 x 3	320 x 3
an	All Flow Rate (Flight)	ft³/min	(11,301 x 2) + (8,476 x 1)	(11,301 x 2) + (8,476 x 1)	11,301 x 3	11,301 x 3
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
Pipe Connctions	Liquid Pipe	mm (inch)	19.05 (3/4)	19.05 (3/4)	22.2 (7/8)	22.2 (7/8)
ripe Connections	Gas Pipe	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	44.5 (1-3/4)	44.5 (1-3/4)
Dimensions (W x H x I	D)	mm	(1,240 x 1,690 x 760) x 2 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 2 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 3	(1,240 x1,690 x 760) x
Net Weight		kg	(283 x 1) + (281 x 1) + (199 x 1)	(283 x 2) + (199 x 1)	(283 x 2) + (221 x 1)	(283 x 2) + (221 x 1)
vec vveigne		lbs	(624 x 1) + (619 x 1) + (439 x 1)	(624 x 2) + (439 x 1)	(624 x 2) + (487 x 1)	(624 x 2) + (487 x 1)
Sound Pressure Level	Cooling	dB(A)	68.3	68.5	68.6	68.7
bound i ressure Level	Heating	dB(A)	69.8	70.4	70.5	70.6
Sound Power Level	Cooling	dB(A)	90.4	91.3	91.5	91.6
Journal ower Level	Heating	dB(A)	92.4	93.2	93.5	93.6
Communication Cable		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant Name		R410A	R410A	R410A	R410A
	Precharged Amount	kg	16.0 + 14.0 + 10.0	16.0 + 16.0 + 10.0	16.0 + 16.0 + 13.0	16.0 + 16.0 + 13.0
Refrigerant	in factory	lbs	35.3 + 30.9 + 22.0	35.3 + 35.3 + 22.0	35.3 + 35.3 + 28.7	35.3 + 35.3 + 28.7
	t-CO <sub>2</sub> eq		83.5	87.7	93.9	93.9
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valv
Dower Supply		Ø V LI-	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of Maymum (	Connectable Indoor Units		64	64	64	64

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. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
  7. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)



# **STANDARD**

ARUN660LTE5 / ARUN680LTE5 / ARUN700LTE5 / ARUN720LTE5



НР			66	68	70	72
	Combination Unit		ARUN660LTE5	ARUN680LTE5	ARUN700LTE5	ARUN720LTE5
Model Name	Independent Unit		ARUN240LTE5 ARUN240LTE5 ARUN180LTE5	ARUN240LTE5 ARUN240LTE5 ARUN200LTE5	ARUN240LTE5 ARUN240LTE5 ARUN220LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5
		kW	184.8	190.4	196.0	201.6
	Cooling (Rated)	Btu/h	630,600	649,700	668,800	687,900
Capacity		kW	205.2	211.5	217.8	222.8
	Heating (Rated)	Btu/h	700.300	721.800	743.300	760.200
	Cooling (Rated)	kW	44.47	45.82	48.36	50.27
Input	Heating (Rated)	kW	49.76	53.21	55.24	56.54
	Cooling (Rated)	kW	53.8	56.0	59.4	61.5
Input	Heating (Rated)	kW	46.5	48.8	51.0	52.9
	Heating (Max.)	kW	55.0	58.1	60.3	62.6
EER (Rated)	ricacing (wax.)	1000	4.16	4.16	4.05	4.01
COP (Rated)			4.12	3.97	3.94	3.94
EER			3.43	3.40	3.30	3.28
ESEER			5.76	5.69	5.61	5.58
ESEER (SLC)			6.84	6.73	6.79	6.83
Power Factor	Rated		0.93	0.93	0.93	0.93
Tower ractor	Color		Warm Gray / Dawn Gray			
Exterior	RAL code		NL503K / NA507K	NL503K / NA507K	NL503K / NA507K	NL503K / NA507K
Heat Exchanger	RAL Code		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Matar Output v Number	W x No.		5.300 x 6	5.300 x 6	5.300 x 6
Compressor	Motor Output x Number	VV X IVO.	(5,300 x 5) + (4,200 x 1)	'	,	,
	Type	10/	Propeller fan	Propeller fan	Propeller fan 900 x 6	Propeller fan
	Motor Output x Number	W	900 x 6	900 x 6		900 x 6
Fan	Air Flow Rate (High)	m³/min ft³/min	320 x 3 11.301 x 3	320 x 3 11.301 x 3	320 x 3 11.301 x 3	320 x 3
ran			,	,	,	11,301 x 3
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive	C: 1 / T	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
Pipe Connctions	Liquid Pipe	mm (inch)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)
	Gas Pipe	mm (inch)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)
Dimensions (W x H x	D)	mm	(1,240 x1,690 x 760) x 3			
Net Weight		kg	(290 x 2) + (270 x 1)	(290 x 2) + (288 x 1)	(290 x 2) + (288 x 1)	290 x 3
		lbs	(639 x 2) + (595 x 1)	(639 x 2) + (635 x 1)	(639 x 2) + (635 x 1)	639 x 3
Sound Pressure Level	Cooling	dB(A)	68.8	69.0	69.6	69.8
	Heating	dB(A)	70.6	71.1	71.3	71.8
Sound Power Level	Cooling	dB(A)	92.0	92.2	92.2	92.8
	Heating	dB(A)	93.8	94.0	94.2	94.8
Communication Cable		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant Name		R410A	R410A	R410A	R410A
	Precharged Amount	kg	16.0 + 16.0 + 13.0	16.0 + 16.0 + 14.0	16.0 + 16.0 + 14.0	16.0 + 16.0 + 16.0
Refrigerant	in factory	lbs	35.3 + 35.3 + 28.7	35.3 + 35.3 + 30.9	35.3 + 35.3 + 30.9	35.3 + 35.3 + 35.3
	t-CO <sub>2</sub> eq		93.9	96.0	96.0	100.2
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Tower Supply		Ø, v, ⊓∠	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of Maxmum (	Connectable Indoor Units		64	64	64	64

- 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. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%. 7. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)
- Eurovent test Condition



## **STANDARD**

ARUN740LTE5 / ARUN760LTE5 / ARUN780LTE5 / ARUN800LTE5



HP			74	76	78	80
	Combination Unit		ARUN740LTE5	ARUN760LTE5	ARUN780LTE5	ARUN800LTE5
Model Name	Independent Unit		ARUN240LTE5 ARUN240LTE5 ARUN140LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN160LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN180LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN200LTE5 ARUN120LTE5
		kW	207.2	212.8	218.4	224.0
	Cooling (Rated)	Btu/h	707,000	726,100	745,200	764,300
Capacity		kW	230.4	236.7	243.0	249.3
	Heating (Rated)	Btu/h	786,300	807,800	829,300	850,800
	Cooling (Rated)	kW	50.54	52.22	52.38	53.73
Input	Heating (Rated)	kW	55.53	57.34	57.82	61.27
	Cooling (Rated)	kW	59.6	62.2	62.2	64.4
Input	Heating (Rated)	kW	51.7	54.1	53.9	56.2
•	Heating (Max.)	kW	61.4	64.4	63.9	66.9
EER (Rated)			4.10	4.08	4.17	4.17
COP (Rated)			4.15	4.13	4.20	4.07
EER			3.48	3.42	3.51	3.48
ESEER			5.86	5.74	5.89	5.83
ESEER (SLC)			7.00	6.91	6.96	6.87
Power Factor	Rated	-	0.93	0.93	0.93	0.93
	Color		Warm Gray / Dawn Gray			
Exterior	RAL code		NL503K / NA507K	NL503K / NA507K	NL503K / NA507K	NL503K / NA507K
Heat Exchanger	10 12 0000		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output x Number	W x No.	5,300 x 6	5,300 x 6	(5,300 x 6) + (4,200 x 1)	5,300 x 7
onipressor.	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(900 x 6) + (1,200 x 1)			
	- Trocor output Arramou	m³/min	(320 x 3) + (240 x 1)			
Fan	Air Flow Rate (High)	ft³/min	(11,301 x 3) + (8,476 x 1)			
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
	Liquid Pipe	mm (inch)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)
Pipe Connctions	Gas Pipe	mm (inch)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)
	•		(1,240 x 1,690 x 760) x 3			
Dimensions (W x H x I	0)	mm	+ (930 x 1,690 x 760) x 1	+ (930 x 1,690 x 760) x 1	+ (930 x 1,690 x 760) x 1	+ (930 x 1,690 x 760) x 1
Not Woight		kg	(290 x 2) + (230 x 1) + (203 x 1)	(290 x 2) + (230 x 1) + (203 x 1)	(290 x 2) + (270 x 1) + (203 x 1)	(290 x 2) + (288 x 1) + (203 x 1)
Net Weight		lbs	(639 x 2) + (507 x 1) + (448 x 1)	(639 x 2) + (507 x 1) + (448 x 1)	(639 x 2) + (595 x 1) + (448 x 1)	(639 x 2) + (635 x 1) + (448 x 1)
Sound Pressure Level	Cooling	dB(A)	69.1	69.2	69.2	69.4
Sourid Pressure Level	Heating	dB(A)	70.9	70.9	71.0	71.4
Cd Ddd	Cooling	dB(A)	91.8	91.9	92.2	92.4
Sound Power Level	Heating	dB(A)	93.7	93.8	94.0	94.2
Communication Cable		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant Name		R410A	R410A	R410A	R410A
	Precharged Amount	kg	16.0 + 16.0 + 13.0 + 10.0	16.0 + 16.0 + 13.0 + 10.0	16.0 + 16.0 + 13.0 + 10.0	16.0 + 16.0 + 14.0 + 10.0
Refrigerant	in factory	lbs	35.3 + 35.3 + 28.7 + 22.0	35.3 + 35.3 + 28.7 + 22.0	35.3 + 35.3 + 28.7 + 22.0	35.3 + 35.3 + 30.9 + 22.0
	t-CO <sub>2</sub> eq		114.8	114.8	114.8	116.9
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
		~	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of Maxmum Connectable Indoor Units		64	64	64	64	

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. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- 7. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

## Non TROPICAL MODEL

#### **STANDARD**

ARUN820LTE5 / ARUN840LTE5 ARUN860LTE5 / ARUN880LTE5





HP			82	84	86	88
	Combination Unit		ARUN820LTE5	ARUN840LTE5	ARUN860LTE5	ARUN880LTE5
Model Name	Independent Unit		ARUN240LTE5 ARUN240LTE5 ARUN220LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN140LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN160LTE5
	Caaling (Datad)	kW	229.6	235.2	240.8	246.4
Cit	Cooling (Rated)	Btu/h	783,400	802,500	821,700	840,800
Capacity	Heating (Dated)	kW	255.6	260.6	266.9	273.2
	Heating (Rated)	Btu/h	872,300	889,200	910,700	932,200
Innut	Cooling (Rated)	kW	56.27	58.18	59.39	61.07
Input	Heating (Rated)	kW	63.30	64.60	66.32	68.13
	Cooling (Rated)	kW	67.8	69.9	71.7	74.3
Input	Heating (Rated)	kW	58.4	60.3	61.9	64.3
	Heating (Max.)	kW	69.2	71.5	73.4	76.4
EER (Rated)			4.08	4.04	4.05	4.03
COP (Rated)			4.04	4.03	4.02	4.01
EER			3.38	3.37	3.36	3.32
ESEER			5.75	5.72	5.68	5.59
ESEER (SLC)			6.91	6.95	6.86	6.79
Power Factor	Rated	-	0.93	0.93	0.93	0.93
Exterior	Color		Warm Gray / Dawn Gray			
EXCENSI	RAL code		NL503K / NA507K	NL503K / NA507K	NL503K / NA507K	NL503K / NA507K
Heat Exchanger			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output x Number	W x No.	5,300 x 7	5,300 x 7	5,300 x 7	5,300 x 7
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(900 x 6) + (1,200 x 1)	(900 x 6) + (1,200 x 1)	900 x 8	900 x 8
	Air Flow Rate (High)	m³/min	(320 x 3) + (240 x 1)	(320 x 3) + (240 x 1)	320 x 4	320 x 4
Fan		ft³/min	(11,301 x 3) + (8,476 x 1)	(11,301 x 3) + (8,476 x 1)	11,301 x 4	11,301 x 4
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
Pipe Connctions	Liquid Pipe	mm (inch)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)
Tipe connectoris	Gas Pipe	mm (inch)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)
Dimensions (W x H x	D)	mm	(1,240 x 1,690 x 760) x 3 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 3 + (930 x 1,690 x 760) x 1	(1,240 x1,690 x 760) x 4	(1,240 x1,690 x 760) x 4
Net Weight		kg	(283 x 2) + (281 x 1) + (199 x 1)	(283 x 3) + (199 x 1)	(283 x 3) + (221 x 1)	(283 x 3) + (221 x 1)
		lbs	(624 x 2) + (619 x 1) + (439 x 1)	(624 x 3) + (439 x 1)	(624 x 3) + (487 x 1)	(624 x 3) + (487 x 1)
Sound Pressure Level	Cooling	dB(A)	70.0	70.1	70.2	70.3
Journal ressure Level	Heating	dB(A)	71.6	72.1	72.1	72.2
Sound Power Level	Cooling	dB(A)	92.4	92.9	93.1	93.2
	Heating	dB(A)	94.4	94.9	95.1	95.2
Communication Cable		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant Name		R410A	R410A	R410A	R410A
	Precharged Amount	kg	16.0 + 16.0 + 14.0 + 10.0	16.0 + 16.0 + 16.0 + 10.0	16.0 + 16.0 + 16.0 + 13.0	16.0 + 16.0 + 16.0 + 13.0
Refrigerant	in factory	lbs	35.3 + 35.3 + 30.9 + 22.0	35.3 + 35.3 + 35.3 + 22.0	35.3 + 35.3 + 35.3 + 28.7	35.3 + 35.3 + 35.3 + 28.7
	t-CO <sub>2</sub> eq		116.9	121.1	127.3	127.3
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
гомег зиррту		Ø, V, □Z	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of Maxmum (	Connectable Indoor Units		64	64	64	64

- 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. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%. 7. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)
- Eurovent test Condition



## **STANDARD**

ARUN900LTE5 / ARUN920LTE5 / ARUN940LTE5 / ARUN960LTE5



HP			90	92	94	96
	Combination Unit		ARUN900LTE5	ARUN920LTE5	ARUN940LTE5	ARUN960LTE5
Model Name	Independent Unit		ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN180LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN200LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN220LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN240LTE5
		kW	252.0	257.6	263.2	268.8
	Cooling (Rated)	Btu/h	859,900	879,000	898,100	917,200
Capacity		kW	279.5	285.8	292.1	297.0
	Heating (Rated)	Btu/h	953,700	975,200	996,700	1,013,600
	Cooling (Rated)	kW	61.23	62.58	65.12	67.03
Input	Heating (Rated)	kW	68.60	72.06	74.08	75.39
	Cooling (Rated)	kW	74.3	76.5	79.9	82.0
Input	Heating (Rated)	kW	64.2	66.5	68.6	70.6
	Heating (Max.)	kW	75.9	78.9	81.2	83.5
EER (Rated)			4.12	4.12	4.04	4.01
COP (Rated)			4.07	3.97	3.94	3.94
EER			3.39	3.37	3.29	3.28
ESEER			5.71	5.66	5.61	5.58
ESEER (SLC)			6.83	6.76	6.80	6.83
Power Factor	Rated	-	0.93	0.93	0.93	0.93
F. 4	Color		Warm Gray / Dawn Gray			
Exterior RAL	RAL code		NL503K / NA507K	NL503K / NA507K	NL503K / NA507K	NL503K / NA507K
Heat Exchanger			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output x Number	W x No.	(5,300 x 7) + (4,200 x 1)	5,300 x 8	5,300 x 8	5,300 x 8
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 8	900 x 8	900 x 8	900 x 8
	A: 51 D : (U: 1)	m³/min	320 x 4	320 x 4	320 x 4	320 x 4
Fan	Air Flow Rate (High)	ft³/min	11,301 x 4	11,301 x 4	11,301 x 4	11,301 x 4
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
D: 6 .:	Liquid Pipe	mm (inch)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)
Pipe Connctions	Gas Pipe	mm (inch)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)
Dimensions (W x H x l	D)	mm	(1,240 x1,690 x 760) x 4			
NI-+ NI/-:		kg	(283 x 3) + (261 x 1)	(283 x 3) + (281 x 1)	(283 x 3) + (281 x 1)	283 x 4
Net Weight		lbs	(624 x 3) + (575 x 1)	(624 x 3) + (619 x 1)	(624 x 3) + (619 x 1)	624 x 4
C ID I I	Cooling	dB(A)	70.3	70.4	70.9	71.0
Sound Pressure Level	Heating	dB(A)	72.2	72.5	72.7	73.0
C	Cooling	dB(A)	93.4	93.6	93.6	94.0
Sound Power Level	Heating	dB(A)	95.3	95.4	95.6	96.0
Communication Cable		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant Name		R410A	R410A	R410A	R410A
	Precharged Amount	kg	16.0 + 16.0 + 16.0 + 13.0	16.0 + 16.0 + 16.0 + 14.0	16.0 + 16.0 + 16.0 + 14.0	16.0 + 16.0 + 16.0 + 16.0
Refrigerant	in factory	lbs	35.3 + 35.3 + 35.3 + 28.7	35.3 + 35.3 + 35.3 + 30.9	35.3 + 35.3 + 35.3 + 30.9	35.3 + 35.3 + 35.3 + 35.3
	t-CO <sub>2</sub> eq		127.3	129.4	129.4	133.6
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valv
Danier Consults		Ø 1/ 11-	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Number of Maxmum Connectable Indoor Units		64	64	64	64	

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.
- 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. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- 7. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

# TROPICAL MODEL HIGH EFFICIENCY

ARUN080LEH5 / ARUN100LEH5 / ARUN120LEH5 / ARUN140LEH5





НР			8	10	12	14
	Combination Unit		ARUN080LEH5	ARUN100LEH5	ARUN120LEH5	ARUN140LEH5
Model Name			ARUN080LEH5	ARUN100LEH5	ARUN120LEH5	ARUN140LEH5
	Independent Unit		1	1	1	1
		RT	6.4	8.0	9.5	11.1
	*Cooling - T1 35°C	kW	22.4	28.0	33.6	39.2
		Btu/h	76,400	95,500	114,600	133,800
		RT	5.7	7.2	9.4	11.0
Capacity (Rated)	**Cooling - T3 46°C	kW	20.2	25.5	33.0	38.8
		Btu/h	68,800	87,000	112,600	132,400
		RT	7.2	8.9	10.7	12.5
	Heating	kW	25.2	31.5	37.8	43.9
		Btu/h	86,000	107,500	129,000	149,900
	*Cooling - T1 35°C	kW	4.52	5.58	7.53	9.10
Input (Rated)	**Cooling - T3 46°C	kW	6.20	7.75	9.60	11.78
	Heating	kW	4.88	5.68	7.58	9.69
	*Cooling - T1 35°C	kW/kW	4.96	5.02	4.46	4.31
COP	**Cooling - T3 46°C	kW/kW	3.25	3.29	3.44	3.29
	Heating	kW/kW	5.16	5.55	4.99	4.53
Power Factor	Rated	-	0.93	0.93	0.93	0.93
Casing	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger	Coloi		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
meat exchanger	Time			Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Type	cm³/rev	Hermetically Sealed Scroll 62	62	62	Hermetically Sealed Scroll 62
	Piston Displacement					
Compressor	Number of Revolution	rev/min	3,600	3,600	3,600	3,600
	Motor Output x Number	W x No.	5,300 x 1	5,300 x 1	5,300 x 1	5,300 x 1
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	1,200 x 1	1,200 x 1	900 x 2	900 x 2
Fan	Air Flow Rate (High)	m³/min	240 x 1	240 x 1	320 x 1	320 x 1
		ft³/min	8,476 x 1	8,476 x 1	11,301 x 1	11,301 x 1
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
Pipe Connctions	Liquid Pipe	mm (inch)	9.52 (3/8)	9.52 (3/8)	12.7 (1/2)	12.7 (1/2)
'	Gas Pipe	mm (inch)	19.05 (3/4)	22.2 (7/8)	28.58 (1-1/8)	28.58 (1-1/8)
		mm	(930 x 1,690 x 760) x 1	(930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1
Dimensions (W x F	1 x D)	inch	(36-5/8 x 66-17/32 x 29-29/32) x 1	(36-5/8 x 66-17/32 x 29-29/32) x 1	(48-13/16 x 66-17/32 x 29-29/32) x 1	(48-13/16 x 66-17/32 x 29-29/32) x 1
Net Weight		kg	200 x 1	200 x 1	221 x 1	221 x 1
ivet vveigitt		lbs	441 x 1	441 x 1	487 x 1	487 x 1
Sound Pressure	Cooling	dB(A)	58.0	58.0	59.0	60.0
Level	Heating	dB(A)	59.0	59.0	60.0	61.0
Sound	Cooling	dB(A)	77.0	78.0	79.0	82.0
Power Level	Heating	dB(A)	78.0	79.0	80.0	84.0
Communication Ca	ble	No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant Name	,	R410A	R410A	R410A	R410A
		kg	10.0	10.0	13.0	13.0
Refrigerant	Precharged Amount	lbs	22.0	22.0	28.7	28.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
	STILLO		3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 400, 60	3, 400, 60	3, 400, 60	3, 400, 60
r ower Supply	Number of Maximum Connectable Indoor Units		3 4()(1 h()			

# TROPICAL MODEL HIGH EFFICIENCY

ARUN160LEH5 / ARUN180LEH5 / ARUN200LEH5 / ARUN220LEH5





HP			16	18	20	22
	Combination Unit		ARUN160LEH5	ARUN180LEH5	ARUN200LEH5	ARUN220LEH5
Model Name	Independent Unit		ARUN160LEH5	ARUN180LEH5	ARUN200LEH5	ARUN120LEH5 ARUN100LEH5
			1	1	1	2
		RT	12.7	14.3	15.9	17.5
	*Cooling - T1 35°C	kW	44.8	50.4	56.0	61.6
		Btu/h	152,900	172,000	191,100	210,200
		RT	11.5	12.9	13.9	16.6
Capacity (Rated)	**Cooling - T3 46°C	kW	40.3	45.4	49.0	58.5
		Btu/h	137,600	154,900	167,200	199,600
		RT	14.2	16.1	17.9	19.7
	Heating	kW	50.0	56.7	63.0	69.3
		Btu/h	170,600	193,500	215,000	236,500
	*Cooling - T1 35°C	kW	9.87	10.72	12.50	13.11
nput (Rated)	**Cooling - T3 46°C	kW	12.80	13.91	15.77	17.35
	Heating	kW	10.30	13.34	15.52	13.26
	*Cooling - T1 35°C	kW/kW	4.54	4.70	4.48	4.70
COP	**Cooling - T3 46°C	kW/kW	3.15	3.26	3.11	3.37
	Heating	kW/kW	4.85	4.25	4.06	5.23
Power Factor	Rated	-	0.93	0.93	0.93	0.93
Casing	Color		Warm Gray / Dawn Gray			
Heat Exchanger			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scrol
Compressor	Piston Displacement	cm³/rev	62.1 x 1 + 43.8 x 1	62.1 x 2	62.1 x 2	62.1 x 2
	Number of Revolution	rev/min	3,600 x 2	3,600 x 2	3,600 x 2	3,600 x 2
	Motor Output x Number	W x No.	5,300 x 1 + 4,200 x 1	5,300 x 2	5,300 x 2	5,300 x 2
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 2	900 x 2	900 x 2	(900 x 2) + (1,200 x 1)
	Wotor Output x Number	m³/min	320 x 1	320 x 1	320 x 1	(320 x 1) + (240 x 1)
an	Air Flow Rate (High)	ft³/min	11,301 x 1	11,301 x 1	11,301 x 1	(11,301 x 1) + (8,476 x 1
	Drive	10 /111111	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
		Cido / Ton	TOP	TOP	TOP	TOP
	Discharge	Side / Top				
Pipe Connctions	Liquid Pipe	mm (inch)	12.7 (1/2)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
	Gas Pipe	mm (inch)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8) (1,240 x 1,690 x 760) x
		mm	(1,240 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1	+ (930 x 1,690 x 760) x
Dimensions (W x F	1 x D)	inch	(48-13/16 x 66-17/32 x 29-29/32) x 1	(48-13/16 x 66-17/32 x 29-29/32) x 1	(48-13/16 x 66-17/32 x 29-29/32) x 1	(48-13/16 x 66-17/32 x 29- 29/32) x 1 + (36-5/8 x 66-17/32 x 29-29/32) x 1
Not Maint		kg	261 x 1	281 x 1	281 x 1	(221 x 1) + (200 x 1)
Net Weight		lbs	575 x 1	619 x 1	619 x 1	(487 x 1) + (441 x 1)
Sound Pressure	Cooling	dB(A)	60.5	61.0	62.0	61.5
_evel	Heating	dB(A)	61.5	62.0	64.5	62.5
Sound	Cooling	dB(A)	83.0	85.0	86.0	81.5
Power Level	Heating	dB(A)	85.0	86.0	87.0	82.5
Communication Ca	ble	No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant Name	. /	R410A	R410A	R410A	R410A
		kg	12.0	14.0	14.0	23.0
Refrigerant	Precharged Amount	lbs	26.5	30.9	30.9	50.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valv
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
олог эцрргу		D, V, 112	3, 400, 60	3, 400, 60	3, 400, 60	3, 400, 60
	um Connectable Indoor Units		26 (40)	29 (45)	32 (50)	35 (56)

Number of Maximum Connectable Indoor Units

# TROPICAL MODEL HIGH EFFICIENCY

ARUN240LEH5 / ARUN260LEH5 / ARUN280LEH5 / ARUN300LEH5



				W.		
HP			24	26	28	30
	Combination Unit		ARUN240LEH5	ARUN260LEH5	ARUN280LEH5	ARUN300LEH5
Model Name	Independent Unit		ARUN140LEH5 ARUN100LEH5	ARUN140LEH5 ARUN120LEH5	ARUN140LEH5 ARUN140LEH5	ARUN160LEH5 ARUN140LEH5
	independent onit		2	2	2	2
		RT	19.1	20.7	22.3	23.9
	*Cooling - T1 35°C	kW	67.2	72.8	78.4	84.0
	cooming 11 55 c	Btu/h	229,300	248,400	267,500	286,600
		RT	18.3	20.4	22.0	22.5
Capacity (Rated)	**Cooling - T3 46°C	kW	64.3	71.8	77.6	79.1
Capacity (Nateu)	Cooling - 13 40 C			245.000	264.800	270.000
		Btu/h	219,400	,	,	,
	Hanking.	RT	21.4	23.2	24.9	26.7
	Heating	kW	75.4	81.7	87.8	93.9
		Btu/h	257,300	278,800	299,700	320,500
	*Cooling - T1 35°C	kW	14.68	16.63	18.20	18.97
Input (Rated)	**Cooling - T3 46°C	kW	19.53	21.38	23.56	24.58
	Heating	kW	15.37	17.27	19.38	19.99
	*Cooling - T1 35°C	kW/kW	4.58	4.38	4.31	4.43
COP	**Cooling - T3 46°C	kW/kW	3.29	3.36	3.29	3.22
Heating		kW/kW	4.91	4.73	4.53	4.70
Power Factor	Rated	-	0.93	0.93	0.93	0.93
Casing	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	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 2) + (43.8 x 1)
	Number of Revolution	rev/min	3,600 x 2	3,600 x 2	3,600 x 2	3,600 x 3
Compressor	Motor Output x Number	W x No.	5,300 x 2	5,300 x 2	5,300 x 2	(5,300 x 2) + (4,200 x 1)
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(900 x 2) + (1,200 x 1)	900 x 4	900 x 4	900 x 4
	THOUSE GREEN TRAINSON	m³/min	(320 x 1) + (240 x 1)	320 x 2	320 x 2	320 x 2
Fan	Air Flow Rate (High)	ft³/min	(11,301 x 1) + (8,476 x 1)	11,301 x 2	11,301 x 2	11,301 x 2
	Drive	10 /111111	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
		Cida / Tan	TOP	TOP	TOP	TOP
	Discharge	Side / Top				
Pipe Connctions	Liquid Pipe	mm (inch)	15.88 (5/8)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
	Gas Pipe	mm (inch)	34.9 (1-3/8) (1,240 × 1,690 × 760) × 1	34.9 (1-3/8) (1,240 x1,690 x 760) x 2	34.9 (1-3/8) (1,240 x1,690 x 760) x 2	34.9 (1-3/8) (1.240 ×1.690 × 760) × 2
			+ (930 x 1,690 x 760) x 1	(1,2 10 X1,030 X 700) X 2	(1,2 10 X1,030 X 700) X 2	(1,2 10 X1,030 X 700) X 2
Dimensions (W x F	IxD)	inch	(48-13/16 x 66-17/32 x 29-29/32) x 1 + (36-5/8 x 66-17/32 x 29-29/32) x 1	(48-13/16 x 66-17/32 x 29-29/32) x 2	(48-13/16 x 66-17/32 x 29-29/32) x 2	(48-13/16 x 66-17/32 x 29-29/32) x 2
		kg	(221 x 1) + (200 x 1)	221 x 2	221 x 2	(261 x 1) + (221 x 1)
Net Weight		lbs	(487 x 1) + (441 x 1)	487 x 2	487 x 2	(575 x 1) + (487 x 1)
Sound Pressure	Cooling	dB(A)	62.1	62.5	63.0	63.3
Level	Heating	dB(A)	63.1	63.5	64.0	64.3
Sound	Cooling	dB(A)	83.5	83.8	85.0	85.5
Power Level	Heating	dB(A)	85.2	85.5	87.0	87.5
Communication Ca		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant Name	(**************************************	R410A	R410A	R410A	R410A
	Terrigerant Name	ka	23.0	26.0	26.0	25.0
Refrigerant	Precharged Amount	lbs	50.7	57.4	57.4	55.2
	Control	IDS	Electronic Expansion Valve			
	Control		'	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
			3, 400, 60	3, 400, 60	3, 400, 60	3, 400, 60

42 (52)

39 (48)

45 (56)

49 (60)



ARUN320LEH5 / ARUN340LEH5 / ARUN360LEH5 / ARUN380LEH5



HP			32	34	36	38
	Combination Unit		ARUN320LEH5	ARUN340LEH5	ARUN360LEH5	ARUN380LEH5
Model Name	Independent Unit		ARUN180LEH5 ARUN140LEH5	ARUN200LEH5 ARUN140LEH5	ARUN200LEH5 ARUN160LEH5	ARUN200LEH5 ARUN180LEH5
			2	2	2	2
		RT	25.4	27.0	28.6	30.2
	*Cooling - T1 35°C	kW	89.6	95.2	100.8	106.4
		Btu/h	305,700	324,800	343,900	363,000
		RT	23.9	24.9	25.4	26.8
Capacity (Rated)	**Cooling - T3 46°C	kW	84.2	87.8	89.3	94.4
		Btu/h	287,300	299,600	304,800	322,100
		RT	28.6	30.4	32.1	34.0
	Heating	kW	100.6	106.9	113.0	119.7
		Btu/h	343,300	364,800	385,600	408,400
	*Cooling - T1 35°C	kW	19.82	21.60	22.37	23.22
Input (Rated)	**Cooling - T3 46°C	kW	25.69	27.55	28.57	29.68
	Heating	kW	23.03	25.21	25.82	28.86
	*Cooling - T1 35°C	kW/kW	4.52	4.41	4.51	4.58
COP	**Cooling - T3 46°C	kW/kW	3.28	3.19	3.13	3.18
	Heating	kW/kW	4.37	4.24	4.38	4.15
Power Factor	Rated	-	0.93	0.93	0.93	0.93
Casing	Color		Warm Gray / Dawn Gray			
Heat Exchanger			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scrol
Compressor	Piston Displacement	cm <sup>3</sup> /rev	62.1 x 3	62.1 x 3	(62.1 x 3) + (43.8 x 1)	62.1 x 4
	Number of Revolution	rev/min	3.600 x 3	3.600 x 3	3,600 x 4	3,600 x 4
	Motor Output x Number	W x No.	5,300 x 3	5,300 x 3	(5,300 x 3) + (4,200 x 1)	5,300 x 4
	Starting Method	** * * * * * * * * * * * * * * * * * *	Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 4	900 x 4	900 x 4	900 x 4
	- Wotor Output X Warrist	m³/min	320 x 2	320 x 2	320 x 2	320 x 2
Fan	Air Flow Rate (High)	ft³/min	11,301 x 2	11,301 x 2	11,301 x 2	11,301 x 2
	Drive	10 /111111	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
	Liquid Pipe	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Pipe Connctions	Gas Pipe	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	41.3 (1-5/8)	41.3 (1-5/8)
	Gas ripe	mm	(1,240 x1,690 x 760) x 2			
Dimensions (W x H	l x D)	inch	(48-13/16 x 66-17/32	(48-13/16 x 66-17/32	(48-13/16 x 66-17/32	(48-13/16 x 66-17/32
		I	x 29-29/32) x 2			
Net Weight		kg	(281 x 1) + (221 x 1)	(281 x 1) + (221 x 1)	(281 x 1) + (261 x 1)	281 x 2
	Cli	lbs	(619 x 1) + (487 x 1)	(619 x 1) + (487 x 1)	(619 x 1) + (575 x 1)	619 x 2
Sound Pressure Level	Cooling	dB(A)	63.5	64.1	64.3	64.5
	Heating	dB(A)	64.5	66.1	66.3	66.4
Sound Power Level	Cooling	dB(A)	86.8	87.5	87.8	88.5
OWEI LEVEL	Heating	dB(A)	88.1	88.8	89.1	89.5
Communication Ca		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant Name		R410A	R410A	R410A	R410A
Refrigerant	Precharged Amount	kg	27.0	27.0	26.0	28.0
gerant	- Techargea Amount	lbs	59.6	59.6	57.4	61.8
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
ower Supply		D, V, 112	3, 400, 60	3, 400, 60	3, 400, 60	3, 400, 60
Number of Maximu	ım Connectable Indoor Units		52 (64)	55 (64)	58 (64)	61 (64)

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# **MULTI V 5**

# TROPICAL MODEL **HIGH EFFICIENCY**

ARUN400LEH5 / ARUN420LEH5 / ARUN440LEH5 / ARUN460LEH5



Model Name	НР			40	42	44	46
Model Name		Combination Unit		ARUN400LEH5	ARUN420LEH5	ARUN440LEH5	ARUN460LEH5
Property   Property	Model Name	Independent Unit			ARUN140LEH5	ARUN140LEH5	ARUN140LEH5
Page				2	3	3	3
Capacity (Rated)         Heating (Path of the Path of th			RT	31.8	33.4	35.0	36.6
Capacity (Rated)   Part		*Cooling - T1 35°C	kW	112.0	117.6	123.2	128.8
Capacity (Rated)         **Cooling - 13 deC*         BW         98.0         116.4         117.9         123.0           Beating         Bluth         33.4400         397.200         402.300         419.700           RT         35.8         37.4         39.1         41.0           Heating         RW         125.00         131.8         137.8         144.5           Popul (Rated)         **Cooling - 113.9°C         kW         25.00         27.30         28.07         28.92           Input (Rated)         **W         31.54         35.34         36.36         37.47         39.2           Heating         kW         31.04         290.7         29.68         32.72           COP         **Cooling - 13.46°C         kW         31.11         3.29         3.24         3.28           COP         **Red         -         **Obstance of the state of the sta			Btu/h	382,100	401,300	420,400	439,500
Pedaga			RT	27.8	33.1	33.5	34.9
Heating	Capacity (Rated)	**Cooling - T3 46°C	kW	98.0	116.4	117.9	123.0
Heating			Btu/h	334,400	397,200	402,300	419,700
Part			RT	35.8	37.4	39.1	41.0
		Heating	kW	126.0	131.8	137.8	144.5
Power   Flated   Power   P			Btu/h	429,900	449,600	470,300	493,200
Heating   Heating Heating   Heating Heating Heating   Heating Heating Heating   Heating Heating Heating Heating Heating   Heating Heating Heating Heating Heating Heating Heating   Heating Heatin		*Cooling - T1 35°C	kW	25.00	27.30	28.07	28.92
Processor   Pr	Input (Rated)	**Cooling - T3 46°C	kW	31.54	35.34	36.36	37.47
COP         4**Cooling - T3 46*°C         kW/kW         3.11         3.29         3.24         3.28           Power Factor         Rated         4         0.93         0.93         0.93         0.93           Casing         Color         Warm Gray / Dawn Gray         Wide Louver Plus         Wide Louver	, , ,	Heating	kW	31.04	29.07	29.68	32.72
Power Factor   Rated   -		*Cooling - T1 35°C	kW/kW	4.48	4.31	4.39	4.45
Power Factor         Rated         -         0.93         0.93         0.93         0.93           Casing         Color         Warm Gray / Dawn Gray         Wide Louver Plus         Mide Louver Plus         Wide Louver Plus	COP		kW/kW	3.11	3.29	3.24	3.28
Power Factor         Rated         -         0.93         0.93         0.93         0.93           Casing         Color         Warm Gray / Dawn Gray         Wide Louver Plus         Mide Louver Plus         Wide Louver Plus		Heating	kW/kW	4.06	4.53	4.64	4.42
Mide Louver Plus   Wide Louver	Power Factor						
Mide Louver Plus   Wide Louver	Casing	Color		Warm Gray / Dawn Gray			
Type					, ,		-
Compressor         Piston Displacement         cm²/rev         62.1 x 4         62.1 x 3         (62.1 x 3) + (43.8 x 1)         62.1 x 4           Compressore         Number of Revolution Motor Output x Number         vm² x vo.         5,300 x 4         3,600 x 3         3,600 x 3         3,600 x 3         3,600 x 4         3,600 x 4         3,600 x 4         3,600 x 3         3,600 x 4         3,600 x 4         9,000 x 6         9,000 x 6 <th< td=""><td></td><td>Туре</td><td></td><td></td><td>Hermetically Sealed Scroll</td><td></td><td></td></th<>		Туре			Hermetically Sealed Scroll		
Compressor         Number of Revolution Number (Morro Output x Number (Starting Method)         1 Mx No.         5,360 x 4         3,600 x 3         3,600 x 4         5,300 x 3         (5,300 x 3) x (5,300 x 3) x (5,200 x 3) x (5,200 x 3)         4,200 x 4         9,000 x 6         9			cm³/rev		,	(62.1 x 3) + (43.8 x 1)	62.1 x 4
Compressory         Motor Output x Number         W x No.         5,300 x 4         5,300 x 3         (5,300 x 3) + (4,200 x 1)         5,300 x 4           Farting Method         Direct On Line         Propeller fan			rev/min	3.600 x 4	3.600 x 3		
Starting Method   Direct On Line	Compressor	Motor Output x Number	W x No.			(5.300 x 3) + (4.200 x 1)	5.300 x 4
PVC68D (PVE)   PVC68D (PVE)   PVC68D (PVE)   PVC68D (PVE)   PVC68D (PVE)   PVC68D (PVE)							
Fan         Type         Propeller fan         900 x 6         900 x 10 x							
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$				, ,	1 /	` '	, ,
Fan         Air Flow Rate (High)         m³/min         320 x 2         320 x 3         320 x 3         320 x 3           Profered         DC INVERTER			W	· ·	'	'	
Fan Power Air Flow Rate (High)         Fe3/min         11,301 x 2         11,301 x 3         12,301 x 3         20         20         20         20         20         20         20         20         20         20         20         20         20         20			m³/min				
Drive   DC INVERTER   DC I	Fan	Air Flow Rate (High)		11.301 x 2		11.301 x 3	
Discharge   Side / Top   TOP   TOP   TOP   TOP		Drive		·	·	· ·	-
Pipe Connctions         Liquid Pipe         mm (inch)         19.05 (3/4)         20.05         20.05         41.3 (1-5/8)         41.3			Side / Top				
Pipe Connctions         Gas Pipe         mm (inch)         41.3 (1-5/8)         41.3 (1-5/8)         41.3 (1-5/8)         41.3 (1-5/8)           Dimensions (W x H x D)         mm         (1,240 x1,690 x 760) x 2         (1,240 x1,690 x 760) x 3         (48-13/16 x 6c-17/32 x 29-29/32) x 3         (261 x 1) x (221 x 2)         (281 x 1) x (221 x 2)         (281 x 1) x (221 x 2)			· '	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Dimensions (W x H x D)	Pipe Connctions						
Dimensions (W x H x D)         inch         (48-13/16 x 66-17/32 x 29-29/32) x 2         (48-13/16 x 66-17/32 x 29-29/32) x 3         (261 x 1) + (221 x 2)         (281 x 1) + (281 x 1)         (281 x 1) + (221 x 2)         (281 x 1) + (281 x 1)         (281 x 1) + (		'					
Net Weight   Ibs   619 x 2	Dimensions (W x H	H x D)	inch		(48-13/16 x 66-17/32		
Sound Pressure   Level   Fleating   Cooling   dB(A)   65.0   64.8   64.9   65.1			kg	281 x 2	221 x 3	(261 x 1) + (221 x 2)	(281 x 1) + (221 x 2)
Level   Heating   dB(A)   67.5   65.8   65.9   66.1	Net Weight		lbs	619 x 2	487 x 3	(575 x 1) + (487 x 2)	(619 x 1) + (487 x 2)
Level         Heating         dB(A)         67.5         65.8         65.9         66.1           Sound Power Level         Cooling         dB(A)         89.0         86.8         87.1         88.0           Power Level         Heating         dB(A)         90.0         88.8         89.1         89.5           Communication Cable         No. x mm² (VCTF-SB)         2C x 1.0 - 1.5           Refrigerant Name         R410A	Sound Pressure	Cooling	dB(A)	65.0	64.8	64.9	65.1
Power Level         Heating         dB(A)         90.0         88.8         89.1         89.5           Communication Cable         No. x mm² (VCTF-SB)         2C x 1.0 ~ 1.5           Refrigerant Name         R410A         R410A         R410A         R410A         R410A           Precharged Amount         kg         28.0         39.0         38.0         40.0           Bush         61.8         86.1         83.9         88.3           Control         Electronic Expansion Valve         Electronic Expansion Valve         Electronic Expansion Valve         Electronic Expansion Valve           Power Supply         Ø, V, Hz         3, 380 ~ 415, 50         3, 380 ~ 415, 50         3, 380 ~ 415, 50         3, 400, 60         3, 400, 60         3, 400, 60		Heating	dB(A)	67.5	65.8	65.9	66.1
Power Level         Heating         dB(A)         90.0         88.8         89.1         89.5           Communication Cable         No. x mm² (VCTF-SB)         2C x 1.0 − 1.5           Refrigerant Name         R410A         R410A         R410A         R410A           Refrigerant Name         kg         28.0         39.0         38.0         40.0           Bostonic Expansion Valve         Belectronic Expansion Valve         86.1         83.9         88.3           Control         Electronic Expansion Valve         Electronic Expansion Valve         Electronic Expansion Valve         Electronic Expansion Valve           Power Supply         Ø, V, Hz         3, 380 - 415, 50         3, 380 - 415, 50         3, 380 - 415, 50         3, 400, 60         3, 400, 60         3, 400, 60	Sound	Cooling	dB(A)	89.0	86.8	87.1	88.0
Refrigerant Name	Power Level	Heating	dB(A)	90.0	88.8	89.1	89.5
Refrigerant         kg         28.0         39.0         38.0         40.0           Precharged Amount         lbs         61.8         86.1         83.9         88.3           Control         Electronic Expansion Valve         Electronic Expansion Valve         Electronic Expansion Valve         Electronic Expansion Valve           Power Supply         Ø, V, Hz         3, 380 ~ 415, 50         3, 380 ~ 415, 50         3, 380 ~ 415, 50         3, 380 ~ 415, 50           3, 400, 60         3, 400, 60         3, 400, 60         3, 400, 60         3, 400, 60	Communication Ca	able		2C x 1.0 ~ 1.5			
Refrigerant         Precharged Amount         Ibs         61.8         86.1         83.9         88.3           Control         Electronic Expansion Valve         Electronic Expansion Valve         Electronic Expansion Valve         Electronic Expansion Valve           Power Supply         Ø, V, Hz         3, 380 ~ 415, 50         3, 380 ~ 415, 50         3, 380 ~ 415, 50         3, 380 ~ 415, 50           3, 400, 60         3, 400, 60         3, 400, 60         3, 400, 60         3, 400, 60		Refrigerant Name		R410A	R410A	R410A	R410A
Precharged Amount   Ibs   61.8   86.1   83.9   88.3	D. C.	B 1 1:	kg	28.0	39.0	38.0	40.0
Power Supply Ø, V, Hz 3, 380 ~ 415, 50 3, 380 ~ 415, 50 3, 380 ~ 415, 50 3, 380 ~ 415, 50 3, 380 ~ 415, 50 3, 380 ~ 415, 50	Refrigerant	Precharged Amount		61.8	86.1	83.9	88.3
Power Supply 0, V, Hz 3, 400, 60 3, 400, 60 3, 400, 60 3, 400, 60		Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
3, 400, 60 3, 400, 60 3, 400, 60	D 6 1		a.v.··	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Number of Maximum Connectable Indoor Units 64 64 64 64	Power Supply		Ø, V, Hz	3, 400, 60	3, 400, 60	3, 400, 60	3, 400, 60
	Number of Maxim	um Connectable Indoor Units	S	64	64	64	64

# TROPICAL MODEL HIGH EFFICIENCY

ARUN480LEH5 / ARUN500LEH5 / ARUN520LEH5 / ARUN540LEH5



HP			48	50	52	54
	Combination Unit		ARUN480LEH5	ARUN500LEH5	ARUN520LEH5	ARUN540LEH5
Model Name	Independent Unit		ARUN200LEH5 ARUN140LEH5 ARUN140LEH5	ARUN200LEH5 ARUN160LEH5 ARUN140LEH5	ARUN200LEH5 ARUN180LEH5 ARUN140LEH5	ARUN200LEH5 ARUN200LEH5 ARUN140LEH5
			3	3	3	3
Capacity (Rated)		RT	38.2	39.8	41.4	42.9
	*Cooling - T1 35°C	kW	134.4	140.0	145.6	151.2
		Btu/h	458,600	477,700	496,800	515,900
	**Cooling - T3 46°C	RT	36.0	36.4	37.8	38.9
		kW	126.6	128.1	133.2	136.8
		Btu/h	432,000	437,100	454,500	466,800
	Heating	RT	42.8	44.6	46.5	48.3
		kW	150.8	156.9	163.6	169.9
		Btu/h	514,700	535,400	558,300	579,800
Input (Rated)	*Cooling - T1 35°C	kW	30.70	31.47	32.32	34.10
	**Cooling - T3 46°C	kW	39.33	40.35	41.46	43.32
	Heating	kW	34.90	35.51	38.55	40.73
	*Cooling - T1 35°C	kW/kW	4.38	4.45	4.50	4.43
	**Cooling - T3 46°C	kW/kW	3.22	3.18	3.21	3.16
	Heating	kW/kW	4.32	4.42	4.24	4.17
Power Factor	Rated		0.93	0.93	0.93	0.93
					Warm Gray / Dawn Gray	
Casing	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray		Warm Gray / Dawn Gray
Heat Exchanger	T		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Туре	27	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scrol
	Piston Displacement	cm³/rev	62.1 x 4	(62.1 x 4) + (43.8 x 1)	62.1 x 5	62.1 x 5
	Number of Revolution	rev/min	3,600 x 4	3,600 x 5	3,600 x 5	3,600 x 5
	Motor Output x Number	W x No.	5,300 x 4	(5,300 x 4) + (4,200 x 1)	5,300 x 5	5,300 x 5
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
Fan	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 6	900 x 6	900 x 6	900 x 6
	Air Flow Rate (High)	m³/min	320 x 3	320 x 3	320 x 3	320 x 3
		ft³/min	11,301 x 3	11,301 x 3	11,301 x 3	11,301 x 3
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
Pipe Connctions	Liquid Pipe	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
	Gas Pipe	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)
		mm	(1,240 x1,690 x 760) x 3			
		inch	(48-13/16 x 66-17/32 x 29-29/32) x 3			
Net Weight		kg	(281 x 1) + (221 x 2)	(281 x 1) + (261 x 1) + (221 x 1)	(281 x 2) + (221 x 1)	(281 x 2) + (221 x 1)
Too Weight		lbs	(619 x 1) + (487 x 2)	(619 x 1) + (575 x 1) + (487 x 1)	(619 x 2) + (487 x 1)	(619 x 2) + (487 x 1)
Sound Pressure Level	Cooling	dB(A)	65.5	65.7	65.8	66.2
	Heating	dB(A)	67.3	67.4	67.5	68.4
Sound	Cooling	dB(A)	88.5	88.8	89.4	89.8
Power Level	Heating	dB(A)	90.0	90.3	90.6	91.0
Communication Cable No. x mm² (VCTF-SB)		2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	
Refrigerant	Refrigerant Name		R410A	R410A	R410A	R410A
	Precharged Amount	kg	40.0	39.0	41.0	41.0
		lbs	88.3	86.1	90.5	90.5
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
		G 1/	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 400, 60	3, 400, 60	3, 400, 60	3, 400, 60

#### TROPICAL MODEL HIGH EFFICIENCY

ARUN560LEH5 / ARUN580LEH5 / ARUN600LEH5



HP			56	58	60
	Combination Unit		ARUN560LEH5	ARUN580LEH5	ARUN600LEH5
Model Name	Independent Unit		ARUN200LEH5 ARUN200LEH5 ARUN160LEH5	ARUN200LEH5 ARUN200LEH5 ARUN180LEH5	ARUN200LEH5 ARUN200LEH5 ARUN200LEH5
			3	3	3
		RT	44.5	46.1	47.7
	*Cooling - T1 35°C	kW	156.8	162.4	168.0
		Btu/h	535,000	554,100	573,200
		RT	39.3	40.7	41.7
apacity (Rated)	**Cooling - T3 46°C	kW	138.3	143.4	147.0
		Btu/h	471,900	489,300	501,600
		RT	50.0	51.9	53.7
	Heating	kW	176.0	182.7	189.0
	,	Btu/h	600,500	623,400	644,900
	*Cooling - T1 35°C	kW	34.87	35.72	37.50
nput (Rated)	**Cooling - T3 46°C	kW	44.34	45.45	47.31
	Heating	kW	41.34	44.38	46.56
	*Cooling - T1 35°C	kW/kW	4.50	4.55	4.48
OP	**Cooling - T3 46°C	kW/kW	3.12	3.16	3.11
	Heating	kW/kW	4.26	4.12	4.06
ower Factor	Rated	-	0.93	0.93	0.93
asing	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
leat Exchanger			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement cm <sup>3</sup> /rev		(62.1 x 5) + (43.8 x 1)	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
ompressor	Motor Output x Number W x No.		(5,300 x 5) + (4,200 x 1)	5,300 x 6	5,300 x 6
	Starting Method	VV X 140.	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number W		900 x 6	900 x 6	900 x 6
	- Iviocor Output x rvamber	m³/min	320 x 3	320 x 3	320 x 3
an	Air Flow Rate (High)	ft³/min	11,301 x 3	11,301 x 3	11,301 x 3
	Drive	10 /111111	DC INVERTER	DC INVERTER	DC INVERTER
		Cida / Tan	TOP	TOP	TOP
	Discharge	Side / Top			
ipe Connctions	Liquid Pipe	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
	Gas Pipe	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8) (1,240 x1,690 x 760) x 3	41.3 (1-5/8)
imensions (W x H	l x D)	mm	(1,240 x1,690 x 760) x 3	, , , ,	(1,240 x1,690 x 760) x 3
	,	inch	(48-13/16 x 66-17/32 x 29-29/32) x 3	(48-13/16 x 66-17/32 x 29-29/32) x 3	(48-13/16 x 66-17/32 x 29-29/32) x 3
I-+ \\\/-:   .		kg	(281 x 2) + (261 x 1)	281 x 3	281 x 3
et Weight		lbs	(619 x 2) + (575 x 1)	619 x 3	619 x 3
ound Pressure	Cooling	dB(A)	66.3	66.5	66.8
evel	Heating	dB(A)	68.5	68.6	69.3
ound	Cooling	dB(A)	90.0	90.5	90.8
ower Level	Heating	dB(A)	91.2	91.5	91.8
ommunication Ca		No. x mm <sup>2</sup>	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
ommunication Ca		(VCTF-SB)			
	Refrigerant Name		R410A	R410A	R410A
efrigerant	Precharged Amount	kg	40.0	42.0	42.0
		lbs	88.3	92.7	92.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
			3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 400, 60	3, 400, 60	3, 400, 60

#### NOTE

- 1. Capacities are based on the following conditions (ISO 15042)
- Cooling Temperature :
- \*Cooling (T1) : Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F)
- \*\*Cooling (T3) : Indoor Temperature 29°C(84.2°F) DB/19°C(66.2°F) WB

  Outdoor Temperature 46°C(114.8°F) DB/24°C(75.2°F) WB
- Heating Temperature :
- Indoor 20°C(68°F) DB / 15°C(59°F) WB
- Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
- Piping Length : Interconnected Pipe Length = 7.5m
- Height difference between outdoor unit and indoor unit: 0m
- 2. The Maximum combination ratio is 130%.
- 3. 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.
- 4. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
- 5. Power factor could vary less than ±1% according to the operating conditions.
- 6. Due to our policy of innovation some specifications may be changed without notification.

#### TROPICAL MODEL

**STANDARD** 

ARUN080LTH5 / ARUN100LTH5 / ARUN120LTH5 / ARUN140LTH5





НР			8	10	12	14
	Combination Unit		ARUN080LTH5	ARUN100LTH5	ARUN120LTH5	ARUN140LTH5
Model Name			ARUN080LTH5	ARUN100LTH5	ARUN120LTH5	ARUN140LTH5
	Independent Unit		1	1	1	1
		RT	6.4	8.0	9.5	11.1
	*Cooling (Rated)	kW	22.4	28.0	33.6	39.2
		Btu/h	76,400	95,500	114,600	133,800
		RT	5.6	7.1	8.9	10.5
Capacity	**Cooling (Rated)	kW	19.8	25.0	31.2	36.8
		Btu/h	67,600	85,300	106,500	125,600
		RT	7.2	8.6	10.7	12.5
	Heating (Rated)	kW	25.2	30.3	37.8	43.9
		Btu/h	86,000	103,400	129,000	149,900
	*Cooling (Rated)	kW	5.00	7.00	8.00	9.30
Input	**Cooling (Rated)	kW	6.37	8.33	9.54	11.20
	Heating (Rated)	kW	5.80	7.30	8.06	9.69
	*Cooling (Rated)	kW	4.48	4.00	4.20	4.22
COP	**Cooling (Rated)	kW	3.11	3.00	3.27	3.29
	Heating (Rated)	kW	4.34	4.15	4.69	4.53
Power Factor	Rated	-	0.93	0.93	0.93	0.93
Casing	Color		Warm Gray / Dawn Gray			
Heat Exchange	er		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	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
	Number of Revolution	n rev/min	3,600	3,600	3,600	3,600
Compressor	Motor Output x Number	W x No.	5,300 x 1	5,300 x 1	5,300 x 1	5,300 x 1
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	1,200 x 1	1,200 x 1	1,200 x 1	900 x 2
_	Ai Fl D-+-/LE-L	m³/min	240 x 1	240 x 1	240 x 1	320 x 1
Fan	Air Flow Rate(High)	ft³/min	8,476 x 1	8,476 x 1	8,476 x 1	11,301 x 1
	External Static Pressu	ıre (Max, Pa)	80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
Pipe	Liquid Pipe	mm (inch)	9.52 (3/8)	9.52 (3/8)	12.7 (1/2)	12.7 (1/2)
Connctions	Gas Pipe	mm (inch)	19.05 (3/4)	22.2 (7/8)	28.58 (1-1/8)	28.58 (1-1/8)
		mm	(930 x 1,690 x 760) x 1	(930 x 1,690 x 760) x 1	(930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1
Dimensions (W	/ x H x D)	inch	(36-5/8 x 66-17/32 x 29-29/32) x 1	(36-5/8 x 66-17/32 x 29-29/32) x 1	(36-5/8 x 66-17/32 x 29-29/32) x 1	(48-13/16 x 66-17/32 x 29-29/32) x 1
Net Weight		kg	173 x 1	171 x 1	200 x 1	221 x 1
TVCC VVCIGITE		lbs	381 x 1	377 x 1	441 x 1	487 x 1
Sound	Cooling	dB(A)	58.0	58.5	59.0	60.0
Pressure Level	Heating	dB(A)	60.0	60.5	60.0	61.0
Sound Power	Cooling	dB(A)	78.0	79.0	79.0	82.0
Level	Heating	dB(A)	80.0	80.0	80.0	84.0
Communication	n Cable	No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant name		R410A	R410A	R410A	R410A
Refrigerant	Precharged Amount in	n kg	4.7	4.7	10.0	13.0
Kerrigerani	factory	lbs	10.4	10.4	22.0	28.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
. Swer Supply		~, *, 112	3, 400, 60	3, 400, 60	3, 400, 60	3, 400, 60
Number of Mar	ximum Connectable Inc	loor Units	13	16	20	23

#### TROPICAL MODEL

#### **STANDARD**

ARUN160LTH5 / ARUN180LTH5 / ARUN200LTH5 / ARUN220LTH5



HP			16	18	20	22
	Combination Unit		ARUN160LTH5	ARUN180LTH5	ARUN200LTH5	ARUN220LTH5
Model Name			ARUN160LTH5	ARUN180LTH5	ARUN200LTH5	ARUN220LTH5
	Independent Unit	-	1	1	1	1
		RT	12.7	14.3	15.9	17.5
	*Cooling (Rated)	kW	44.8	50.4	56.0	61.6
		Btu/h	152,900	172,000	191,100	210,200
		RT	11.4	12.4	13.6	14.1
Capacity	**Cooling (Rated)	kW	40.3	43.6	48.0	49.6
, ,		Btu/h	137,500	148,800	163,800	169,100
		RT	14.2	16.1	17.9	19.7
	Heating (Rated)	kW	50.0	56.7	63.0	69.3
		Btu/h	170,600	193,500	215,000	236,500
	*Cooling (Rated)	kW	10.80	11.20	13.00	14.84
nput	**Cooling (Rated)	kW	13.15	14.39	15.77	16.72
	Heating (Rated)	kW	11.36	11.98	15.52	17.54
	*Cooling (Rated)	kW	4.15	4.50	4.31	4.15
:OP	**Cooling (Rated)	kW	3.06	3.03	3.04	2.96
	Heating (Rated)	kW	4.40	4.73	4.06	3.95
ower Factor	Rated	-	0.93	0.93	0.93	0.93
asing	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gra
leat Exchange	er		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scro
	Piston Displacement	cm³/rev	62.1	62.1 x 1 + 43.8 x 1	62.1 x 2	62.1 x 2
	Number of Revolution	n rev/min	3,600	3,600 x 2	3,600 x 2	3,600 x 2
Compressor	Motor Output x Number	W x No.	5,300 x 1	5,300 x 1 + 4,200 x 1	5,300 x 2	5,300 x 2
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 2	900 x 2	900 x 2	900 x 2
	A: EL D. (U. 1)	m³/min	320 x 1	320 x 1	320 x 1	320 x 1
an	Air Flow Rate(High)	ft³/min	11,301 x 1	11,301 x 1	11,301 x 1	11,301 x 1
	External Static Pressu	ıre (Max, Pa)	80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
ipe	Liquid Pipe	mm (inch)	12.7 (1/2)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
onnctions	Gas Pipe	mm (inch)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)
		mm	(1,240 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x
Dimensions (W	/xHxD)	inch	(48-13/16 x 66-17/32 x 29-29/32) x 1			
let Weight		kg	221 x 1	261 x 1	281 x 1	281 x 1
vec vvelgill		lbs	487 x 1	575 x 1	619 x 1	619 x 1
ound	Cooling	dB(A)	60.5	61.0	62.0	64.5
ressure Level	Heating	dB(A)	61.5	62.0	64.5	65.5
ound Power	Cooling	dB(A)	83.0	85.0	86.0	86.0
evel	Heating	dB(A)	85.0	86.0	87.0	88.0
communication	n Cable	No. x mm² (VCTF-SB)	2C x 1.0 ~ 1.5			
	Refrigerant name		R410A	R410A	R410A	R410A
Onfrigorent	Precharged Amount is	n_kg	13.0	13.0	14.0	14.0
Refrigerant	factory	lbs	28.7	28.7	30.9	30.9
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Val
) C		Ø VIII.	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
ower Supply		Ø, V, Hz	3, 400, 60	3, 400, 60	3, 400, 60	3, 400, 60
	ximum Connectable Inc	la au Halea	26	29	32	35

#### TROPICAL MODEL

#### **STANDARD**

ARUN240LTH5 / ARUN260LTH5 ARUN280LTH5 / ARUN300LTH5



HP			24	26	28	30
	Combination Unit		ARUN240LTH5	ARUN260LTH5	ARUN280LTH5	ARUN300LTH5
Model Name	Independent Unit		ARUN120LTH5 ARUN120LTH5	ARUN140LTH5 ARUN120LTH5	ARUN160LTH5 ARUN120LTH5	ARUN160LTH5 ARUN140LTH5
			2	2	2	2
		RT	19.1	20.7	22.3	23.9
	*Cooling (Rated)	kW	67.2	72.8	78.4	84.0
	,	Btu/h	229,300	248,400	267,500	286,600
		RT	17.7	19.3	20.3	21.9
apacity	**Cooling (Rated)	kW	62.4	68.0	71.5	77.1
		Btu/h	212,900	232,000	244,000	263,100
		RT	21.5	23.2	24.9	26.7
	Heating (Rated)	kW	75.6	81.7	87.8	93.9
	ricating (riacca)	Btu/h	257,900	278,800	299,600	320,500
	*Cooling (Rated)	kW	16.00	17.30	18.80	20.10
nput	**Cooling (Rated)	kW	19.08	20.74	22.69	24.35
iput		kW	16.12	17.75	19.42	21.05
	Heating (Rated)					
OD	*Cooling (Rated)	kW	4.20	4.21	4.17	4.18
OP	**Cooling (Rated)	kW	3.27	3.28	3.15	3.17
	Heating (Rated)	kW	4.69	4.60	4.52	4.46
ower Factor	Rated	-	0.93	0.93	0.93	0.93
asing	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
leat Exchange	r		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scro
	Piston Displacement	cm³/rev	62.1 x 2	62.1 x 2	62.1 x 2	62.1 x 2
	Number of Revolution	rev/min	3,600 x 2	3,600 x 2	3,600 x 2	3,600 x 2
ompressor	Motor Output x Number	W x No.	5,300 x 2	5,300 x 2	5,300 x 2	5,300 x 2
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	1,200 x 2	(900 x 2) + (1,200 x 1)	(900 x 2) + (1,200 x 1)	900 x 4
	A. 5. B. (III.)	m³/min	240 x 2	(320 x 1) + (240 x 1)	(320 x 1) + (240 x 1)	320 x 2
an	Air Flow Rate(High)	ft³/min	8,476 x 2	(11,301 x 1) + (8,476 x 1)	(11,301 x 1) + (8,476 x 1)	11,301 x 2
	External Static Pressu	re (Max, Pa)	80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP	TOP
ipe	Liquid Pipe	mm (inch)	15.88 (5/8)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
onnctions	Gas Pipe	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)
		mm	(930 x 1,690 x 760) x 2	(1,240 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1 + (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x
Dimensions (W	/×H×D)	inch	(36-5/8 x 66-17/32 x 29- 29/32) x 2	(48-13/16 x 66-17/32 x 29-29/32) x 1 + (36-5/8 x 66- 17/32 x 29-29/32) x 1	(48-13/16 x 66-17/32 x	(48-13/16 x 66-17/32 x 29-29/32) x 2
		kg	200 x 2	(221 x 1) + (200 x 1)	(221 x 1) + (200 x 1)	221 x 2
let Weight		lbs	441 x 2	(487 x 1) + (441 x 1)	(487 x 1) + (441 x 1)	487 x 2
ound	Cooling	dB(A)	62.0	62.5	62.8	63.3
		dB(A)	63.0	63.5	63.8	64.3
	Cooling	dB(A)	82.0	83.8	84.5	85.5
ound Power evel	Heating	dB(A)	83.0	85.5	86.2	87.5
ommunication			2C x 1.0 ~ 1.5	85.5 2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	87.5 2C x 1.0 ~ 1.5
.ommunicatioi		No. x mm <sup>2</sup> (VCTF-SB)				
	Refrigerant name	Les	R410A	R410A	R410A	R410A
Refrigerant	Precharged Amount in		10.0 + 10.0	13.0 + 10.0	13.0+ 10.0	13.0+ 13.0
	factory	lbs	22.0 + 22.0	28.7 + 22.0	28.7 + 22.0	28.7 + 28.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valv
ower Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
тис. эцррку		-, -,	3, 400, 60	3, 400, 60	3, 400, 60	3, 400, 60
Number of Ma	ximum Connectable Ind	oor Units	39	42	45	49

#### TROPICAL MODEL

#### STANDARD

ARUN320LTH5 / ARUN340LTH5 / ARUN360LTH5



HP			32	34	36
	Combination Unit		ARUN320LTH5	ARUN340LTH5	ARUN360LTH5
Model Name	Independent Unit		ARUN160LTH5 ARUN160LTH5	ARUN180LTH5 ARUN160LTH5	ARUN200LTH5 ARUN160LTH5
	,		2	2	2
		RT	25.4	27.0	28.6
	*Cooling (Rated)	kW	89.6	95.2	100.8
		Btu/h	305,700	324,800	343,900
		RT	22.9	23.8	25.1
Capacity	**Cooling (Rated)	kW	80.6	83.9	88.3
		Btu/h	275,000	286,300	301,300
		RT	28.4	30.3	32.1
	Heating (Rated)	kW	100.0	106.7	113.0
		Btu/h	341,200	364,100	385,600
	*Cooling (Rated)	kW	21.60	22.00	23.80
Input	**Cooling (Rated)	kW	26.30	27.54	28.92
	Heating (Rated)	kW	22.72	23.34	26.88
	*Cooling (Rated)	kW	4.15	4.33	4.24
COP	**Cooling (Rated)	kW	3.06	3.05	3.05
	Heating (Rated)	kW	4.40	4.57	4.20
Power Factor	Rated	-	0.93	0.93	0.93
Casing	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchange	er		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement cm³/rev		62.1 x 2	(62.1 x 2) + (43.8 x 1)	62.1 x 3
	Number of Revolution rev/min		3,600 x 2	3,600 x 3	3,600 x 3
Compressor	Motor Output x Number  W x No.		5,300 x 2	(5,300 x 2) + (4,200 x 1)	5,300 x 3
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 4	900 x 4	900 x 4
	A: EL D. (U. 1)	m³/min	320 x 2	320 x 2	320 x 2
Fan	Air Flow Rate(High)	ft³/min	11,301 x 2	11,301 x 2	11,301 x 2
	External Static Pressu	ire (Max, Pa)	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe	Liquid Pipe	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Connctions	Gas Pipe	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	41.3 (1-5/8)
Dimensions (M	/ <sub>2</sub>     <sub>2</sub>   D)	mm	(1,240 x 1,690 x 760) x 2	(1,240 x 1,690 x 760) x 2	(1,240 x1,690 x 760) x 2
Dimensions (W	V X FI X D)	inch	(48-13/16 x 66-17/32 x 29-29/32) x 2	(48-13/16 x 66-17/32 x 29-29/32) x 2	(48-13/16 x 66-17/32 x 29-29/32) x 2
Not Majaht		kg	221 x 2	(261 x 1) + (221 x 1)	(281 x 1) + (221 x 1)
Net Weight		lbs	487 x 2	(575 x 1) + (487 x 1)	(619 x 1) + (487 x 1)
Sound	Cooling	dB(A)	63.5	63.8	64.3
Pressure Level	Heating	dB(A)	64.5	64.8	66.3
Sound Power	Cooling	dB(A)	86.0	87.1	87.8
Level	Heating	dB(A)	88.0	88.5	89.1
Communication	n Cable	No. x mm <sup>2</sup> (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
D. C	Precharged Amount in	kg kg	13.0 + 13.0	13.0 + 13.0	14.0 + 13.0
Refrigerant	factory	lbs	28.7 + 28.7	28.7 + 28.7	30.9 + 28.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
		~	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 400, 60	3, 400, 60	3, 400, 60

#### TROPICAL MODEL STANDARD

ARUN380LTH5 / ARUN400LTH5 / ARUN420LTH5



HP			38	40	42
	Combination Unit		ARUN380LTH5	ARUN400LTH5	ARUN420LTH5
Model Name	Independent Unit		ARUN220LTH5 ARUN160LTH5	ARUN200LTH5 ARUN200LTH5	ARUN220LTH5 ARUN200LTH5
			2	2	2
		RT	30.2	31.8	33.4
	*Cooling (Rated)	kW	106.4	112.0	117.6
		Btu/h	363,000	382,100	401,300
		RT	25.5	27.3	27.7
Capacity	**Cooling (Rated)	kW	89.9	96.0	97.6
, ,	3、 /	Btu/h	306,600	327,600	332,900
		RT	33.9	35.8	37.6
	Heating (Rated)	kW	119.3	126.0	132.3
	ricating (natea)	Btu/h	407,100	429,900	451,400
	*Cooling (Rated)	kW	25.64	26.00	27.84
nput	**Cooling (Rated)	kW	29.87	31.54	32.49
прис					
	Heating (Rated)	kW	28.90	31.04	33.06
COD	*Cooling (Rated)	kW	4.15	4.31	4.22
COP	**Cooling (Rated)	kW	3.01	3.04	3.00
	Heating (Rated)	kW	4.13	4.06	4.00
Power Factor	Rated	-	0.93	0.93	0.93
Casing	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchange	er		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement cm³/rev		62.1 x 3	62.1 x 4	62.1 x 4
	Number of Revolution rev/min		3,600 x 3	3,600 x 4	3,600 x 4
Compressor	Motor Output x Number	W x No.	5,300 x 3	5,300 x 4	5,300 x 4
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 4	900 x 4	900 x 4
	A: EL D. (III.I.)	m³/min	320 x 2	320 x 2	320 x 2
Fan	Air Flow Rate(High)	ft³/min	11,301 x 2	11,301 x 2	11,301 x 2
	External Static Press	ure (Max, Pa)	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe	Liquid Pipe	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Connctions	Gas Pipe	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)
		mm	(1,240 x1,690 x 760) x 2	(1,240 ×1,690 × 760) × 2	(1,240 x1,690 x 760) x 2
Dimensions (W	/xHxD)	inch	(48-13/16 x 66-17/32 x 29-29/32) x 2		, , , , ,
		kg	(281 x 1) + (221 x 1)	281 x 2	281 x 2
Vet Weight		lbs	(619 x 1) + (487 x 1)	619 x 2	619 x 2
c 1	Cooling	dB(A)	66.0	65.0	66.4
Sound Pressure Level		dB(A)	67.0	67.5	68.0
		dB(A)	87.8	89.0	89.0
Sound Power Level	Cooling				
	Heating	dB(A)	89.8	90.0	90.5
Communication		No. x mm <sup>2</sup> (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 i		14.0 + 13.0	14.0 + 14.0	14.0 + 14.0
	factory	lbs	30.9 + 28.7	30.9 + 30.9	30.9 + 30.9
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
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	ximum Connectable Inc	door Units	61	64	64

#### TROPICAL MODEL

#### **STANDARD**

ARUN440LTH5 / ARUN460LTH5 / ARUN480LTH5



HP			44	46	48
	Combination Unit		ARUN440LTH5	ARUN460LTH5	ARUN480LTH5
Model Name	Independent Unit		ARUN220LTH5 ARUN220LTH5	ARUN160LTH5 ARUN160LTH5 ARUN140LTH5	ARUN160LTH5 ARUN160LTH5 ARUN160LTH5
			2	3	3
		RT	35.0	36.6	38.2
	*Cooling (Rated)	kW	123.2	128.8	134.4
		Btu/h	420,400	439,500	458,600
		RT	28.2	33.3	34.3
Capacity	**Cooling (Rated)	kW	99.2	117.4	120.9
		Btu/h	338,200	400,600	412,500
		RT	39.4	40.9	42.6
	Heating (Rated)	kW	138.6	143.9	150.0
	, , , , , , , , , , , , , , , , , , ,	Btu/h	472,900	491,000	511,800
	*Cooling (Rated)	kW	29.68	30.90	32.40
Input	**Cooling (Rated)	kW	33.44	37.50	39.45
·	Heating (Rated)	kW	35.08	32.41	34.08
	*Cooling (Rated)	kW	4.15	4.17	4.15
COP	**Cooling (Rated)	kW	2.97	3.13	3.06
	Heating (Rated)	kW	3.95	4.44	4.40
Power Factor	Rated	-	0.93	0.93	0.93
Casing	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchange			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Treat Exterioring	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement cm³/rev		62.1 x 4	62.1 x 3	62.1 x 3
	Number of Revolution rev/min		3,600 x 4	3,600 x 3	3,600 x 3
Compressor	Motor Output x Number	W x No.	5,300 x 4	5,300 x 3	5,300 x 3
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 4	900 x 6	900 x 6
	A. F. B. (11.1)	m³/min	320 x 2	320 x 3	320 x 3
Fan	Air Flow Rate(High)	ft³/min	1,1301 x2	11,301 x 3	11,301 x 3
	External Static Pressu	ıre (Max, Pa)	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe	Liquid Pipe	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Connctions	Gas Pipe	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)
D		mm	(1,240 x1,690 x 760) x 2	(1,240 x1,690 x 760) x 3	(1,240 x1,690 x 760) x 3
Dimensions (W	/ x H x D)	inch	(48-13/16 x 66-17/32 x 29-29/32) x 2	(48-13/16 x 66-17/32 x 29-29/32) x 3	(48-13/16 x 66-17/32 x 29-29/32) x 3
		kg	281 x 2	221 x 3	221 x 3
Net Weight		lbs	619 x 2	487 x 3	487 x 3
Sound	Cooling	dB(A)	67.5	65.1	65.3
Pressure Level	Heating	dB(A)	68.5	66.1	66.3
Sound Power	Cooling	dB(A)	89.0	87.5	87.8
Level	Heating	dB(A)	91.0	89.5	89.8
Communication		No. x mm² (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant name	(12.1.00)	R410A	R410A	R410A
		, ka	14.0 + 14.0	13.0 + 13.0 + 13.0	13.0 + 13.0 + 13.0
Refrigerant	Precharged Amount in factory	lbs	30.9 + 30.9	28.7 + 28.7 + 28.7	28.7 + 28.7 + 28.7
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
	Control		3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 400, 60	3, 400, 60	3, 400, 60
Number of Ma	ximum Connectable Ind	loor I Inits	5, 400, 00	5, 400, 60	5, 400, 00
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STANDARD

ARUN500LTH5 / ARUN520LTH5 / ARUN540LTH5



HP			50	52	54
	Combination Unit		ARUN500LTH5	ARUN520LTH5	ARUN540LTH5
Model Name	Independent Unit		ARUN180LTH5 ARUN160LTH5 ARUN160LTH5	ARUN200LTH5 ARUN160LTH5 ARUN160LTH5	ARUN220LTH5 ARUN160LTH5 ARUN160LTH5
			3	3	3
		RT	39.8	41.4	42.9
	*Cooling (Rated)	kW	140.0	145.6	151.2
		Btu/h	477,700	496,800	515,900
		RT	35.3	36.5	37.0
Capacity	**Cooling (Rated)	kW	124.2	128.6	130.2
		Btu/h	423,800	438,800	444,200
		RT	44.5	46.3	48.1
	Heating (Rated)	kW	156.7	163.0	169.3
		Btu/h	534,700	556,200	577,700
	*Cooling (Rated)	kW	32.80	34.60	36.44
Input	**Cooling (Rated)	kW	40.69	42.07	43.02
	Heating (Rated)	kW	34.70	38.24	40.26
	*Cooling (Rated)	kW	4.27	4.21	4.15
COP	**Cooling (Rated)	kW	3.05	3.06	3.03
	Heating (Rated)	kW	4.52	4.26	4.21
Power Factor	Rated	-	0.93	0.93	0.93
Casing	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchange	r		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement cm³/rev		(62.1 x 3) + (43.8 x 1)	62.1 x 4	62.1 x 4
	Number of Revolution rev/min		3,600 x 4	3,600 x 4	3,600 x 4
Compressor	Motor Output x Number	W x No.	(5,300 x 3) + (4,200 x 1)	5,300 x 4	5,300 x 4
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 6	900 x 6	900 x 6
_	Air Flow Rate(High)	m³/min	320 x 3	320 x 3	320 x 3
Fan	All Flow Race(Flight)	ft³/min	11,301 x 3	11,301 x 3	11,301 x 3
	External Static Pressu	ıre (Max, Pa)	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe	Liquid Pipe	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Connctions	Gas Pipe	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)
Dimensions (W	( v H v D)	mm	(1,240 x1,690 x 760) x 3	(1,240 x1,690 x 760) x 3	(1,240 x1,690 x 760) x 3
Difficilisions (**		inch	(48-13/16 x 66-17/32 x 29-29/32) x 3	(48-13/16 x 66-17/32 x 29-29/32) x 3	(48-13/16 x 66-17/32 x 29-29/32) x 3
Net Weight		kg	(261 x 1) + (221 x 2)	(281 x 1) + (221 x 2)	(281 x 1) + (221 x 2)
		lbs	(575 x 1) + (487 x 2)	(619 x 1) + (487 x 2)	(619 x 1) + (487 x 2)
Sound	Cooling	dB(A)	65.4	65.8	67.0
Pressure Level	Heating	dB(A)	66.4	67.5	68.0
Sound Power	Cooling	dB(A)	88.5	89.0	89.0
Level	Heating	dB(A)	90.1	90.5	91.0
Communication	n Cable	No. x mm <sup>2</sup> (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 is	n kg	13.0 + 13.0 + 13.0	14.0 + 13.0 + 13.0	14.0 + 13.0 + 13.0
Remgerant	factory	lbs	28.7 + 28.7 + 28.7	30.9 + 28.7 + 28.7	30.9 + 28.7 + 28.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø V Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
ower supply		Ø, V, Hz	3, 400, 60	3, 400, 60	3, 400, 60
Number of Max	ximum Connectable Inc	door Units	64	64	64

#### TROPICAL MODEL

#### STANDARD

ARUN560LTH5 / ARUN580LTH5 / ARUN600LTH5



НР			56	58	60
	Combination Unit		ARUN560LTH5	ARUN580LTH5	ARUN600LTH5
Model Name	Independent Unit		ARUN200LTH5 ARUN200LTH5 ARUN160LTH5	ARUN220LTH5 ARUN200LTH5 ARUN160LTH5	ARUN220LTH5 ARUN220LTH5 ARUN160LTH5
			3	3	3
		RT	44.5	46.1	47.7
	*Cooling (Rated)	kW	156.8	162.4	168.0
		Btu/h	535,000	554,100	573,200
		RT	38.7	39.2	39.6
Capacity	**Cooling (Rated)	kW	136.3	137.9	139.5
		Btu/h	465,100	470,500	476,000
		RT	50.0	51.8	53.6
	Heating (Rated)	kW	176.0	182.3	188.6
		Btu/h	600,500	622,000	643,500
	*Cooling (Rated)	kW	36.80	38.64	40.48
Input	**Cooling (Rated)	kW	44.69	45.64	46.59
	Heating (Rated)	kW	42.40	44.42	46.44
	*Cooling (Rated)	kW	4.26	4.20	4.15
COP	**Cooling (Rated)	kW	3.05	3.02	2.99
	Heating (Rated)	kW	4.15	4.10	4.06
Power Factor	Rated	-	0.93	0.93	0.93
Casing	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchange	er		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	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
	Number of Revolution	rev/min	3,600 x 5	3,600 x 5	3,600 x 5
Compressor	Motor Output x Number	W x No.	5,300 x 5	5,300 x 5	5,300 x 5
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 6	900 x 6	900 x 6
F	Air Flow Rate(High)	m³/min	320 x 3	320 x 3	320 x 3
Fan	- The recoverage of the recove	ft³/min	11,301 x 3	11,301 x 3	11,301 x 3
	External Static Pressure (Max, Pa)		80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	ТОР
Pipe	Liquid Pipe	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
Connctions	Gas Pipe	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)
Dimensions (V	/ x H x D)	mm	(1,240 x1,690 x 760) x 3	(1,240 x1,690 x 760) x 3	(1,240 x 1,690 x 760) x 3
5 (1		inch	(48-13/16 x 66-17/32 x 29-29/32) x 3	(48-13/16 x 66-17/32 x 29-29/32) x 3	(48-13/16 x 66-17/32 x 29-29/32) x 3
Net Weight		kg	(281 x 2) + (221 x 1)	(281 x 2) + (221 x 1)	(281 x 2) + (221 x 1)
		lbs	(619 x 2) + (487 x 1)	(619 x 2) + (487 x 1)	(619 x 2) + (487 x 1)
Sound	Cooling	dB(A)	66.3	67.4	68.3
Pressure Level	Heating	dB(A)	68.5	68.9	69.3
Sound Power	Cooling	dB(A)	90.0	90.0	90.0
Level	Heating	dB(A)	91.2	91.6	92.0
Communicatio	n Cable	No. x mm <sup>2</sup> (VCTF-SB)		2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant name		R410A	R410A	R410A
Refrigerant	Precharged Amount in	kg kg	14.0 + 14.0 + 13.0	14.0 + 14.0 + 13.0	14.0 + 14.0 + 13.0
Herrigeranic	factory	lbs	30.9 + 30.9 + 28.7	30.9 + 30.9 + 28.7	30.9 + 30.9 + 28.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
1 Ower Supply		D, V, 112	3, 400, 60	3, 400, 60	3, 400, 60
Number of Ma	ximum Connectable Ind	oor Units	64	64	64

#### TROPICAL MODEL

**STANDARD** 

ARUN620LTH5 / ARUN640LTH5 / ARUN660LTH5



HP			62	64	66
	Combination Unit		ARUN620LTH5	ARUN640LTH5	ARUN660LTH5
Model Name	Independent Unit		ARUN220LTH5 ARUN200LTH5 ARUN200LTH5	ARUN220LTH5 ARUN220LTH5 ARUN200LTH5	ARUN220LTH5 ARUN220LTH5 ARUN220LTH5
			3	3	3
		RT	49.3	50.9	52.5
	*Cooling (Rated)	kW	173.6	179.2	184.8
		Btu/h	592,300	611,400	630,500
		RT	41.4	41.8	42.3
Capacity	**Cooling (Rated)	kW	145.6	147.2	148.8
		Btu/h	496,800	502,200	507,700
		RT	55.5	57.3	59.0
	Heating (Rated)	kW	195.3	201.6	207.9
		Btu/h	666,400	687,900	709,400
	*Cooling (Rated)	kW	40.84	42.68	44.52
Input	**Cooling (Rated)	kW	48.26	49.21	50.16
	Heating (Rated)	kW	48.58	50.60	52.62
	*Cooling (Rated)	kW	4.25	4.20	4.15
COP	**Cooling (Rated)	kW	3.02	2.99	2.97
	Heating (Rated)	kW	4.02	3.98	3.95
Power Factor	Rated	-	0.93	0.93	0.93
Casing	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchange	r		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	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
	Number of Revolution rev/min		3,600 x 6	3,600 x 6	3,600 x 6
Compressor	Motor Output x Number	W x No.	5,300 x 6	5,300 x 6	5,300 x 6
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	900 x 6	900 x 6	900 x 6
_	Air Flow Rate(High)	m³/min	320 x 3	320 x 3	320 x 3
Fan	All Flow Rate(Flight)	ft³/min	11,301 x 3	11,301 x 3	11,301 x 3
	External Static Pressu	ıre (Max, Pa)	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe	Liquid Pipe	mm (inch)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)
Connctions	Gas Pipe	mm (inch)	44.5 (1-3/4)	44.5 (1-3/4)	53.98 (2-1/8)
Dimensions (W	/ v H v D)	mm	(1,240 x 1,690 x 760) x 3	(1,240 x 1,690 x 760) x 3	(1,240 x 1,690 x 760) x 3
Difficitions (VV		inch	(48-13/16 x 66-17/32 x 29-29/32) x 3	(48-13/16 x 66-17/32 x 29-29/32) x 3	(48-13/16 x 66-17/32 x 29-29/32) x 3
Not Weight		kg	281 x 3	281 x 3	281 x 3
Net Weight		lbs	619 x 3	619 x 3	619 x 3
Sound	Cooling	dB(A)	67.8	68.6	69.3
Pressure Level	Heating	dB(A)	69.6	70.0	70.3
Sound Power	Cooling	dB(A)	90.8	90.8	90.8
Level	Heating	dB(A)	92.1	92.5	92.8
Communication	n Cable	No. x mm <sup>2</sup> (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	ı kg	14.0 + 14.0 + 14.0	14.0 + 14.0 + 14.0	14.0 + 14.0 + 14.0
Reiligerant	factory	lbs	30.9 + 30.9 + 30.9	30.9 + 30.9 + 30.9	30.9 + 30.9 + 30.9
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Dawar Court		Ø VIII-	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 400, 60	3, 400, 60	3, 400, 60
				64	64

#### NOTE

- 1. Capacities are based on the following conditions (ISO 15042)
- Cooling Temperature :
- \*Cooling (T1) : Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F)
- \*\*Cooling (T3) : Indoor Temperature 29°C(84.2°F) DB/19°C(66.2°F) WB

  Outdoor Temperature 46°C(114.8°F) DB/24°C(75.2°F) WB
- Heating Temperature :
- Indoor 20°C(68°F) DB / 15°C(59°F) WB
- Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
- Piping Length : Interconnected Pipe Length = 7.5m
- Height difference between outdoor unit and indoor unit: 0m
- 2. The Maximum combination ratio is 130%.
- 3. 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.
- 4. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
- 5. Power factor could vary less than ±1% according to the operating conditions.
- 6. Due to our policy of innovation some specifications may be changed without notification.



Suitable for residences and small offices





#### **Customer Benefits**

- Energy saving
- High reliability
- Improved user convenience

#### **CONVENIENT PIPE DIRECTION DESIGN**

#### Free Design & Installation



Sufficient pipes length limitation in Design and Installation of immense variety of building.

#### **R1**Compressor<sup>™</sup>

#### High-Efficiency & Reliability

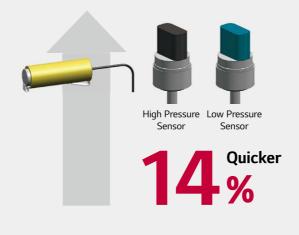


Revolutionary Scroll Compressor is applied for high-efficiency and reliability. This type of compressor is more advanced compared to the conventional one.

#### **SMART CONTROL**

#### **Accurate and Easy Control**

#### Temperature + Pressure Control



Pressure Control applied for smart, quick, and precise responds of temperature that user requests.

#### **BIOMIMETIC FAN**

#### **Operation Noise Reduction**

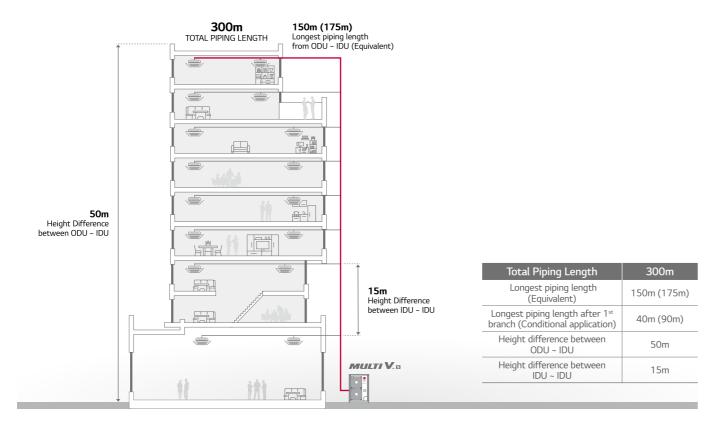




#### Compact model (Size 40%↓, Weight 25%↓)

With biomimetic fan design newly developed fan blows higher air volume also operating noise is decreased. This technology enables a highly efficient compact model.

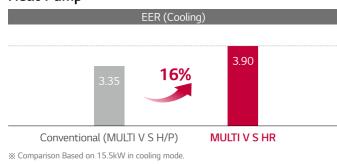
#### **Piping Length**



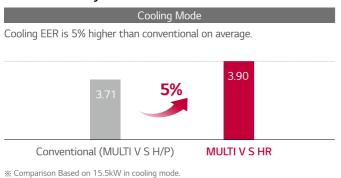
#### **EER / COP / Part load**

Saving Energy Cost with High Efficient Product

#### **Heat Pump**

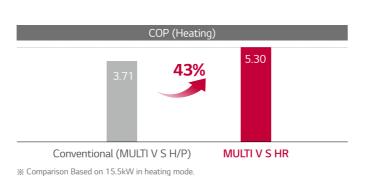






\* Comparison Based on 15.5kW in heating mode

Conventional (MULTI V S H/P)



# Heating COP is 5% higher than conventional on average. 5%

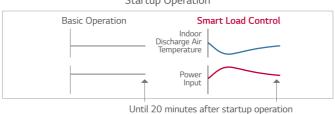
MULTI V S HR

**Smart Load Control Applied** 

Increase comfortable sensation and Max. 23% energy saving thanks to MULTI V load control

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





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

Max. 10% Energy saving



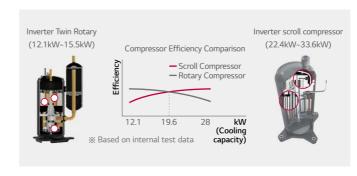


Max. 13% Energy saving

- \* How to set up : By dip switch in outdoor unit (Referred to Product Data Book) Factory
- \* ESEER(European seasonal energy efficiency Ratio) conditions based on 15.5kw unit
- 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 (Temparature & humidity) smart load control is possible with Remote controller PTEMTB100 (White) /PREMTBB10 (Black)

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

Adapted High Efficient 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.

#### Twin Rotary Rotor

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

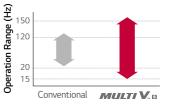
#### Surface Coating

Surface coating of outstanding abrasion resistance property on vane and crank shaft.

#### **Inverter Scroll Compressor**

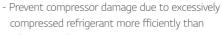
#### World Best Class Compressor Speed

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



#### 6 By-pass Valve

Compressor reliability is maximized with 6 By-pass Valve



4 by-pass valve

#### **Direct Oil Injection**

- Eliminate suction refrigerant gas heat loss through direct oil injection into compression chamber (efficiency increases)
- Reliability increase due to proper oil amount supply

#### Scroll Profile

- The enhanced reliability by increasing the thickness of scroll central part within largest pressure
- Efficiency increases by expanding 96% bypass area and 17% improved volume ratio by non uniform scroll thickness

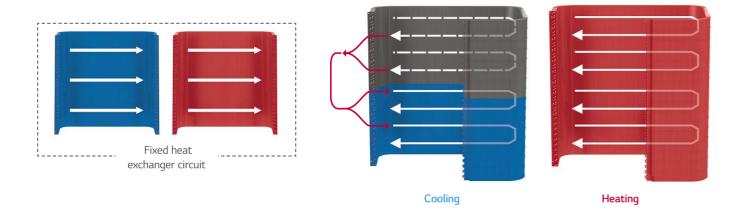




#### **Optimal Heat Exchanger**

Maximize Efficiency according to different Heat Exchanger path by cooling and heating (LG's own technology)

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

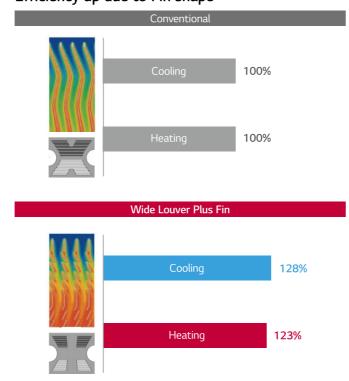


Number of circuit

# Efficiency performance Heating Cooling

Previous Design (Fixed)

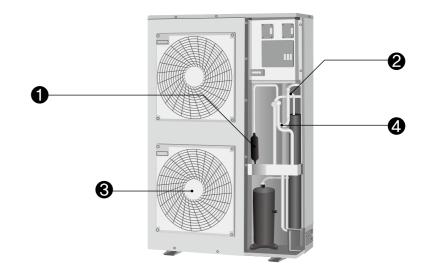
#### Efficiency up due to Fin shape



#### **High Reliability of Refrigerant Components**

Superior Performance and Strong Durable Components are developed by LG's technologies

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



#### Cyclonic Oil Separator

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



#### **8** BLDC Fan Motor

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



# Motor Motor Speed (RPM)

#### Large Volume Accumulator

- Improved reliability by adopting the large volume accumulator (38% volume up compared to conventional).
- Prevents the liquid refrigerant entering the compressor suction.
- Maximize efficiency by optimal amount of refrigerant.
- Protect compressor break down and Increase life time.

#### 4 Double Sub-cool Interchanger

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





Double Sub-cool Interchanger

#### **Smart Control**

Pressure Control applied for smart, quick, and precise responds of temperature that user requests

#### Temperature + Pressure Control

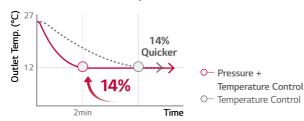
Senses and controls pressure directly using pressure sensor for faster and more exact response to load variation.





#### Quick Operating Response

Pressure control takes up to 14% less time in cooling mode, to reach the desired temperature. The indoor environment can be controlled more accurately and more comfortable.



※ Specifications may vary for each model

#### Heat Exchanger with Ocean Black Fin for Corrosion Resistance

Strong Durability against high salinity and heavily polluted air

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



Ocean Black Fin

#### Corrosion Resistance Proven by Certified Tests

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

#### Certified protection





Condition of salt spray test

Temperature	35℃				
Mist of 5% sodium chloride solution					

#### Condition of gas exposure test

R.H.	NO <sub>2</sub>	SO <sub>2</sub>
95%	10 x 10 <sup>-5</sup>	5 x 10 <sup>-6</sup>

#### **Enhanced Coating Layers**

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

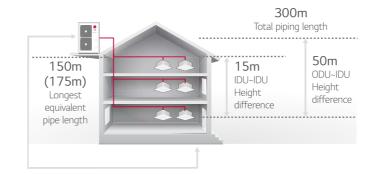


#### **Sufficient Pipe Length Limit**

Sufficient pipes length limitation in Design and Installation of immense variety of building

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

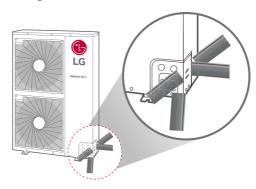
#### Piping Capabilities



#### 4 Way Piping

Free design and installation by 4 way piping

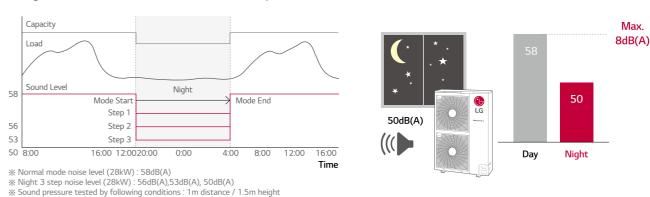
At night mode, noise reduced maximum 14% compared to normal mode.



#### **Low Noise Operation**

Free from noise at any time with low noise operation function

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



#### **Biomimetic Fan**

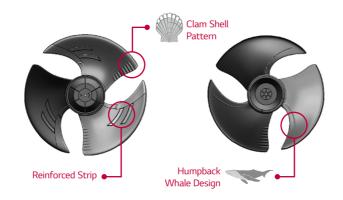
With biomimetic fan design, newly developed fan blows higher air volume, also operating noise is decreased. This technology enables a highly efficient compact model.

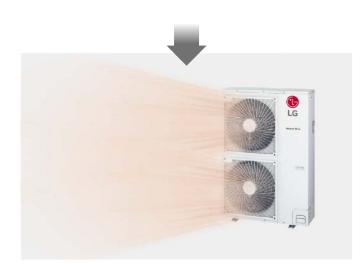
- General fan design
- Sound pressure level 53.1dB(A) (110CMM / 2 fan)
- Max. Air flow up to 60 CMM (800RPM / 124W Motor x 1EA)

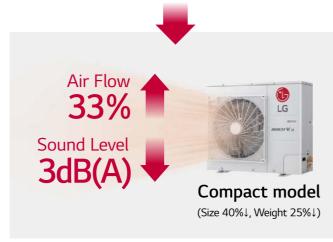
#### New

- Biomimetic fan design
- Sound pressure level 49.6dB(A) (110CMM / 2 fan)
- Max. Air flow up to 86CMM\* (1,000RPM / 200W Motor x 1EA)









\* The value is based on 5,6HP model.

#### Fan Technology and RPM Control

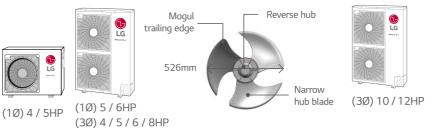
External static pressure control for outdoor unit fan to adapt more flexibly to various installation conditions of outdoor units

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

#### Fan Technology

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

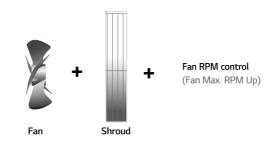
Super cannon fan increases the air volume in 50CMM and the noise level is decreased by 4dB(A).





#### Fan RPM Control

Flow of air has straightness due to fan shroud and Fan RPM control even in high-rise building.





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

#### **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



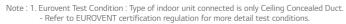


#### **HEAT PUMP**

ARUN040GSS0 / ARUN050GSL0



НР			4	5
Model Name	Combination Unit		ARUN040GSS0	ARUN050GSL0
C : (D : 1)	Cooling	kW	12.1	14.0
Capacity (Rated)	Heating	kW	12.5	15.0
/5	Cooling	kW	3.78	4.38
Input (Rated)	Heating	kW	2.10	2.65
EER			3.20	3.20
COP			5.94	5.66
	Туре		BLDC Inverter Twin Rotary	BLDC Inverter Twin Rotary
	Piston Displacement	cm³/rev	44.2	44
Compressor	Motor Output	VV	4,000	4,000
	Starting Method		DC Inverter Starting	DC Inverter Starting
	Туре		Axial Flow Fan	Axial Flow Fan
	Motor Output x Number	W	124 x 1	124 x 1
_	A. E. B. (11.1)	m³/min	60	60
Fan	Air Flow Rate (High)	ft³/min	2,119	2,119
	Drive		DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side
	Liquid	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)
Pipe Connections	Gas	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)
Dimensions (W x H x [	0)	mm	950 x 834 x 330	950 x 834 x 330 73
Net Weight		kg	70	
	Cooling	dB(A)	50	52
Sound Pressure Level	Heating	dB(A)	52	58
	Cooling	dB(A)	72	72
Sound Power Level	Heating dB(A)		75	75
Communication Cable	-	No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant name		R410A	R410A
	Dracharand Amount	kg	1.8	2.4
Defrigerent	Precharged Amount	lbs	4.0	5.3
Refrigerant	GWP		2,087.5	2,087.5
	t-CO <sub>2</sub> eq		3.8	5.0
	Control		Electronic Expansion Valve	Electronic Expansion Valve
D-fri Oil	Туре		FVC68D (PVE)	FVC68D (PVE)
Refrigerant Oil	Charge	сс	1,300	1,300
D 6 1		a v II	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60
Number of Maxmum C	Connectable Indoor Units		8	10



- Refer to EUROVENT website for test values connected Ceiling Cassette type indoors.

- Refer to EUROVENT website for test values connected Ceiling Cassette type indoors.

  2. Performances are based on the following conditions:

   Cooling Temperature: Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB / Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB

   Heating Temperature: Indoor 20°C(68°F) DB / 15°C(59°F) WB / Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB

  3. The maximum combination ratio is 160% (the maximum combination ratio of ARUN050GSL0 is 130%)

  4. Wiring cable size must comply with the applicable local and national codes.

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

  6. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.

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

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



#### **HEAT PUMP**

ARUN050GSS0 / ARUN060GSS0



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



HP			5	6			
Model Name	Combination Unit		ARUN050GSS0	ARUN060GSS0			
Cit- (D-td)	Cooling kW		14.0	15.5			
Capacity (Rated)	Heating	kW	16.0	18.0			
I	Cooling	kW	3.33	3.97			
Input (Rated)	Heating	kW	2.77	3.40			
EER			4.20	3.90			
COP			5.77	5.30			
	Туре		BLDC Inverter Twin Rotary	BLDC Inverter Twin Rotary			
C	Piston Displacement	cm³/rev	44.2	44.2			
Compressor	Motor Output	W	4,000	4,000			
	Starting Method		DC Inverter Starting	DC Inverter Starting			
	Туре		Axial Flow Fan	Axial Flow Fan			
	Motor Output x Number	W	124 x 2	124 x 2			
_	A. 5. B. (11.1)	m³/min	110	110			
Fan	Air Flow Rate (High)	ft³/min	3,885	3,885			
	Drive		DC INVERTER	DC INVERTER			
	Discharge	Side / Top	Side	Side			
	Liquid	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)			
Pipe Connections	Gas	mm (inch)	Ø15.88 (5/8)	Ø19.05 (3/4)			
Dimensions (W x H x D	))	mm	950 x 1,380 x 330	950 x 1,380 x 330			
Net Weight	kg		kg		g 94	94	
	Cooling	dB(A)	51	52			
Sound Pressure Level	Heating	dB(A)	53	54			
	Cooling	dB(A)	72	72			
Sound Power Level	Heating	dB(A)	76	77			
Communication Cable	-	No. x mm <sup>2</sup> (VCTF-SB)	2C × 1.0 ~ 1.5	2C x 1.0 ~ 1.5			
	Refrigerant name		R410A	R410A			
	D	kg	3.0	3.0			
D 61	Precharged Amount	lbs	6.6	6.6			
Refrigerant	GWP		2,087.5	2,087.5			
	t-CO <sub>2</sub> eq		6.3	6.3			
	Control		Electronic Expansion Valve	Electronic Expansion Valve			
D 61	Туре		FVC68D (PVE)	FVC68D (PVE)			
Refrigerant Oil	Charge	CC	1,300	1,300			
	-	~	1, 220 ~ 240, 50	1, 220 ~ 240, 50			
Power Supply	Ø, V, Hz		1, 220, 60	1, 220, 60			
Number of Maymum C	Connectable Indoor Units		10	13			

- 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

  - Heating Temperature: Indoor 20°C(48°F) UB / 15°C(59°F) WB / Outdoor /°C(44.6°F) UB / 6°C(42.8°F) WB

    3. The maximum combination ratio is 160% (the maximum combination ratio of ARUN050GSL0 is 130%)

    4. Wiring cable size must comply with the applicable local and national codes.

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

    6. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.

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

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

#### Non TROPICAL MODEL

#### **HEAT PUMP**

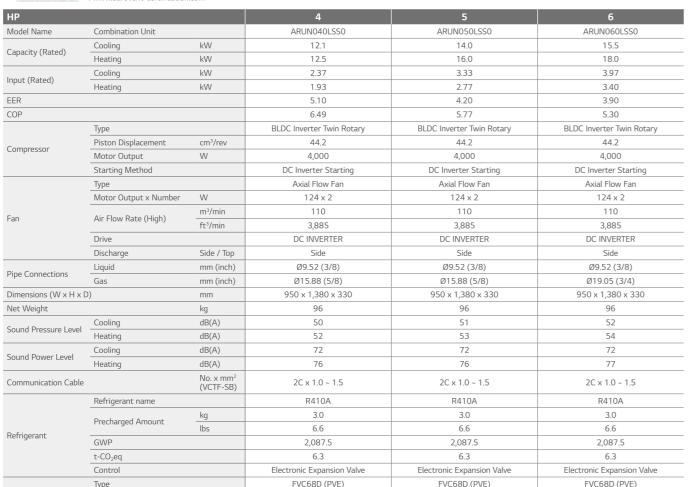
ARUN040LSS0 / ARUN050LSS0 / ARUN060LSS0



Refrigerant Oil

Power Supply





1,300

3, 380 ~ 415, 50

3, 380, 60

FVC68D (PVE)

1,300

3, 380 ~ 415, 50

3, 380, 60

10

FVC68D (PVE)

1,300

3, 380 ~ 415, 50

3, 380, 60

13



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.

CC

Ø, V, Hz

Charge

Number of Maxmum Connectable Indoor Units



#### **HEAT PUMP**

#### ARUN080LSS0 / ARUN100LSS0 / ARUN120LSS0



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





HP			8	10	12
Model Name	Combination Unit		ARUN080LSS0	ARUN100LSS0	ARUN120LSS0
Canacity (Dated)	Cooling	kW	22.4	28.0	33.6
Capacity (Rated)	Heating	kW	24.5	30.6	36.7
	Cooling	kW	8.30	8.75	14.00
Input (Rated)	Heating	kW	6.62	8.12	7.46
EER			2.70	3.20	2.40
COP			3.70	3.77	4.92
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
6	Piston Displacement	cm³/rev	43.8	62.1	62.1
Compressor	Motor Output	W	4,200	5,300	5,300
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Туре		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	124 x 2	250 x 2	250 x 2
F	A: 51 D : (11:1)	m³/min	140	190	190
Fan	Air Flow Rate (High)	ft³/min	4,944	6,710	6,710
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side	Side
	Liquid	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø12.7 (1/2)
Pipe Connections	Gas	mm (inch)	Ø19.05 (3/4)	Ø22.2 (7/8)	Ø28.58 (1 1/8)
Dimensions (W x H x	D)	mm	950 x 1,380 x 330	1,090 x 1,625 x 380	1,090 x 1,625 x 380
Net Weight		kg	115	144	157
	Cooling	dB(A)	57	58	60
Sound Pressure Level	Heating	dB(A)	57	58	60
	Cooling	dB(A)	81	80	81
Sound Power Level	Heating	dB(A)	84	84	85
Communication Cable		No. x mm² (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
	Drocharged Amount	kg	3.5	4.5	6.0
Deficement	Precharged Amount	lbs	7.7	9.9	13.2
Refrigerant	GWP		2,087.5	2,087.5	2,087.5
	t-CO <sub>2</sub> eq		7.3	9.4	12.5
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Defricement Oil	Туре		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
Refrigerant Oil	Charge	СС	2,400	2,600	3,400
Danier Const.		Ø 1/ 11-	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	2 200 60		2 200 60
. оттог оцерту			3, 380, 60	3, 380, 60	3, 380, 60

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

   Cooling Temperature: Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB / Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
- Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB / Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
- 3. The maximum combination ratio is 160% (the maximum combination ratio of ARUN050GSL0 is 130%)
- 4. Wiring cable size must comply with the applicable local and national codes.5. Due to our policy of innovation some specifications may be changed without notification.
- 6. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
- 7. Power factor could vary less than ±1% according to the operating conditions.
  8. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

<sup>-</sup> Refer to EUROVENT website for test values connected Ceiling Cassette type indoors.

<sup>2.</sup> 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

<sup>3.</sup> The maximum combination ratio is 160% (the maximum combination ratio of ARUN050GSL0 is 130%)

<sup>4.</sup> 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.

<sup>6.</sup> Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.

<sup>7.</sup> Power factor could vary less than  $\pm 1\%$  according to the operating conditions.

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



**HEAT RECOVERY** 

ARUB060GSS4



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



HP				6
Model				ARUB060GSS4
Canacity (Dated)	Cooling	Nom	kW	15.5
Capacity (Rated)	Heating	Nom	kW	18.0
D (D-+)	Cooling	Nom	kW	3.97
Power Input (Rated)	Heating	Nom	kW	4.10
EER				3.90
COP				4.39
ESEER				7.15
SLC ESEER				8.05
	Туре			Hermetically Sealed Scroll
6	Piston Displacement		cm³/rev	43.8
Compressor	Motor Output		W	4,200
	Starting Method			DC Inverter Starting
	Туре			Axial Flow Fan
	Motor Output x Number		W	124 x 2
F	4. El . B . (1)		m³/min	110
Fan	Air Flow Rate (High)		ft³/min	3,885
	Drive			DC INVERTER
	Discharge		Side / Top	Side
	Liquid		mm (inch)	Ø9.52 (3/8)
Pipe Connections	Low Pressure Gas		mm (inch)	Ø19.05 (3/4)
	High Pressure Gas		mm (inch)	Ø15.88 (5/8)
Dimensions (W x H x D)			mm	950 x 1,380 x 330
Net Weight			kg	118
6 10 1 1	Cooling		dB(A)	56
Sound Pressure Level	Heating		dB(A)	58
C 1D 1 1	Cooling		dB(A)	69
Sound Power Level	Heating		dB(A)	71
Communication Cable			No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5
	Refrigerant Name			R410A
D. 61	Precharged Amount		kg	3.5
Refrigerant	t-CO <sub>2</sub> eq			7.3
	Control			Electronic Expansion Valve
D 61	Туре			FVC68D (PVE)
Refrigerant Oil	Charge		СС	1,300
			a.u.:	1, 220 ~ 240, 50
			Ø, V, Hz	
Power Supply				1, 220, 60

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.

- Cooling Temperature: Indoor 27°C(80.6°F) DB / 15°C(80.6°F) WB / Outdoor 35°C(44.6°F) DB / 24°C(3.2°F) WB

- Heating Temperature: Indoor 20°C(68°F) DB / 15°C(59°F) WB / Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB

3. The maximum combination ratio is 160% (the maximum combination ratio of ARUN050GSL0 is 130%)

4. Wiring cable size must comply with the applicable local and national codes.

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

6. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.

7. Power factor could vary less than ±1% according to the operating conditions.
8. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

#### TROPICAL MODEL

#### **HEAT PUMP**

ARUN040LSH5 / ARUN050LSH5 /ARUN060LSH0





HP			4	5	6
Model Name	Independent Unit		ARUN040LSH5	ARUN050LSH5	ARUN060LSH0
		RT	3.2	4.0	4.4
	*Cooling - T1 35°C	kW	11.2	14.0	15.5
		Btu/h	38,200	47,800	52,900
		RT	2.7	3.4	3.8
Capacity (Rated)	**Cooling - T3 46°C	kW	9.5	11.9	13.2
, , ,	3	Btu/h	32,400	40,600	45,000
		RT	3.6	4.5	5.1
	Heating	kW	12.5	16.0	18.0
		Btu/h	42,700	54,600	61,400
	*Cooling - T1 35°C	kW	2.60	3.38	3.96
nput (Rated)	**Cooling - T3 46°C	kW	2.80	3.66	4.26
	Heating	kW	2.75	3.52	4.09
	*Cooling - T1 35°C	kW / kW	4.31	4.14	3.91
COP	**Cooling - T3 46°C	kW / kW	3.40	3.25	3.10
	Heating	kW / kW	4.55	4.55	4.40
Power Factor	Rated	-	0.93	0.93	0.93
Casing Color			Warm Gray	Warm Gray	Warm Gray
Heat Exchanger			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
	Type		LG Inverter Scroll	LG Inverter Scroll	DC Inverter Rotary
	Piston Displacement	cm²/rev	31.6	31.6	44.2
	Number of Revolution	rev/min	3.600	3.600	3,600
Compressor	Motor Output x Number	W x No.	3,198 x 1	3,198 x 1	4,000 x 1
	Starting Method		DC Inverter Starting	DC Inverter Starting	Inverter
	Oil Type		FW68D	FW68D	FVC68D (PVE)
	Туре		Axial Flow Fan	Axial Flow Fan	Propeller fan
	Motor Output x Number	W	200 x 1	200 x 1	124 x 2
		m³/min	80	80	110
an	Air Flow Rate (High)	ft³/min	2,824	2,824	3,885
	Drive	10711111	DC Inverter	DC Inverter	DC Inverter
	Discharge	Side / Top	Side	Side	Side
	Liquid	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)
Piping Connections	Gas	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø19.05 (3/4)
		mm	950 x 834 x 330	950 x 834 x 330	950 x 1,380 x 330
Dimensions (W x H x	D)	inch	37-13/32 x 32-27/32 x 13	37-13/32 x 32-27/32 x 13	37.4 x 54.3 x 13.0
		kg	72	72	96
Net Weight		lbs	159	159	212
	Cooling	dB(A)	50	50	52.0
Sound Press Level	Heating	dB(A)	52	52	54.0
Sound Power Level	· · · · · · · · · · · · · · · · · · ·	dB(A)	70 ~74	70 ~74	67
Communication Cable	<u> </u>	No. x mm² (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
John Marie Cable	Refrigerant name	140. X 111111 (VC11 -3D)	R410A	R410A	R410A
	nemgerane name	kg	2.4	2.4	3.0
Refrigerant	Precharged Amount	lbs	5.3	5.3	6.6
	Control	103	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
	Control		3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 400, 60	3, 400, 60	3, 400, 60
	Connectable Indoor Units		3, 400, 00	3, 400, 00	3, 400, 60

Note: 1. Capacities are based on the following conditions (ISO 15042)

- Cooling Temperature: \*Cooling (T1): Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB / Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F)

\*\*Cooling (T3): Indoor Temperature 29°C(84.2°F) DB/19°C(66.2°F) WB / Outdoor Temperature 46°C(114.8°F) DB/24°C(75.2°F) WB

- Heating Temperature: Indoor 20°C(68°F) DB / 15°C(59°F) WB / Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB

- Piping Length: Interconnected Pipe Length = 7.5m

- Height difference between outdoor unit and indoor unit: 0m

2. The Maximum combination ratio is 130%.

The Maximum combination ratio is 130%.
 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 Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
 Power factor could vary less than ±1% according to the operating conditions.
 Due to our policy of innovation some specifications may be changed without notification.

#### TROPICAL MODEL

#### **HEAT PUMP**

ARUN080LSH0 / ARUN100LSH0



HP			8	10
Model Name	Independent Unit		ARUN080LSH0	ARUN100LSH0
		RT	6.4	8.0
	*Cooling - T1 35°C	kW	22.4	28.0
		Btu/h	76,400	95,900
		RT	5.4	7.1
Capacity (Rated)	**Cooling - T3 46°C	kW	19.0	25.0
		Btu/h	64,900	85,300
		RT	7.2	9.0
	Heating	kW	25.2	31.5
		Btu/h	86,000	107,500
	*Cooling - T1 35°C	kW	5.60	7.09
nput (Rated)	**Cooling - T3 46°C	kW	5.94	7.94
	Heating	kW	5.86	7.41
	*Cooling - T1 35°C	kW / kW	4.00	3.95
COP	**Cooling - T3 46°C	kW / kW	3.20	3.15
	Heating	kW / kW	4.30	4.25
Power Factor	Rated	-	0.93	0.93
Casing Color			Warm Gray	Warm Gray
Heat Exchanger			Wide Louver Plus	Wide Louver Plus
·g	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm²/rev	62.1	62.1
	Number of Revolution	rev/min	3,600	3,600
Compressor	Motor Output x Number		5,300 x 1	5,300 x 1
	Starting Method	VV X 140.	Inverter	Inverter
	Oil Type		FVC68D (PVE)	FVC68D (PVE)
	Туре		Propeller fan	Propeller fan
	Motor Output x Number	W	250 x 2	251 x 2
	- Wotor Output X (Variable)	m³/min	190	190
an	Air Flow Rate (High)	ft³/min	6,707	6,707
	Drive	16 /111111	DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side
	Liquid	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)
Piping Connections	Gas	mm (inch)	Ø19.05 (3/4)	Ø22.2 (7/8)
	Uds	mm	(1,090 x 1,625 x 380)	(1,090 x 1,625 x 380)
Dimensions (W x H x	D)	inch	(42.9 x 64.0 x 15.0)	(42.9 x 64.0 x 15.0)
		kg	144	144
Net Weight		lbs	317	317
	Cooling	dB(A)	57.0	58.0
ound Press Level		dB(A)	57.0	58.0
Sound Power Level	Heating		68	69
		dB(A)		
Communication Cable		No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
	Refrigerant name	Lee	R410A	R410A
Refrigerant	Precharged Amount	kg	4.5	4.5
		lbs	9.9	9.9
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50
		. ,	3, 400, 60	3, 400, 60

- Note: 1. Capacities are based on the following conditions (ISO 15042)

   Cooling Temperature: \*Cooling (T1): Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB / Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F)

  \*\*Cooling (T3): Indoor Temperature 29°C(84.2°F) DB/19°C(66.2°F) WB / Outdoor Temperature 46°C(114.8°F) DB/24°C(75.2°F) WB

   Heating Temperature: Indoor 20°C(68°F) DB / 15°C(59°F) WB / Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB

   Piping Length: Interconnected Pipe Length = 7.5m

   Height difference between outdoor unit: and indoor unit: 0m

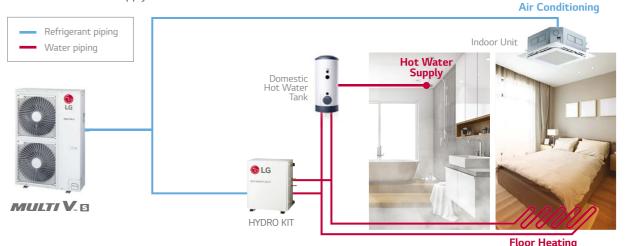
  - 2. The Maximum combination ratio is 130%.
  - 2. The Washington Combination Ratio is 150%.

    3. 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 Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
     Power factor could vary less than ±1% according to the operating conditions.
     Due to our policy of innovation some specifications may be changed without notification.

#### MULTI V S APPLICATION GUIDE

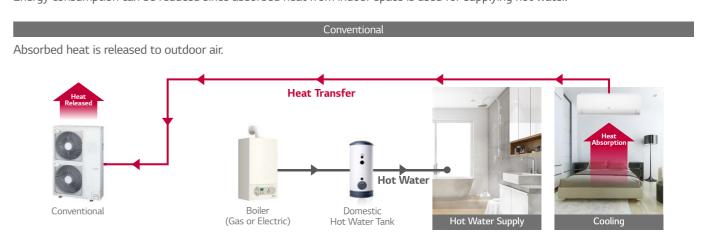
#### **System Diagram**

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



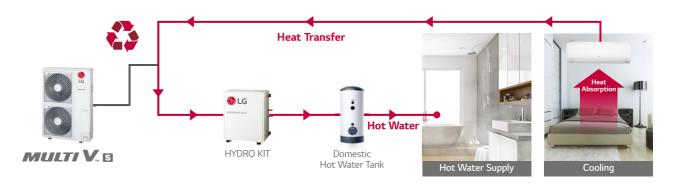
#### **Energy Saving**

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



#### MULTI V S with HYDRO KIT

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



OUTDOOR UNITS FEATURE 102 | 103 **OUTDOOR UNITS** 



#### **Customer Benefits**

- Flexible design & installation
- Space & installation cost saving
- Easy maintenance
- Building permit could be simplified

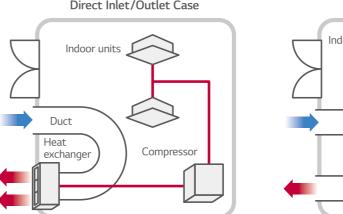
#### **MULTI V MODULAR**

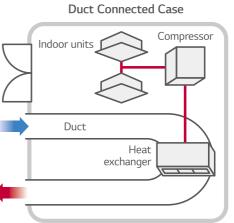
# Bird's-Eye View Max.70m MULTI V

#### High Flexibility of Installation

#### Outdoor unit split by compressor and heat exchanger module

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





#### Lighter & smaller units can make installation much more easier

#### Ease and flexibility of installation

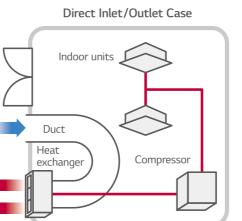
Ease and flexibility of installation thanks to the high static pressure available and adjustable and the reduced weight.

#### Small size

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

#### Regulatory compliance

Regulatory compliance thanks to the 3,600 CMM of exhausted air.



#### **MULTI V MODULAR**

#### **Increased Freedom of Design**

Additional structure installation or ceiling construction isn't required due to improved freedom of design. This makes replacement of the compressor easier, making the service and maintenance of products handy. Moreover, split module provides low noise operation in comparison to the integrated type.



Heat exchanger module can be installed in false ceiling spaces.



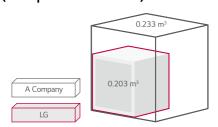


Compressor module can be installed at any place inside.



#### **Space Saving & Convenient Installation**

Volume (Compressor Module)



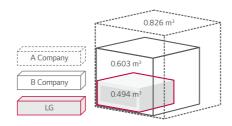
#### E.S.P. (External Static Pressure) Control

up to 30 Pa





#### Volume (Heat Exchanger Module)

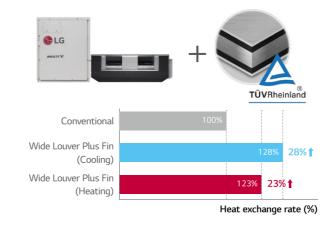


#### High Static Pressure Mod

# up to 157 Pa (Max.)

#### Wide Louver Plus Fin + Corrosion Resistance

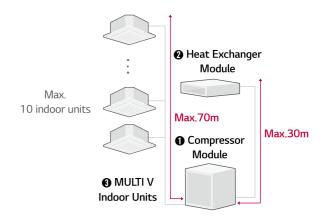
Wide Louver Plus fin technology increases efficiency and heating performance compared to conventional fin.



#### **Module Type**

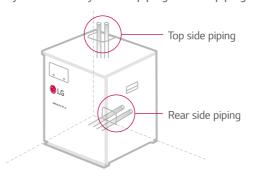
Increased freedom of design

Additional structure installation and ceiling construction isn't required.
 Ease of service (Replacement of the comp.)
 Low noise by module (vs Integrated Type)

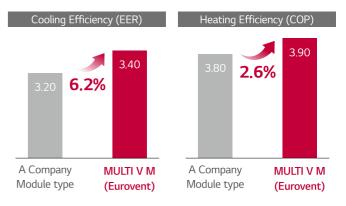


#### Flexible Piping Location

Neat & easy installation by flexible piping location piping.

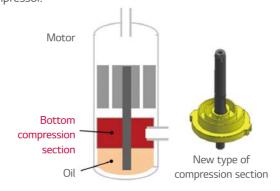


#### Flexible Piping Location



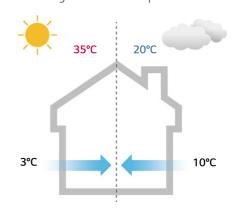
#### **New Type Scroll**

MULTI V M ensures world's best class energy efficiency with innovative technology including the LG's New Type Scroll compressor.



#### **Smart Load Control**

To save operation energy, automatically control the refrigerant temperature according to outdoor temperature.



#### **MULTI V MODULAR**



\* Below spec can be revised until PDB distributed.

HP			5
Model Name	Combination Unit		Compressor Module
		kW	14.0
Capacity	Cooling (Rated)	kcal/h	12,000
		kW	14.0 / 16.0
	Heating (Rated / Max.)	kcal/h	12,000 / 13,800
	Cooling (Rated)	kW	4.12
Input (Rated)	Heating (Rated / Max.)	kW	3.59 / 4.32
EER (Based on Rated capa		100	3.40
COP (Based on Rated capa			3.90
COP (Based on Max. capac			3.70
Power Factor	Rated	_	0.93
Casing Color	nateu	-	
			Morning Gray
Heat Exchanger	T		- Usanosiis Makas Communi
	Type	37	Hermetic Motor Compressor
	Piston Displacement	cm³/rev	31.6
	Number of Revolution	rev/min	3,600
Compressor	Motor Output	W	3,200
	Starting Method		DC Inverter Starting
	Oil Type		FVC68D (PVE)
	Oil Charge		1,000
	Туре		-
	Motor Output x Number	W	-
Fan	Air Flour Date (High)	m³/min	-
Fan	Air Flow Rate (High)	ft³/min	-
	Drive		-
	Discharge Side / Top		-
	Nominal (Rated, Factory Set)	mmAq (Pa)	-
External Static Pressure	Max.	mmAq (Pa)	-
Pipe Connections	Liquid / Gas	mm (inch)	Ø9.52 (3/8) - IDU / Ø15.88 (5/8) - IDU
	· ·	mm	580 x 700 x 500
Dimensions (W x H x D)		inch	22-27/32 x 27-9/16 x 19-11/16
		kg	69
Net Weight		lbs	152
Sound Pressure Level	Cooling / Heating	dB(A)	45 / 45
Souria i ressure Lever	High Pressure Protection	-	High pressure sensor
Protection Devices	Compressor / Fan	_	Over-heat protection
Frotection Devices	Inverter	-	Over-heat protection / Over-current protection
C	lliverter	N	· · · · · ·
Communication Cable	Defricerent Nove	No. x mm <sup>2</sup> (VCTF)	2C x 1.0 ~ 1.5 R410A
	Refrigerant Name	Lea	
D. C.	Precharged Amount	kg	2.0
Refrigerant		lbs	4.4
	t-CO <sub>2</sub> eq		4.2
	Control		
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50
Number of Maximum Con	nectable Indoor Units		10

Note : 1. Eurovent Test Condition : Type of indoor unit connected is only Ceiling Concealed Duct.
- Refer to EUROVENT certification programme for more detail test conditions.

- Refer to EUROVENT certification programme for more detail test conditions.

   Refer to EUROVENT website for test values connected Ceiling Cassette type indoors.

  2. Performances are based on the following conditions:

   Cooling Temperature: Indoor 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor 35°C (95°F) DB / 24°C (75.2°F) WB

   Heating Temperature: Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

   Heat Exchanger Module ~ Compressor Module = 5m

   Compressor Module ~ Indoor Unit = 7.5m

- Compressor Module Indoor Unit = 7.5m
  3. The maximum combination ratio is 130%.
  4. Wiring cable size must comply with the applicable local and national codes.
  5. Due to our policy of innovation some specifications may be changed without notification.
  6. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
  7. Power factor could vary less than ±1% according to the operating conditions.
  8. This product contains Fluorinated greenhouse gases. (R410A, GWP (Global warming potential) = 2087.5)



W. Dolou, appearant he varied until DDD distributed

Eelow spec can be revise	מ מוזמו דטט מוזמו ווטמופע.		
HP			5
Model Name	Combination Unit		Heat Exchanger Module
	Cooling (Rated)	kW	<del>-</del>
Capacity		kcal/h	-
Сарасіту	Heating (Rated / Max.)	kW	-/-
	Heating (Nateu / Iviax.)	kcal/h	-/-
Input (Rated)	Cooling (Rated)	kW	<del>-</del>
iliput (Nateu)	Heating (Rated / Max.)	kW	-/-
EER (Based on Rated capa	city)		-
COP (Based on Rated capa	acity)		-
COP (Based on Max. capac	city)		-
Power Factor	Rated	-	-
Casing Color			Galvanized Steel Plate
Heat Exchanger			Ocean Black Fin (Wide Louver Plus)
	Туре		-
	Piston Displacement	cm³/rev	
	Number of Revolution	rev/min	-
Compressor	Motor Output	W	-
	Starting Method		-
	Oil Type		-
	Oil Charge		-
	Туре		Sirocco Fan
	Motor Output x Number	W	400 x 2
	Air Flow Rate (High)	m³/min	60
Fan		ft³/min	2,119
	Drive		Direct
	Discharge	Side / Top	Side
	Nominal (Rated, Factory Set)	mmAq (Pa)	3 (29)
External Static Pressure	Max.	mmAq (Pa)	16 (157)
Pipe Connections	Liquid / Gas	mm (inch)	Ø12.7 (1/2) - Comp. Module / Ø19.05 (3/4) - Comp. Module
		mm	1,562 x 460 x 688
Dimensions (W x H x D)		inch	61-1/2 x 18-1/8 x 27-3/32
		kg	84
Net Weight		lbs	185
Sound Pressure Level	Cooling / Heating	dB(A)	45 / 45
DOMINIA I TESSUTE LEVEL	High Pressure Protection	-	-
Protection Devices	Compressor / Fan	-	Fan driver overload protector
	Inverter	-	- arranver overteda protector
Communication Cable		No. x mm² (VCTF)	2C x 1.0 ~ 1.5
Comanicación Cabic	Refrigerant Name		= -
	norngerune ivallie	kg	
Pofrigorant	Precharged Amount	lbs	
Refrigerant	+ 00 00	IUS	<u> </u>
	t-CO <sub>2</sub> eq		
Power Supply	Control	Ø VIII-	Electronic Expansion Valve
		Ø, V, Hz	1, 220 ~ 240, 50

Note: 1. Eurovent Test Condition: Type of indoor unit connected is only Ceiling Concealed Duct.
- Refer to EUROVENT certification programme for more detail test conditions.

- Refer to EUROVENT certification programme for more detail test conditions.

   Refer to EUROVENT website for test values connected Ceiling Cassette type indoors.

  2. Performances are based on the following conditions:

   Cooling Temperature: Indoor 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor 35°C (95°F) DB / 24°C (75.2°F) WB

   Heating Temperature: Indoor 20°C (68°F) DB / 15°C (59°F) WB, Outdoor 7°C (44.6°F) DB / 6°C (42.8°F) WB

   Heat Exchanger Module Compressor Module = 5m

   Compressor Module Indoor Unit = 7.5m

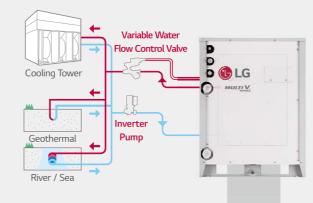
   The principle of the programme of the

- Compressor Module Indoor Unit = 7.5m
  3. The maximum combination ratio is 130%.
  4. Wiring cable size must comply with the applicable local and national codes.
  5. Due to our policy of innovation some specifications may be changed without notification.
  6. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
  7. Power factor could vary less than ±1% according to the operating conditions.
  8. This product contains Fluorinated greenhouse gases. (R410A, GWP (Global warming potential) = 2087.5)



#### VARIABLE WATER FLOW CONTROL

#### Buildings Made Eco-Friendly

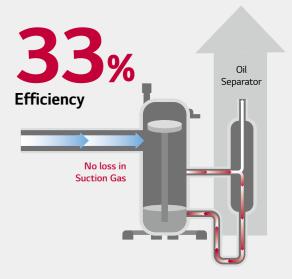


Energy 71 %

LG applied Variable Water Flow Control to optimize water flow control regarding partial cooling or heating load conditions.

#### $HiPOR^{TM}$

## Maximizes Reliability and Efficiency of the Compressor



HiPOR™ technology enables oil to return directly into the compressor, instead of returning through the refrigerant suction pipe. This does not waist energy when oil flows between the separator and the compressor.

#### **LONGEST PIPING LENGTH**

#### Design and Installation of Immense Variety of Building



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

#### **COMPACT SIZE & LIGHT WEIGHT**

### Easy and Unrestricted Installation with Reduced Size and Weight

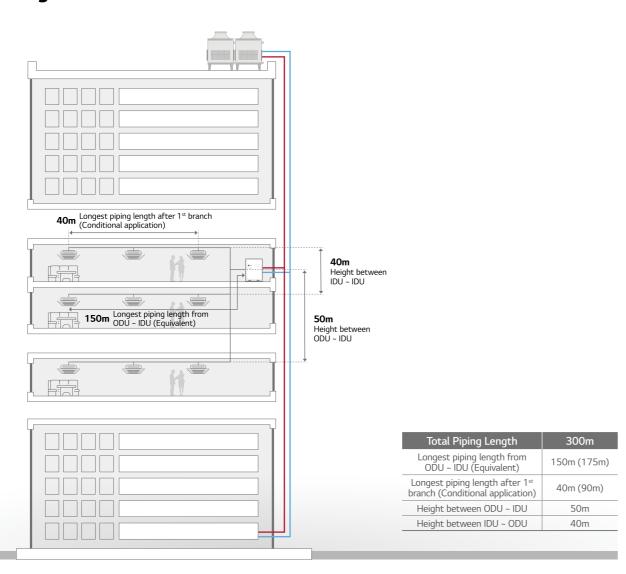
Reduced 61% Reduced 18 weight



LG applied Variable Water Flow Control to optimize water flow control regarding partial cooling or heating load conditions.

- Replacement of Chiller-FCU system

#### **Piping Length**



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

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

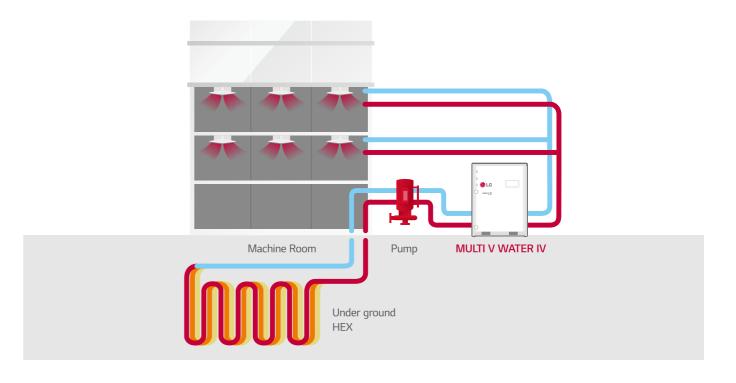


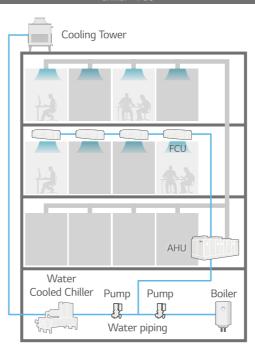
#### MULTI V WATER IV System for Geothermal Applications

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

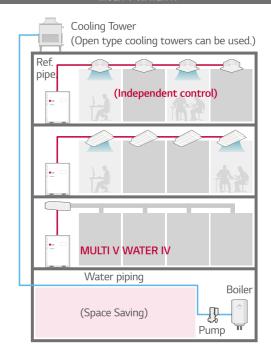
- The Circulating water temperature range is between  $-5^{\circ}$ C  $\sim 45^{\circ}$ C
- Antifreeze should be applied depending on the application.

 $\ensuremath{\mathbb{X}}$  Please contact local LG office for application availability.





Central control



Independent control

#### **Economical, Highly Efficient System**

LG's key technologies are integrated to inverter compressor

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

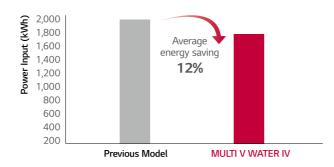


#### Maximum COP



- $\fint \fint \fin$
- \* Indoor temperature : 20°C DB / 15°C WB
- \* Maximum COP Condition : Cooling 40% + Heating 60% operation

#### Economical, Highly Efficient System



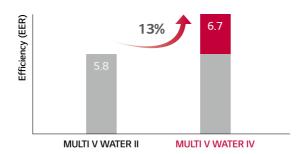
#### LG's 4th Generation Inverter Compressor



- **5%** HEX Optimization
- 2% Cycle Composition Improvement
- Improvement

  1% Inverter Control
- 1% Active Oil Control
- 1% HiPOR™

#### Integrated Part Load Efficiency

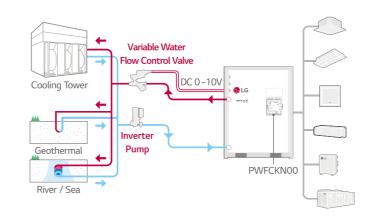


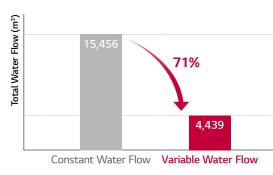
- 6% HEX Optimization
- **4%** Cycle Composition Improvement
- 1% Inverter Control
- 1% Active Oil Control
- 1% HiPOR™

#### Variable Water Flow Control (Option)

Supporting your buildings to become greener

The world's first variable water flow control system for water cooled VRF system. 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, 68,000m<sup>2</sup>
  - 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 (\$)



	5 ye	ears	10 years			
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
- Annual power consumption rate expected to increase by 5%

#### **Largest Capacity**

World's largest capacity makes it easy to apply to large building and large systems

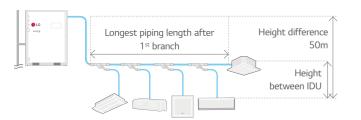
Providing 8 ~ 20HP (22.4 ~ 56kW) with single unit, and up to the world's largest capacity 80HP (224kW) by combination.

HP	8	10	14	20	22	24	28	30	34	40	42 ~ 60	62 ~ 80
kW	22.4	28	39.2	56	61.6	67.2	78.4	84	95.2	112	117.6 ~ 168	173.6 ~ 224
LG						• -					<u> </u>	• • • • • • • • • • • • • • • • • • •
		1 l	Jnit			2 Units					3 Units	4 Units

#### **Longest Piping Length**

Sufficient pipes length limitation in Design and Installation of immense variety of building

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



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

#### **Compact Size**

Significant uptake of construction space that can be used for commercial use or public space as much as possible

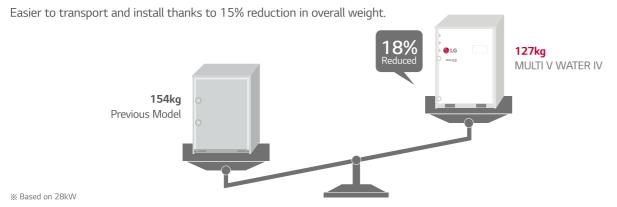
The optimal design of the compact, lightweight outdoor unit enables double stacking, which results in 50% savings in installation space.



\* 112kW, Floor area based

#### **Light Weight**

Nothing or Decrease additional load reinforcement work at building



**OUTDOOR UNITS** 

#### 116 | 117

#### \_\_\_

#### **MULTI V WATER IV**

#### Precaution of Installation

- 1. Do not install the unit at the outdoors. (Otherwise it may cause fire, electric shock and trouble.) Recommended ambient temperature of outdoor unit is between 0 ~ 40°C.
- 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°C 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.')
- 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 flush.
- 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. It is recommended to 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.)
- 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%**.)
- 12. To protect the water cooling type product, you must install a **strainer with 50 mesh** or more on the heat water supply pipe. 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 the refrigerant 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 exchanger.
  - 5) As a result of the damage of the heat exchanger from the freezing, the refrigerant side and the heat water source side will be mixed to make the product unusable.

#### MULTI V WATER IV REFERENCE SITE

#### **Bouygues Challenger**





LG MULTI V WATER Solution with Geothermal Application.









#### Site Information

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

#### **LG Solution**

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

#### **HEAT PUMP**

ARWN080LAS4 / ARWN100LAS4 / ARWN140LAS4 / ARWN200LAS4



НР			8	10	14	20
	Combination Unit		ARWN080LAS4	ARWN100LAS4	ARWN140LAS4	ARWN200LAS4
Model Name	Independent Unit		ARWN080LAS4	ARWN100LAS4	ARWN140LAS4	ARWN200LAS4
0 1:	Cooling	kW	22.4	28.0	39.2	56.0
Capacity	Heating	kW	25.2	31.5	44.1	63.0
	Cooling	kW	3.86	5.09	7.84	11.20
Input	Heating	kW	4.20	5.34	8.17	11.67
Casing Color			Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray , Mornig Gray
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination		(Inverter) x 1	(Inverter) x 1	(Inverter) x 1	(Inverter) x 1
	Piston Displacement	cm³/rev	43.8	43.8	43.8	62.1
Compressor	Number of revolution	rev/min	Inverter 3,600 at 60Hz			
Compressor	Motor Output	kW	4.2	4.2	4.2	5.3
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Oil Charge Amount cc		1,200 + 1,600	1,200 + 1,600	1,200 + 1,600	1,400 + 1,600
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
Heat Exchanger	Maximum Pressure Resistance kgf/cm		45	45	45	45
Heat Exchanger	Head Loss	kPa	10.7	15.8	28.6	30.1
	Rated Water Flow	LPM	77	96	135	192
Temp. range of	Cooling		10°C ~ 45°C (50°F ~ 113°F)			
Circulation water	Heating		-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)
Refrigerant	Liquid Pipes	mm (inch)	9.52 (3/8)	9.52 (3/8)	12.7 (1/2)	12.7 (1/2)
Connecting Pipes	Gas Pipes	mm (inch)	22.2 (7/8)	22.2 (7/8)	25.4 (1)	28.58 (1-1/8)
	Inlet	mm	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)
Water Connecting Pipes	Outlet	mm	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)
		mm	(755 x 500 x 997) x 1			
Dimensions (W x H x D)		inch	(29-23/32 x 39-1/4 x 19-11/16) x 1			
Net Weight		kg	127 x 1	127 x 1	127 x 1	140 x 1
iver vveignt		lbs	280 x 1	280 x 1	280 x 1	309 x 1
Transmission Cable (CVV-	-SB)	mm <sup>2</sup>	1.0 ~ 1.5 x 2C			
	Name		R410A	R410A	R412A	R410A
Refrigerant	Charge Amount	kg	5.8	5.8	5.8	3.0
	Control Device		EEV	EEV	EEV	EEV
Power Supply		Ø, V, Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
т очист эцррцу		D, V, 112	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
Sound Pressure Level	Cooling	dB(A)	47	50	58	54
Journa Fressure Level	Heating	dB(A)	51	53	57	60
Sound Power Level	Cooling	dB(A)	59	62	70	66
Journa i Ower Level	Heating	dB(A)	63	65	69	72

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

#### **HEAT PUMP**

ARWN220LAS4 / ARWN240LAS4 / ARWN280LAS4 / ARWN300LAS4



HP			22	24	28	30	
	Combination Unit		ARWN220LAS4	ARWN240LAS4	ARWN280LAS4	ARWN300LAS4	
Model Name	Independent Unit		ARWN140LAS4 ARWN080LAS4	ARWN140LAS4 ARWN100LAS4	ARWN140LAS4 ARWN140LAS4	ARWN200LAS4 ARWN100LAS4	
Cih.	Cooling	kW	61.6	67.2	78.4	84.0	
Capacity	Heating	kW	69.3	75.6	88.2	94.5	
	Cooling	kW	11.70	12.93	15.68	16.29	
Input	Heating	kW	12.37	13.51	16.34	17.01	
Casing Color			Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination		(Inverter) x 2	(Inverter) x 2	(Inverter) x 2	(Inverter) x 2	
Model Name  Capacity  Input  Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CW-Refrigerant  Power Supply  Sound Pressure Level	Piston Displacement	cm <sup>3</sup> /rev	43.8 + 43.8	43.8 + 43.8	43.8 + 43.8	62.1 + 43.8	
	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	
	Motor Output	kW	4.2+4.2	4.2 + 4.2	4.2 + 4.2	5.3 + 4.2	
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line	
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
	Oil Charge Amount	СС	(1,200 + 1,600) x 2	(1,200 + 1,600) x 2	(1,200 + 1,600) x 2	(1,400 + 1,200) + 1,600 x	
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
emp. range of	Maximum Pressure Resistance	kqf/cm <sup>2</sup>	45	45	45	45	
	Head Loss	kPa	28.6 + 10.7	28.6 + 15.8	28.6 + 28.6	30.1 + 15.8	
	Rated Water Flow	LPM	135 + 77	135 + 96	135 + 135	192 + 96	
Temp. range of	Cooling		10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	
Circulation water	Heating		-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	
Refrigerant	Liquid Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	
Connecting Pipes	Gas Pipes	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	
	Inlet	KW   Warm   Hermer	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	
Capacity  Input  Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CV)  Refrigerant  Power Supply  Sound Pressure Level	Outlet	mm	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	
		Name   Name	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2			
Dimensions (W x H x D)		inch			(29-23/32 x 39-1/4 x 19-11/16) x 2	(29-23/32 x 39-1/4 x 19-11/16) x 2	
		kg	127 x 2	127 x 2	127 x 2	(140 x 1) + (127 x 1)	
Net Weight		lbs	280 x 2	280 x 2	280 x 2	(309 x 1) + (280 x 1)	
Transmission Cable (CVV-	·SB)	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	
	Name		R410A	R410A	R410A	R410A	
Refrigerant	Charge Amount	kg	5.8 + 5.8	5.8 + 5.8	5.8 + 5.8	3.0 + 5.8	
	Control Device		EEV	EEV	EEV	EEV	
			3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	
Power Supply		Ø, V, Hz	· · · · ·	, ,	3, 380, 60	3, 380, 60	
	Cooling	dB(A)			59	55	
Sound Pressure Level	Heating		-		58	61	
	Cooling				72	68	
Sound Power Level	Heating				71	74	

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

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

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

<sup>2.</sup> Capacities are net capacities.

<sup>2.</sup> Capacities are rise capacities.

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

4. 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.)

<sup>\*</sup> This product contains Fluorinated Greenhouse Gases. (R410A)

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

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

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

<sup>2.</sup> Capacities are net capacities.
3. Due to our policy of innovation some specifications may be changed without notification.

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

#### **HEAT PUMP**

ARWN340LAS4 / ARWN400LAS4 / ARWN420LAS4 / ARWN440LAS4



НР			34	40	42	44	
	Combination Unit		ARWN340LAS4	ARWN400LAS4	ARWN420LAS4	ARWN440LAS4	
Model Name	Independent Unit		ARWN200LAS4 ARWN140LAS4	ARWN200LAS4 ARWN200LAS4	ARWN200LAS4 ARWN140LAS4 ARWN080LAS4	ARWN200LAS4 ARWN140LAS4 ARWN100LAS4	
Cit	Cooling	ARV   ARV	95.2	112.0	117.6	123.2	
Capacity	Heating	kW	107.1	126.0	132.3	138.6	
Innut	Cooling	kW	19.04	22.40	22.90	24.13	
прис	Heating	kW	19.84	23.34	24.04	25.18	
Casing Color			Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination		(Inverter) x 2	(Inverter) x 2	(Inverter) x 3	(Inverter) x 3	
	Piston Displacement	cm³/rev	43.8 + 62.1	62.1 + 62.1	62.1 + 43.8 + 43.8	62.1 + 43.8 + 43.8	
	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	
Compressor	Motor Output	kW	4.2 + 5.3	5.3 + 5.3	5.3 + 4.2 + 4.2	5.3 + 4.2 + 4.2	
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line	
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
Model Name  Capacity  Input  Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight	Oil Charge Amount	сс	(1,400 + 1,200) + 1,600 x 2	(1,400 + 1,600) x 2	(1,400 + 1,200 + 1,200) + 1,600 x 3	(1,400 + 1,200 + 1,200) + 1,600 x 3	
Model Name  Capacity  Input  Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CVV-1)  Refrigerant  Power Supply  Sound Pressure Level	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45	45	
	Head Loss	kPa	30.1 + 28.6	30.1 + 30.1	30.1 + 28.6 + 10.7	30.1 + 28.6 + 15.8	
	Rated Water Flow	LPM	192 + 135	192 + 192	192 + 135 + 77	192 + 135 + 96	
Temp. range of	Cooling		10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	
Circulation water	Heating		-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	
Refrigerant	Liquid Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	
Connecting Pipes	Gas Pipes	mm (inch)	34.9 (1-3/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	
	Inlet	mm	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	
Temp. range of Circulation water Refrigerant Connecting Pipes Water Connecting Pipes	Outlet	mm	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	
		mm	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2	OOLAS4 OOLAS4 ARWN100LAS4 ARWN10LAS4 ARWN10LAS4 ARWN100LAS4 ARWN10LAS4 ARW		
Dimensions (W x H x D)		inch	(29-23/32 x 39-1/4 x 19-11/16) x 2	(29-23/32 x 39-1/4 x 19-11/16) x 2			
Net Weight		kg	(140 x 1) + (127 x 1)	140 x 2	(140 x 1) + (127 X 2)	(140 x 1) + (127 X 2)	
		lbs	(309 x 1) + (280 x 1)	309 x 2	(309 x 1) + (280 X 2)	(309 x 1) + (280 X 2)	
Transmission Cable (CVV-	SB)	mm <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	
	Name		R410A	R410A	R410A	R410A	
Refrigerant	Charge Amount	kg	3.0 + 5.8	3.0 + 3.0	3.0 + 5.8 + 5.8	3.0 + 5.8 + 5.8	
	Control Device		EEV	EEV	EEV	EEV	
Power Supply		Ø V Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50			
. ст. опри			3, 380, 60	3, 380, 60			
Sound Pressure Level	Cooling	dB(A)	59	55			
	Heating		61	61			
Sound Power Level	Cooling		72	68			
	Heating	dB(A)	74	74	76	76	

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

#### **HEAT PUMP**

ARWN480LAS4 / ARWN500LAS4 / ARWN540LAS4 / ARWN600LAS4



HP			48	50	54	60	
	Combination Unit		ARWN480LAS4	ARWN500LAS4	ARWN540LAS4	ARWN600LAS4	
Model Name	Independent Unit		ARWN200LAS4 ARWN140LAS4 ARWN140LAS4	ARWN200DAS4 ARWN200DAS4 ARWN100DAS4	ARWN200LAS4 ARWN200LAS4 ARWN140LAS4	ARWN200LAS4 ARWN200LAS4 ARWN200LAS4	
6 :	Cooling	kW	134.4	AS4 ARWN500LAS4  AS4 ARWN200DAS4 AS4 ARWN100DAS4  AS4 ARWN100DAS4  ARWN100DASA  ARWN100DASA  ARWN100DASA  ARWN100DASA  ARWN100DASA  ARWN100DASA  ARWN100DASA  ARWN100DASA  ARW	151.2	168.0	
Capacity	Heating	kW	151.2	157.5	170.1	189.0	
la a cata	Cooling	kW	26.88	27.49	30.24	33.60	
input	Heating	kW	28.01	28.68	31.51	35.01	
Casing Color			Warm Gray, Mornig Gray Warm Gray, Mornig Gray V		Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scrol	
	Combination		(Inverter) x 3	(Inverter) x 3	(Inverter) x 3	(Inverter) x 3	
Capacity Input Casing Color Compressor  Heat Exchanger Temp. range of Circulation water Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight Transmission Cable (CVV: Refrigerant Power Supply  Sound Pressure Level	Piston Displacement	cm³/rev	62.1 + 43.8 + 43.8	62.1 + 62.1 + 43.8	62.1 + 62.1 + 43.8	62.1 + 62.1 + 62.1	
	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	
	Motor Output	kW	5.3 + 4.2 + 4.2	5.3 + 5.3 + 4.2	5.3 + 5.3 + 4.2	5.3 + 5.3 + 5.3	
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line	
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
Input  Casing Color  Compressor  Heat Exchanger  Temp. range of  Circulation water  Refrigerant  Connecting Pipes  Water Connecting Pipe  Dimensions (W x H x D	Oil Charge Amount	СС	(1,400 + 1,200 + 1,200) + 1,600 x 3		(1,400 + 1,400 + 1,200) + 1,600 x 3	(1,400 + 1,600) x 3	
Capacity  Input  Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CVV)  Refrigerant  Power Supply	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45	45	
	Head Loss	kPa	30.1 + 28.6 + 28.6	30.1 + 30.1 + 15.8	30.1 + 28.6 + 28.6	30.1 + 30.1 + 30.1	
	Rated Water Flow	LPM	192 + 135 + 135	192 + 192 + 96	192 + 192 + 135	192 + 192+ 192	
Temp. range of	Cooling		10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F	
Circulation water	Heating		-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F	
Refrigerant	Liquid Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	
nput Casing Color Compressor  Heat Exchanger Compressor  Compresso	Gas Pipes	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	
	Inlet	mm	PT40 + PT40 + PT40 (Internal)		PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	
Capacity Input Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight	Outlet	mm	PT40 + PT40 + PT40 (Internal)		PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	
		mm	(755 x 997 x 500) x 3	ARWN200DAS4 ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 140.0 151.2 168.0 157.5 170.1 189.0 3.60 3.60 3.60 3.60 3.60 3.60 3.60 3.			
Dimensions (W x H x D)		inch	(29-23/32 x 39-1/4 x 19-11/16) x 3				
NI - 187 : I -		kg	(140 x 1) + (127 X 2)	(140 x 2) + (127 X 1)	(140 x 2) + (127 X 1)	140 x 3	
ivet vveignt		lbs	(309 x 1) + (280 X 2)	(309 x 2) + (280X1)	(309 x 2) + (280X1)	309 x 3	
Transmission Cable (CVV-	-SB)	mm²	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	
	Name		R410A	R410A	R410A	R410A	
Refrigerant	Charge Amount	kg	3.0 + 5.8 + 5.8	3.0 + 3.0 + 5.8	3.0 + 3.0 + 5.8	3.0 + 3.0 + 3.0	
	Control Device		EEV	EEV	EEV	EEV	
Davier Cumply		Ø 1/ 11=	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	
Power Supply		Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	
Cound Draggers I area	Cooling	dB(A)	60	58	60		
Sound Pressure Level	Heating	dB(A)	62	63	62	62	
Carrad Danner I	Cooling	dB(A)	74	72	74	70	
Sound Power Level	Heating	dB(A)	76	77	76	76	

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

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

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

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

<sup>\*</sup> This product contains Fluorinated Greenhouse Gases. (R410A)

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

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

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

<sup>2.</sup> Capacities are net capacities.

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

#### **HEAT PUMP**

ARWN620LAS4 / ARWN640LAS4 / ARWN680LAS4



НР			62	64	68	
	Combination Unit		ARWN620LAS4	ARWN640LAS4	ARWN680LAS4	
Model Name	Independent Unit		ARWN200LAS4 ARWN200LAS4 ARWN140LAS4 ARWN080LAS4	ARWN200LAS4 ARWN200LAS4 ARWN140LAS4 ARWN100LAS4	ARWN200LAS4 ARWN200LAS4 ARWN140LAS4 ARWN140LAS4	
Canacitus	Cooling	kW k	173.6	179.2	190.4	
Capacity	Independent Unit  Cooling ki Heating ki Cooling ki Heating ki Heating ki Heating ki Heating ki Heating ki Type Combination Piston Displacement ci Number of revolution re Motor Output ki Starting Method Oil Type Oil Charge Amount ci Type Maximum Pressure Resistance ki Head Loss ki Rated Water Flow Li Cooling Heating Liquid Pipes re Gas Pipes re Inlet re Outlet re Drain Outlet re SSB) re	kW	195.3	201.6	214.2	
Lancide	Cooling	kW	34.10	35.33	38.08	
Input	Heating	kW	35.71	36.85	39.68	
Casing Color			Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination		(Inverter) x 4	(Inverter) x 4	(Inverter) x 4	
	Piston Displacement	cm³/rev	62.1 + 62.1 + 43.8 + 43.8	62.1 + 62.1 + 43.8 + 43.8	62.1 + 62.1 + 43.8 + 43.8	
Compressor  Heat Exchanger  Temp. range of  Circulation water  Refrigerant	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	
Compressor	Motor Output	kW	5.3 + 5.3 + 4.2 + 4.2	5.3 + 5.3 + 4.2 + 4.2	5.3 + 5.3 + 4.2 + 4.2	
	Starting Method		Direct On Line	Direct On Line	Direct On Line	
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC71D (PVE)	
	Oil Charge Amount	СС	(1,400 x 2 + 1,200 x 2) + (1,600 x 4)	(1,400 x 2 + 1,200 x 2) + (1,600 x 4)	(1,400 x 2 + 1,200 x 2) + (1,600 x 4)	
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
Heat Exchanger Temp. range of	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45	
	Head Loss	kPa	30.1 + 30.1 + 28.6 + 10.7	30.1 + 30.1 + 28.6 + 15.8	30.1 + 30.1 + 28.6 + 28.6	
	Rated Water Flow	LPM	192 + 192+ 135 + 77	192 + 192+ 135 + 96	192 + 192 + 135 + 135	
Temp. range of	Cooling		10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 116°F)	
Circulation water	Heating		-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 116°F)	
Refrigerant	Liquid Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	22.2 (7/8)	
Connecting Pipes	Gas Pipes	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	53.98 (2-1/8)	
	Inlet	mm	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT 40 + PT 40 + PT 40 + PT40	
Heat Exchanger  Temp. range of Circulation water Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight	Outlet	mm	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT 40 + PT 40 + PT 40 + PT40	
	Drain Outlet	ARWN1200LAS4 ARWN140LAS4 ARWN140LAS4 ARWN1080LAS4 ARWN10BLAS4 ARWN10BLASA ARWN10BLAS	PT20 (3/4, External)	PT20 (3/4, External)		
Dimensions (M v H v D)		mm	(755 x 997 x 500) x 4	(755 x 997 x 500) x 4	(755 x 997 x 500) x 4	
Dilliensions (VV X 11 X D)		inch	(29-23/32 x 39-1/4 x 19-11/16) x 4	(29-23/32 x 39-1/4 x 19-11/16) x 4	(29-23/32 x 39-1/4 x 19-11/16) x 4	
Not Weight		kg	(140 x 2) + (127 x 2)	(140 x 2) + (127 x 2)	(140 x 2) + (127 x 2)	
		lbs	(309 x 2) + (280 x 2)	(309 x 2) + (280 x 2)	(309 x 2) + (280 x 2)	
Transmission Cable (CVV-	-SB)	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 5C	
	Name		R410A	R410A	R410A	
Refrigerant	Charge Amount	kg	5.8 + 5.8 + 3.0 + 3.0	5.8 + 5.8 + 3.0 + 3.0	5.8 + 5.8 + 3.0 + 3.0	
	Control Device		EEV	EEV	EEV	
Power Supply		Ø V Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	6, 380 ~ 415, 50	
т омет эцрргу		Ø, V, 112	3, 380, 60	3, 380, 60	6, 380, 60	
Sound Pressure Level	Cooling	dB(A)	61	61	61	
Staria Fressure Level	Heating	dB(A)	64	64	63	
Sound Power Level	Cooling	dB(A)	75	75	75	
	Heating	dB(A)	79	79	77	

**HEAT PUMP** 

ARWN700LAS4 / ARWN740LAS4 / ARWN800LAS4



HP			70	74	80	
	Combination Unit		ARWN700LAS4	ARWN740LAS4	ARWN800LAS4	
Model Name  Capacity  Input  Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CV)  Refrigerant	Independent Unit		ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN100LAS4	ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN140LAS4	ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN200LAS4	
Caracita	Cooling	kW	196.0	ARWN740LAS4  ARWN200LAS4  200LAS4  200LAS4  ARWN200LAS4  ARWN20LAS4  ARWN200LAS4  ARWN20LAS4  ARWN20LA	201.6	
Capacity	Heating	kW	220.5	207.9	226.8	
	Cooling	kW	38.69	35.53	38.76	
input	Heating	kW	40.35	37.14	40.52	
Casing Color			Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination		(Inverter) x 4	(Inverter) x 4	(Inverter) x 4	
	Piston Displacement	cm³/rev	62.1 + 62.1 + 62.1 + 43.8	62.1 + 62.1 + 62.1 + 43.8	62.1 + 62.1 + 62.1 + 62.1	
Model Name  Capacity  Input  Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CVV-Refrigerant	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	
Compressor	Motor Output	kW	5.3 + 5.3 + 5.3 + 4.2	5.3 + 5.3 + 5.3 + 4.2	5.3 + 5.3 + 5.3 + 5.3	
	Starting Method		Direct On Line	Direct On Line	Direct On Line	
	Oil Type		FVC71D (PVE)	FVC74D (PVE)	FVC77D (PVE)	
Input Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight Transmission Cable (CVV Refrigerant  Power Supply  Sound Pressure Level	Oil Charge Amount cc		(1,400 x 3 + 1,200) + (1,600 x 4)	(1,400 x 3 + 1,200) + (1,600 x 4)	(1,400 + 1,600) x 4	
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
Hoot Evolonger	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45	
	Head Loss	kPa	30.1 + 30.1 + 30.1 + 15.8	30.1 + 30.1 + 30.1 + 28.6	30.1 + 30.1 + 30.1 + 30.1	
	Rated Water Flow	LPM	192 + 192 + 192 + 96	192 + 192 + 192 + 135	192 + 192 + 192 + 192	
Temp. range of	Cooling		10°C ~ 45°C (50°F ~ 116°F)	10°C ~ 45°C (50°F ~ 119°F)	10°C ~ 45°C (50°F ~ 122°F)	
Circulation water	Heating		-5°C ~ 45°C (23°F ~ 116°F)	-5°C ~ 45°C (23°F ~ 119°F)	-5°C ~ 45°C (23°F ~ 122°F)	
Refrigerant	Liquid Pipes	mm (inch)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	
Connecting Pipes	Gas Pipes	mm (inch)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)	
	Inlet	mm	PT 40 + PT 40 + PT 40 + PT40	ARWN200LAS4 ARWN100LAS4 196.0 184.8 220.5 207.9 38.69 35.53 40.35 37.14  arm Gray, Mornig Gray Merrically Sealed Scroll (Inverter) x 4 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1 + 62.1 + 43.8 4 62.1 + 62.1	PT 40 + PT 40 + PT 40 + PT 40	
Water Connecting Pipes	Outlet	mm	PT 40 + PT 40 + PT 40 + PT40	PT 40 + PT 40 + PT 40 + PT 40	PT 40 + PT 40 + PT 40 + PT 40	
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	
Dimensions (W v H v D)		mm	(755 x 997 x 500) x 4	(755 x 997 x 500) x 4	(755 x 997 x 500) x 4	
Difficisions (W X 11 X D)		inch	(29-23/32 x 39-1/4 x 19-11/16) x 4	(29-23/32 x 39-1/4 x 19-11/16) x 4	(29-23/32 x 39-1/4 x 19-11/16) x 4	
Not Weight		kg	(140 x 2) + (127 X 2)	(140 x 3) + (127 x 1)	140 x 4	
ivet vveignt		lbs	(309 x 2) + (280 X 2)	(309 x 3) + (280 x 1)	309 x 4	
Transmission Cable (CVV	-SB)	mm <sup>2</sup>	1.0 ~ 1.5 x 5C	1.0 ~1.5 x 8C	1.0 ~1.5 x 11C	
	Name		R410A	R410A	R410A	
Refrigerant	Charge Amount	kg	5.8 + 5.8 + 3.0 + 3.0	3.0 + 3.0 + 3.0 + 5.8	3.0 + 3.0 + 3.0 + 3.0	
	Control Device	(Inverter) x 4   (Inv	EEV	EEV		
Dowar Supply		Ø 1/ Ll=	6, 380 ~ 415, 50	9, 380 ~ 415, 50	12, 380 ~ 415, 50	
т омет эцрріу		IJ, V, □Z	6, 380, 60	9, 380, 60	12, 380, 60	
Sound Proceure Lovel	Cooling	dB(A)	60	61	57	
Journa Fressure Level	Heating	dB(A)	65	63	63	
Cound Dower Lavel	Cooling	dB(A)	74	75	71	
Sound Power Level	Heating	dB(A)	80	77	77	

This product contains Fluorinated Greenhouse Gases. (R410A)

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

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

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

<sup>2.</sup> Capacities are life capacities.

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

4. 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.)

<sup>\*</sup> This product contains Fluorinated Greenhouse Gases. (R410A)

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

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

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

#### **HEAT RECOVERY**

ARWB080LAS4 / ARWB100LAS4 / ARWB140LAS4 / ARWB200LAS4



Model Name	НР			8	10	14	20	
Capacity   Cooling   KW   22.4   28.0   39.2   56.0		Combination Unit		ARWB080LAS4	ARWB100LAS4	ARWB140LAS4	ARWB200LAS4	
Capacity   Heating   KW   25.2   31.5   44.1   63.0	Model Name	Independent Unit		ARWB080LAS4	ARWB100LAS4	ARWB140LAS4	ARWB200LAS4	
New Cooling   NW   25.2   31.5   31	6 '	Cooling	kW	22.4	28.0	39.2	56.0	
Table   Heating   KW   4.20   5.34   8.17   11.67	Capacity	Heating	kW kW kW kW  cm³/rev rev/min kW  ccc  cce kgf/cm² kPa LPM  11	25.2	31.5	44.1	63.0	
Casing Color		Cooling	KW   KW   KW   KW   KW   KW   KW   KW	3.86	5.09	7.84	11.20	
Type	Input	Heating	kW	4.20	5.34	8.17	11.67	
Combination	Casing Color			Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray , Mornig Gray	
Piston Displacement		Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
Number of revolution   rev/min   Inverter 3,600 at 60Hz   Inverter 3,600 at 6Hz   Inverter		Combination		(Inverter) x 1	(Inverter) x 1	(Inverter) x 1	(Inverter) x 1	
Motor Output		Piston Displacement	cm³/rev	43.8	43.8	43.8	62.1	
Motor Output   MW   4.2   4.2   4.2   5.3	Model Name  Capacity  Input  Casing Color  Compressor  T  Compressor  A  S  C  C  C  C  C  C  C  C  C  C  C  C	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	
Oil Type	Compressor	Motor Output	kW	4.2	4.2	4.2	5.3	
Dil Charge Amount   Cc		Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line	
Type		Oil Type	ARW   kW   kW   kW   kW   kW   kW   kW	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
Maximum Pressure Resistance   Maximum Resistance		Oil Charge Amount	СС	1,200 + 1,600	1,200 + 1,600	1,200 + 1,600	1,400 + 1,600	
Head Loss   KPa   10.7   15.8   28.6   30.1     Rated Water Flow   LPM   77   96   135   192     Temp. range of   Cooling   10°C - 45°C (50°F - 113°F)   10°C -		Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
Head Loss   KPa   10.7   15.8   28.6   30.1	Heat Evelopeer	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45	45	
Temp. range of   Cooling	Input Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CV)  Refrigerant  Power Supply	Head Loss	kPa	10.7	15.8	28.6	30.1	
Circulation water         Heating         -5°C - 45°C (23°F - 113°F)         -5°C - 45°C (23°F - 113°F)<	Rated Water Flow LF		LPM	77	96	135	192	
Liquid Pipes	Temp. range of			10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	
Refrigerant Connecting Pipes         Low Pressure Gas Pipes         mm (inch)         22.2 (7/8)         22.2 (7/8)         25.4 (1)         28.58 (1-1/8)           Water Connecting Pipes         High Pressure Gas Pipes         mm (inch)         19.05 (3/4)	Circulation water	ater Heating		-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	
Connecting Pipes   High Pressure Gas Pipes   mm (inch)   19.05 (3/4)		Liquid Pipes	mm (inch)	9.52 (3/8)	9.52 (3/8)	12.7 (1/2)	12.7 (1/2)	
High Pressure Gas Pipes   mm (inch)   19.05 (3/4)   19.05 (3/4)   19.05 (3/4)   19.05 (3/4)	Refrigerant	Low Pressure Gas Pipes	mm (inch)	22.2 (7/8)	22.2 (7/8)	25.4 (1)	28.58 (1-1/8)	
Water Connecting Pipes         Outlet         mm         PT40 (1-1/2, Internal)         PT40 (1-1/2, Intern		High Pressure Gas Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	
Drain Outlet         mm         PT20 (3/4, External)         PT20 (3/2 External)         PT20		Inlet	mm	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	
Dimensions (W x H x D)	Water Connecting Pipes	Outlet	mm	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	PT40 (1-1/2, Internal)	
Dimensions (W x H x D)   Inch   (29-23/32 x 39-1/4		Drain Outlet	mm	PT20 (3/4, External)	28.0 39.2 56.0 31.5 44.1 63.0 5.09 7.84 11.20 5.34 8.17 11.67  Gray Warm Gray, Mornig Gray Market Gray Gray Gray Gray Gray Gray Gray Gray	PT20 (3/4, External)		
Net Weight   Mane   Refrigerant   Refrigerant   Mane   Refrigerant   Mane   Refrigerant   Refrigerant   Mane   Refrigerant   Mane   Refrigerant   Refrigerant   Mane   Refrigerant   Refrigerant   Refrigerant   Mane   Refrigerant   Refrigerant   Mane   Refrigerant   Refrigerant   Refrigerant   Mane   Refrigerant   Refrigerant   Refrigerant   Refrigerant   Mane   Refrigerant   R			mm	10.7 15.8 28.6 3.6  77 96 135 19  10°C - 45°C (50°F - 113°F) 10°C - 45°C (23°F - 113°F) 10°C - 45°C (2	(755 x 500 x 997) x 1			
Net Weight   Ibs	Dimensions (W x H x D)		inch					
Transmission Cable (CVV-SB)   mm²   1.0 ~ 1.5 x 2C	Not Words		kg	127 x 1	127 x 1	127 x 1	140 x 1	
Name	Net weight		lbs	280 x 1	280 x 1	280 x 1	309 x 1	
Refrigerant         Charge Amount         kg         5.8         5.8         5.8         3.0           Power Supply         EEV         Say 3, 380 - 415, 50         3, 380 - 415, 50         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380,	Transmission Cable (CVV-	SB)	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	
Control Device   EEV   EEV   EEV   EEV		Name		R410A	R410A	R412A	R410A	
Power Supply         Ø, V, Hz         3, 380 ~ 415, 50         3, 380 ~ 415, 50         3, 380 ~ 415, 50         3, 380 ~ 415, 50         3, 380 ~ 415, 50         3, 380 ~ 415, 50         3, 380 ~ 415, 50         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         54         54         54         54         54         55         57         60         60         50         50         50         60 <td>Refrigerant</td> <td>Charge Amount</td> <td>kg</td> <td>5.8</td> <td>5.8</td> <td>5.8</td> <td>3.0</td>	Refrigerant	Charge Amount	kg	5.8	5.8	5.8	3.0	
Power Supply         Ø, V, Hz         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         54         54           Sound Pressure Level         Heating         dB(A)         51         53         57         60           Sound Power Level         Cooling         dB(A)         59         62         70         66		Control Device		EEV	EEV	EEV	EEV	
3,380,60   3,380,60	Power Supply		Ø V Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	
Sound Pressure Level         Heating         dB(A)         51         53         57         60           Sound Power Level         Cooling         dB(A)         59         62         70         66	Tower Supply		Ø, V, 112	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	
Heating         dB(A)         51         53         57         60           Sound Power Level         Cooling         dB(A)         59         62         70         66	Sound Pressure Level	Cooling	dB(A)	47	50	58	54	
Sound Power Level	Journa Flessure Level	Heating	dB(A)	51	53	57	60	
Heating dB(A) 63 65 69 72	Sound Power Level	Cooling	dB(A)	59	62	70	66	
	Journa Fower Level	Heating	dB(A)	63	65	69	72	

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

#### **HEAT RECOVERY**

ARWB220LAS4 / ARWB240LAS4 / ARWB280LAS4 / ARWB300LAS4



HP			22	24	28	30
	Combination Unit		ARWB220LAS4	ARWB240LAS4	ARWB280LAS4	ARWB300LAS4
Model Name	Independent Unit		ARWB140LAS4 ARWB080LAS4	ARWB140LAS4 ARWB100LAS4	ARWB140LAS4 ARWB140LAS4	ARWB200LAS4 ARWB100LAS4
6	Cooling	kW	61.6	67.2	78.4	84.0
Capacity	dependent Unit  cooling kW eating kW cooling kW eating kW eating kW eating kW eating kW  cooling cooling kW eating kW  cooling cooling cooling kW eating Method  il Type il Charge Amount cc  cooling cooling eating kPa cooling cooling cooling cooling kB eating cooling coo	kW	69.3	75.6	88.2	94.5
	Cooling	kW	11.70	12.93	15.68	16.29
Input	Heating	kW	12.37	13.51	16.34	17.01
Casing Color			Warm Gray, Mornig Gray			
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination		(Inverter) x 2	(Inverter) x 2	(Inverter) x 2	(Inverter) x 2
Model Name  Capacity  Input  Casing Color  Compressor  Compressor  Heat Exchanger  Temp. range of Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CVV-S  Refrigerant  Power Supply  Sound Pressure Level  Sound Power Level	Piston Displacement	cm³/rev	43.8 + 43.8	43.8 + 43.8	43.8 + 43.8	62.1 + 43.8
	Number of revolution	rev/min	Inverter 3,600 at 60Hz			
	Motor Output	kW	4.2+4.2	4.2 + 4.2	4.2 + 4.2	5.3 + 4.2
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
eat Exchanger  eat Exchanger  emp. range of connecting Pipes from Effigerant connecting Pipes from Efficient Pi	Oil Charge Amount	СС	(1,200 + 1,600) x 2	(1,200 + 1,600) x 2	(1,200 + 1,600) x 2	(1,400 + 1,200) + 1,600 x 2
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
Dimensions (W x H x D)  Net Weight	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45	45
	Head Loss	kPa	28.6 + 10.7	28.6 + 15.8	28.6 + 28.6	30.1 + 15.8
	Rated Water Flow	LPM	135 + 77	135 + 96	135 + 135	192 + 96
Temp. range of	Rated Water Flow LPM Cooling		10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F
			-5°C ~ 45°C (23°F ~ 113°F)			
Capacity Input Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CVV-  Refrigerant  Power Supply	Liquid Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)
	Low Pressure Gas Pipes	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)
	High Pressure Gas Pipes	mm (inch)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)	28.58 (1-1/8)
	Inlet	mm	PT40 + PT40 (Internal)			
Capacity  Input  Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CVV-S)  Refrigerant  Power Supply  Sound Pressure Level	Outlet	mm	PT40 + PT40 (Internal)			
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)
		mm	(755 x 997 x 500) x 2			
Dimensions (W x H x D)		inch	(29-23/32 x 39-1/4 x 19-11/16) x 2			
NI - 187 : I -		kg	127 x 2	127 x 2	127 x 2	(140 x 1) + (127 x 1)
Net Weight		lbs	280 x 2	280 x 2	280 x 2	(309 x 1) + (280 x 1)
Typ   Max   Heat Exchanger   Max   Heat Exchanger   Rat   Temp. range of   Coc	-SB)	mm <sup>2</sup>	1.0 ~ 1.5 x 2C			
	Name		R410A	R410A	R410A	R410A
Refrigerant	Charge Amount	kg	5.8 + 5.8	5.8 + 5.8	5.8 + 5.8	3.0 + 5.8
	Control Device		EEV	EEV	EEV	EEV
			3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50
Power Supply		Ø, V, Hz	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60
	Cooling	dB(A)	58	59	59	55
Sound Pressure Level	Heating	dB(A)	58	58	58	61
	Cooling	dB(A)	71	72	72	68
Sound Power Level			71	71	71	74

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

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

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

<sup>2.</sup> Capacities are net capacities.

<sup>2.</sup> Capacities are net capacities.

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

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

<sup>\*</sup> This product contains Fluorinated Greenhouse Gases. (R410A)

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

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

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

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

#### **HEAT RECOVERY**

ARWB340LAS4 / ARWB400LAS4 / ARWB420LAS4 / ARWB440LAS4





Model Name	НР			34	40	42	44	
Marrie County		Combination Unit		ARWB340LAS4	ARWB400LAS4 ARWB200LAS4 ARWB20LAS4 ARWB200LAS4 ARWB20L	ARWB420LAS4	ARWB440LAS4	
Capacity   Heating   KW   107.1   126.0   132.3   138.6	Model Name	Independent Unit	kW kW kW kW  cm³/rev rev/min kW  cc ((ace kgf/cm² kPa LPM  mm (inch) mm (inch) mm (inch) mm (inch) mm  mm  mm  mm  mm  kg lbs  mm²  kg  dB(A) dB(A) dB(A)			ARWB140LAS4	ARWB140LAS4	
Heatting	Canacita	Cooling	kW	95.2	112.0	117.6	ARWB440LAS4 ARWB200LAS4 ARWB140LAS4 ARWB140LAS4 ARWB100LAS4 123.2 138.6 24.13 25.18 Warm Gray, Mornig Gray roll Hermetically Sealed Scrol (Inverter) x 3 62.1 + 43.8 + 43.8 dz Inverter 3,600 at 60Hz 5.3 + 4.2 + 4.2 Direct On Line FVC68D (PVE) 0) (1,400 + 1,200) + 1,600 x 3 e Stainless Steel Plate 45 30.1 + 28.6 + 15.8 192 + 135 + 96 3°F) 10°C - 45°C (50°F - 113°F 19.05 (3/4) 41.3 (1-5/8) 34.9 (1-3/8) 0 PT40 + PT40 + PT40 (Internal) 0 PT20 (3/4, External) 3 (755 x 997 x 500) x 3 (29-23/32 x 39-1/4 x 19-11/16) x 3 0) (140 x 1) + (127 x 2) (309 x 1) + (280 x 2) 1.0 - 1.5 x 2C R410A 3.0 + 5.8 + 5.8 EEV 3, 380 - 415, 50 3, 380, 60 60 60 62 74	
	Сараспу	Heating	kW	107.1	126.0	132.3	138.6	
Casing Color	Innut	Cooling	kW	19.04	22.40	22.90	24.13	
Type	прис	Heating	kW	19.84	ARWB400LAS4 ARWB200LAS4 ARWB20LAS4 ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB20LAS4 ARWB200LAS4 ARWB20LAS4 ARWB20LASA ARWB20LAS4 ARWB	24.04	25.18	
Combination   Cinverter) x 2   Cinverter) x 2   Cinverter) x 3   Cinverter) x 3	Casing Color			Warm Gray, Mornig Gray	ARWB400LAS4 ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB000LAS4 ARWB00		Warm Gray, Mornig Gray	
Piston Displacement		Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
Number of revolution   rev/min   Inverter 3,600 at 60Hz   Inverter 3,		Combination		(Inverter) x 2	(Inverter) x 2	(Inverter) x 3	(Inverter) x 3	
Compressor         Motor Output         kW         4.2 + 5.3         5.3 + 5.3         5.3 + 4.2 + 4.2         5.3 + 4.2 + 4.2           Sarating Method		Piston Displacement	cm³/rev	43.8 + 62.1	62.1 + 62.1	62.1 + 43.8 + 43.8	62.1 + 43.8 + 43.8	
Starting Method   Direct On Line   PICOCON   Direct On Line   PICOCON   Direct On Line   Direct On Line   PICOCON   Direct   Direct On Line   Direct On Line   PICOCON   Direct   Direct On Line   PICOCON   Direct On Line   Dir		Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	
PVC68D (PVE)	Compressor	Motor Output	kW	4.2 + 5.3	5.3 + 5.3	5.3 + 4.2 + 4.2	5.3 + 4.2 + 4.2	
Oil Charge Amount   Cc   (1,400 + 1,200) + 1,600 x 2   (1,400 + 1,000 + 1,200)   + 1,600 x 3		Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line	
Heat Exchanger   Type		Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
Maximum Pressure Resistance   kgf/cm²   45   45   45   45   45   45   45   4		Oil Charge Amount	сс	(1,400 + 1,200) + 1,600 x 2	(1,400 + 1,600) x 2			
Head Loss   KPa   30.1 + 28.6   30.1 + 30.1   30.1 + 28.6 + 10.7   30.1 + 28.6 + 15.8		Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
Head Loss   KPa   30.1 + 28.6   30.1 + 30.1   30.1 + 28.6 + 10.7   30.		Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45	45	
Temp. range of   Cooling   10°C - 45°C (50°F - 113°F)   10°C - 45°C (23°F - 113°F)   10°C - 45°C (23°	Capacity  Input Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CVV: Refrigerant  Power Supply  Sound Pressure Level	Head Loss	kPa	30.1 + 28.6	30.1 + 30.1	30.1 + 28.6 + 10.7	30.1 + 28.6 + 15.8	
Circulation water   Heating		Rated Water Flow	kW k	192 + 135	192 + 192	192 + 135 + 77	192 + 135 + 96	
Refrigerant Connecting Pipes   Liquid Pipes   mm (inch)   19.05 (3/4)	Temp. range of	Cooling		10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	
Refrigerant Connecting Pipes   Low Pressure Gas Pipes   mm (inch)   34.9 (1-3/8)   41.3 (1-5/8)   34.9 (1-3/8	Circulation water	Heating		-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	
Connecting Pipes   Him (Inch)   34.5 (1-3/8)   41.3 (1-3/8)   41		Liquid Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	
High Pressure Gas Pipes   mm (inch)   28.58 (1-1/8)   34.9 (1-3/8)   34.9 (1-3/8)   34.9 (1-3/8)		Low Pressure Gas Pipes	mm (inch)	34.9 (1-3/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	
Mater Connecting Pipes         Inlet         mm         P140+P140 (internal)         P140+P140 (internal)         (internal)         (internal)         (internal)           Water Connecting Pipes         Outlet         mm         PT40+PT40 (internal)         PT40+PT40 (internal)         PT40+PT40+PT40 (internal)         PT40+PT40 (internal)         PT20 (3/4, External)	Connecting ripes	High Pressure Gas Pipes	mm (inch)	28.58 (1-1/8)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	
Dutlet   mm		Inlet	mm	PT40 + PT40 (Internal)	ARWB200LAS4 ARWB200LAS4 ARWB100LAS4 ARWB10LAS4 ARWB10LA			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Water Connecting Pipes	Outlet	mm	PT40 + PT40 (Internal)	PT40 + PT40 (Internal)			
Dimensions (W x H x D)         inch         (29-23/32 x 39-1/4 x 19-11/16) x 2         (29-23/32 x 39-1/4 x 19-11/16) x 3         (140 x 1) + (127 x 2)         (140 x 1)		Drain Outlet	mm	PT20 (3/4, External)	ARWB200LAS4 Dasa  1386 22.40 22.91 4.13 6.25.18  Marmacray, Mornig Gray Marm Gray, Mornig Gray Marmacray, Mornig Gray Marmacray, Mornig Gray Marm Gray, Mornig Gray Marmacray, Mornig Gray Marmacray Marmacra, Mornig Gray Marmacra, Mornig Bray Marmacra, Mornig Bray Marmacra, Morn	PT20 (3/4, External)		
Net Weight   NetWeight   Net Weight   Net Weight   Net Weight   Net Weight   NetW			mm	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2	(755 x 997 x 500) x 3	(755 x 997 x 500) x 3	
Transmission Cable (CVV-SB)   mm²   1.0 - 1.5 x 2C   1.0 x 2C   1	Dimensions (W x H x D)		inch					
Sound Pressure Level   Sound Power Supply   Sound Power Level   Sound Pressure Level   Sound Power Supply   Sound Power Level   Sound Pressure Le	Not Weight		kg	(140 x 1) + (127 x 1)	140 x 2	(140 x 1) + (127 X 2)	(140 x 1) + (127 X 2)	
Name	Net Weight		lbs	(309 x 1) + (280 x 1)	309 x 2	(309 x 1) + (280 X 2)	(309 x 1) + (280 X 2)	
Refrigerant         Charge Amount         kg         3.0 + 5.8         3.0 + 3.0         3.0 + 5.8 + 5.8         3.0 + 5.8 + 5.8           Power Supply         EEV         EEV         EEV         EEV         EEV           3, 380 - 415, 50         3, 380 - 415, 50         3, 380 - 415, 50         3, 380 - 415, 50         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         60         60         60         60         60         60         62         62         62         62         68         73         74	Transmission Cable (CVV-	Motor Output kV Starting Method Oil Type Oil Charge Amount cc  Type Maximum Pressure Resistance kg Head Loss kP Rated Water Flow LP Cooling r Heating Liquid Pipes mr Low Pressure Gas Pipes mr High Pressure Gas Pipes mr Outlet mr Drain Outlet mr Drain Outlet mr inc kH x D)  Sole (CVV-SB) Name Charge Amount kg Control Device  Cooling  Geoling  Cooling  Retard Water Flow LP Cooling  Maximum Pressure Resistance kg Maximum Pressure Res		1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	
Control Device   EEV   EEV   EEV   EEV		Name		R410A	R410A	R410A	R410A	
Power Supply    8, V, Hz   3, 380 - 415, 50   3, 380 - 415, 50   3, 380 - 415, 50   3, 380 - 415, 50   3, 380 - 415, 50   3, 380, 60   3, 380, 60   3, 380, 60     Sound Pressure Level   Cooling   dB(A)   61   61   62   62     Sound Power Level   Cooling   dB(A)   72   68   73   74	Refrigerant	Charge Amount	kg	3.0 + 5.8	3.0 + 3.0	3.0 + 5.8 + 5.8	3.0 + 5.8 + 5.8	
Power Supply         Ø, V, Hz         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         3, 380, 60         60         60           Sound Pressure Level         Heating         dB(A)         61         61         62         62           Sound Power Level         Cooling         dB(A)         72         68         73         74		Control Device		EEV	EEV	EEV	EEV	
3, 380, 60 3, 380, 60 3, 380, 60 3, 380, 60 3, 380, 60 3, 380, 60 3, 380, 60 3, 380, 60 3, 380, 60 3, 380, 60 3, 380, 60 60 60 60 60 60 60 60 60 60 60 60 60	Power Supply		Ø V Uz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	3, 380 ~ 415, 50	
Sound Pressure Level         Heating         dB(A)         61         61         62         62           Sound Power Level         Cooling         dB(A)         72         68         73         74	т оччет эцррцу		€, V, I IZ	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60	
Heating         dB(A)         61         61         62         62           Sound Power Level         Cooling         dB(A)         72         68         73         74	Sound Proceura Loyal	Cooling	dB(A)	59	55	60	60	
Sound Power Level	Journa Fressure Level	Heating	dB(A)	61	61	62	62	
	Sound Power Lovel	Cooling	dB(A)	72	68	73	74	
	Journal I Ower Level	Heating	dB(A)	74	74	76	76	

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

#### **HEAT RECOVERY**

ARWB480LAS4 / ARWB500LAS4 / ARWB540LAS4 / ARWB600LAS4



HP			48	50	54	60		
	Combination Unit		ARWB480LAS4	ARWB500LAS4	ARWB540LAS4	ARWB600LAS4		
Model Name	Independent Unit		ARWB200LAS4 ARWB140LAS4 ARWB140LAS4	ARWB200DAS4 ARWB200DAS4 ARWB100DAS4	ARWB200LAS4 ARWB200LAS4 ARWB140LAS4	ARWB200LAS4 ARWB200LAS4 ARWB200LAS4		
	Cooling	kW	134.4	140.0	ARWB540LAS4 ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB201AS4 ARWB200LAS4 ARWB20ARWB20 ARWB200LAS4 ARWB200LAS4 ARWB20 ARWB200LAS4 ARWB20 A	168.0		
apacity	Heating	kW	151.2	157.5	170.1	189.0		
	Cooling	kW	26.88	27.49	30.24	33.60		
iput	Heating	kW	28.01	28.68	RWB500LAS4 ARWB500LAS4 ARWB200LAS4 ARWB200			
Casing Color			Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	ARWB600LAS4 ARWB200LAS4  168.0 33.60 35.01 Gray Warm Gray, Mornig Gray Bell Control (Inverter) x 3 Bell C2.1 + 62.1 + 62.1 Control (Inverter) x 3 Bell C2.1 + 62.1 + 62.1 Control Line FVC68D (PVE) Control Contro		
	Туре		Hermetically Sealed Scroll	ARWB500LAS4 ARWB200DAS4 ARWB200DAS4 ARWB200DAS4 ARWB200LAS4 ARWB100DAS4 ARWB140LAS4  140.0 151.2 157.5 170.1 27.49 30.24 28.68 31.51  Warm Gray, Mornig Gray Hermetically Sealed Scroll (Inverter) x 3 62.1 + 62.1 + 43.8 Inverter 3,600 at 60Hz 5.3 + 5.3 + 4.2 Direct On Line FVC68D (PVE)  (1,400 + 1,400 + 1,200) + 1,600 x 3 Stainless Steel Plate 45 30.1 + 30.1 + 15.8 30.1 + 28.6 + 28.6 192 + 192 + 96 192 + 192 + 135 10°C - 45°C (50°F - 113°F) 10°C - 45°C (23°F - 113°F) 10°C - 45°C (33°F - 113°F) 10°C - 45°C (23°F - 113°F) 10°C - 45°		Hermetically Sealed Scroll		
	Combination		(Inverter) x 3	(Inverter) x 3	(Inverter) x 3	(Inverter) x 3		
	Piston Displacement	cm³/rev	62.1 + 43.8 + 43.8	62.1 + 62.1 + 43.8	62.1 + 62.1 + 43.8	62.1 + 62.1 + 62.1		
apacity  apacity  apacity  apacity  apacity  asing Color  ompressor  eat Exchanger  emp. range of irculation water  efrigerant onnecting Pipes  water Connecting Pipes  imensions (W x H x D)  let Weight  ransmission Cable (CVV- efrigerant ower Supply  ound Pressure Level	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz		
Compressor	Motor Output	kW	5.3 + 4.2 + 4.2	5.3 + 5.3 + 4.2	5.3 + 5.3 + 4.2	5.3 + 5.3 + 5.3		
	Starting Method		Direct On Line	Direct On Line	Direct On Line	Direct On Line		
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)		
Model Name  Capacity  Input  Casing Color  Compressor  Heat Exchanger  Iemp. range of  Circulation water  Refrigerant  Connecting Pipes  Water Connecting Pipes	Oil Charge Amount	СС	(1,400 + 1,200 + 1,200) + 1,600 x 3			(1,400 + 1,600) x 3		
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate		
Capacity  Input Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CV)  Refrigerant  Power Supply  Sound Pressure Level	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45	45		
	Head Loss	kPa	30.1 + 28.6 + 28.6	30.1 + 30.1 + 15.8	30.1 + 28.6 + 28.6	30.1 + 30.1 + 30.1		
	Rated Water Flow	LPM	192 + 135 + 135	192 + 192 + 96	192 + 192 + 135	192 + 192+ 192		
emp. range of	Cooling		10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F		
irculation water	Heating		-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F		
	Liquid Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)	19.05 (3/4)		
Capacity  Input Casing Color  Compressor  Heat Exchanger  Femp. range of Circulation water Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Fransmission Cable (CVV  Refrigerant  Power Supply  Sound Pressure Level	Low Pressure Gas Pipes	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)	41.3 (1-5/8)		
	High Pressure Gas Pipes	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	34.9 (1-3/8)	` '		
	Inlet	mm	PT40 + PT40 + PT40 (Internal)		ARWB200LAS4 ARWB20LAS4 ARWB			
Capacity  Input Casing Color  Compressor  Heat Exchanger  Femp. range of Circulation water Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Welet Weight  Fransmission Cable (CV)  Refrigerant  Power Supply  Sound Pressure Level	Outlet	mm	PT40 + PT40 + PT40 (Internal)					
	Drain Outlet	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)		
		mm	(755 x 997 x 500) x 3	(755 x 997 x 500) x 3	(755 x 997 x 500) x 3	ARWB600LAS4 ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 168.0 189.0 33.60 35.01 Warm Gray, Mornig Gray Hermetically Sealed Scroll (Inverter) x 3 62.1 + 62.1 + 62.1 Inverter 3,600 at 60Hz 5.3 + 5.3 + 5.3 Direct On Line FVC68D (PVE) (1,400 + 1,600) x 3 Stainless Steel Plate 45 30.1 + 30.1 + 30.1 192 + 192 + 192 10°C - 45°C (50°F - 113°F 19.05 (3/4) 41.3 (1-5/8) 34.9 (1-3/8) PT40 + PT40 + PT40 (Internal) PT20 (3/4, External) (755 x 997 x 500) x 3 (29-23/32 x 39-1/4 x 19-11/16) x 3 140 x 3 309 x 3 1.0 - 1.5 x 2C R410A 3.0 + 3.0 + 3.0 EEV 3, 380 - 415, 50 3, 380, 60 56 62 70		
Dimensions (W x H x D)		inch	(29-23/32 x 39-1/4 x 19-11/16) x 3					
I-+ \\/-:-b+		kg	(140 x 1) + (127 X 2)	(140 x 2) + (127 X 1)	(140 x 2) + (127 X 1)	140 x 3		
iet vveignt		lbs	(309 x 1) + (280 X 2)	(309 x 2) + (280X1)	(309 x 2) + (280X1)	309 x 3		
ransmission Cable (CVV-	SB)	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		
	Name		R410A	R410A	R410A	R410A		
Refrigerant	Charge Amount	kg	3.0 + 5.8 + 5.8	3.0 + 3.0 + 5.8	3.0 + 3.0 + 5.8	3.0 + 3.0 + 3.0		
	Control Device		EEV	EEV	EEV	3		
lauras Cumplic	Ø. V. Hz 3, 380 - 415, 50 3, 380 ~ 415, 50		3, 380 ~ 415, 50	3, 380 ~ 415, 50				
ower Supply		IJ, V, HZ	3, 380, 60	3, 380, 60	3, 380, 60	3, 380, 60		
	Cooling	dB(A)	60	58	60	56		
ound Pressure Level	Heating	dB(A)	62	63	62			
	Cooling	dB(A)	74	72	74	70		
Sound Power Level		dB(A)	76		_			

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

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

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

<sup>2.</sup> Capacities are net capacities.

<sup>2.</sup> Capacities are recognitions.

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

4. 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.)

<sup>\*</sup> This product contains Fluorinated Greenhouse Gases. (R410A)

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

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

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

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

#### **HEAT RECOVERY**

ARWB620LAS4 / ARWB640LAS4 / ARWB680LAS4



НР			62	64	68	
	Combination Unit		ARWB620LAS4	ARWB640LAS4	ARWB680LAS4	
Model Name	Independent Unit		ARWB200LAS4 ARWB200LAS4 ARWB140LAS4 ARWB080LAS4	ARWB200LAS4 ARWB200LAS4 ARWB140LAS4 ARWB100LAS4	ARWB200LAS4 ARWB200LAS4 ARWB140LAS4 ARWB140LAS4	
Conneite	Cooling	n rev/min kW cc (1,4 Resistance kgf/cm² kPa LPM mm (inch) ipes mm (inch) ipes mm (inch) mm mm mm mm mm mm	173.6	179.2	190.4	
Capacity	Heating	kW kW kW kW  cm³/rev rev/min kW  cc tance kgf/cm² kPa LPM  mm (inch) mm (inch) mm (inch) mm mm mm inch kg lbs mm²  kg  db(A) dB(A) dB(A) dB(A)	195.3	201.6	214.2	
In	Cooling	kW	34.10	35.33	38.08	
Input	Heating	kW	35.71	36.85	39.68	
Casing Color			Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination		(Inverter) x 4	(Inverter) x 4	(Inverter) x 4	
	Piston Displacement	cm³/rev	62.1 + 62.1 + 43.8 + 43.8	62.1 + 62.1 + 43.8 + 43.8	62.1 + 62.1 + 43.8 + 43.8	
Model Name  Capacity  Input  Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CVV-1)  Refrigerant  Power Supply	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	
Compressor	Motor Output	kW	5.3 + 5.3 + 4.2 + 4.2	5.3 + 5.3 + 4.2 + 4.2	5.3 + 5.3 + 4.2 + 4.2	
	Starting Method		Direct On Line	Direct On Line	Direct On Line	
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC71D (PVE)	
	Oil Charge Amount	СС	(1,400 x 2 + 1,200 x 2) + (1,600 x 4)	(1,400 x 2 + 1,200 x 2) + (1,600 x 4)	(1,400 x 2 + 1,200 x 2) + (1,600 x 4)	
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
Input Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CVV)	Maximum Pressure Resistance kgf/cm <sup>2</sup>		45	45	45	
Capacity Input Casing Color  Compressor  Heat Exchanger  Temp. range of Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight  Transmission Cable (CVV	Head Loss kPa		30.1 + 30.1 + 28.6 + 10.7	30.1 + 30.1 + 28.6 + 15.8	30.1 + 30.1 + 28.6 + 28.6	
	Rated Water Flow	LPM	192 + 192+ 135 + 77	192 + 192+ 135 + 96	192 + 192 + 135 + 135	
Temp. range of	Rated Water Flow LPM Cooling		10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 113°F)	10°C ~ 45°C (50°F ~ 116°F)	
Circulation water	Heating		-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 113°F)	-5°C ~ 45°C (23°F ~ 116°F)	
- 4.	Liquid Pipes	mm (inch)	19.05 (3/4)	19.05 (3/4)	22.2 (7/8)	
	Low Pressure Gas Pipes	mm (inch)	41.3 (1-5/8)	41.3 (1-5/8)	53.98 (2-1/8)	
Heat Exchanger  Formal	High Pressure Gas Pipes	mm (inch)	34.9 (1-3/8)	34.9 (1-3/8)	44.5 (1-3/4)	
	Inlet	mm	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT 40 + PT 40 + PT 40 + PT40	
Water Connecting Pipes	Outlet	mm	PT40 + PT40 + PT40 (Internal)	PT40 + PT40 + PT40 (Internal)	PT 40 + PT 40 + PT 40 + PT40	
	Drain Outlet	mm	PT20 (3/4, External)	ARWB680LAS4 ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB10LAS4 ARWB200LAS4 ARWB10LAS4 ARWB200LAS4 ARWB10LAS4 ARW	PT20 (3/4, External)	
Dimensions (M v H v D)		mm	ARWB140LAS4 ARWB10LAS4 ARWB1140LAS4 ARWB1140LAS4 ARWB10B00LAS4 ARWB10B00LAS4 ARWB10LAS4 ARWB10B00LAS4 ARWB11B00LAS4 ARWB10B00LAS4 ARWB10B00LAS	(755 x 997 x 500) x 4		
Difficultions (VV X TT X D)		inch	(29-23/32 x 39-1/4 x 19-11/16) x 4	(29-23/32 x 39-1/4 x 19-11/16) x 4	(29-23/32 x 39-1/4 x 19-11/16) x 4	
Not Weight		kg	(140 x 2) + (127 X 2)	(140 x 2) + (127 X 2)	(140 x 2) + (127 X 2)	
TVCE VVCIGITE		lbs	(309 x 2) + (280X2)	(309 x 2) + (280X2)	(309 x 2) + (280 X 2)	
Transmission Cable (CVV-	SB)	mm <sup>2</sup>	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 5C	
	Name		R410A	R410A	R410A	
Refrigerant	Charge Amount	kg	5.8 + 5.8 + 3.0 + 3.0	5.8 + 5.8 + 3.0 + 3.0	5.8 + 5.8 + 3.0 + 3.0	
	Control Device		EEV	EEV	EEV	
Power Supply		Ø V Hz	3, 380 ~ 415, 50	3, 380 ~ 415, 50	6, 380 ~ 415, 50	
томет заррту		D, 4, 112	3, 380, 60	3, 380, 60	6, 380, 60	
Sound Pressure Level	Cooling	dB(A)	61	61	61	
Staria i ressure Level	Heating	dB(A)				
Sound Power Level	Cooling	dB(A)	75			
	Heating	dB(A)	79	79	77	

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

#### **HEAT RECOVERY**

ARWB700LAS4 / ARWB740LAS4 / ARWB800LAS4



HP			70	74	80
	Combination Unit		ARWB700LAS4	ARWB740LAS4	ARWB800LAS4
Model Name	Independent Unit		ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB100LAS4	ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB140LAS4	ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB200LAS4
Cit	Cooling	kW	196.0	184.8	201.6
Capacity	Heating	kW	220.5	207.9	226.8
la a cata	Cooling	kW	38.69	35.53	38.76
input	Heating	kW	40.35	37.14	40.52
Casing Color			Warm Gray, Mornig Gray	Warm Gray, Mornig Gray	Warm Gray, Mornig Gray
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination		(Inverter) x 4	(Inverter) x 4	(Inverter) x 4
	Piston Displacement	cm³/rev	62.1 + 62.1 + 62.1 + 43.8	62.1 + 62.1 + 62.1 + 43.8	62.1 + 62.1 + 62.1 + 62.1
6	Number of revolution	rev/min	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz	Inverter 3,600 at 60Hz
Compressor	Motor Output	kW	5.3 + 5.3 + 5.3 + 4.2	5.3 + 5.3 + 5.3 + 4.2	5.3 + 5.3 + 5.3 + 5.3
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC71D (PVE)	FVC74D (PVE)	FVC77D (PVE)
	Oil Charge Amount	СС	(1,400 x 3 + 1,200) + (1,600 x 4)	(1,400 x 3 + 1,200) + (1,600 x 4)	(1,400 + 1,600) x 4
	Туре		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
Model Name  Capacity  Input  Casing Color  Compressor  Heat Exchanger  Temp. range of  Circulation water  Refrigerant Connecting Pipes  Water Connecting Pipes  Dimensions (W x H x D)  Net Weight	Maximum Pressure Resistance kgf/cm <sup>2</sup>		45	45	45
	Head Loss	kPa	30.1 + 30.1 + 30.1 + 15.8	30.1 + 30.1 + 30.1 + 28.6	30.1 + 30.1 + 30.1 + 30.1
	Rated Water Flow	LPM	192 + 192 + 192 + 96	192 + 192 + 192 + 135	192 + 192 + 192 + 192
Temp. range of	Cooling		10°C ~ 45°C (50°F ~ 116°F)	10°C ~ 45°C (50°F ~ 119°F)	10°C ~ 45°C (50°F ~ 122°F)
Circulation water	Heating		-5°C ~ 45°C (23°F ~ 116°F)	-5°C ~ 45°C (23°F ~ 119°F)	-5°C ~ 45°C (23°F ~ 122°F)
	Liquid Pipes	mm (inch)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)
	Low Pressure Gas Pipes	mm (inch)	53.98 (2-1/8)	53.98 (2-1/8)	53.98 (2-1/8)
connecting ripes	High Pressure Gas Pipes	mm (inch)	44.5 (1-3/4)	44.5 (1-3/4)	44.5 (1-3/4)
	Inlet	mm	PT 40 + PT 40 + PT 40 + PT40	PT 40 + PT 40 + PT 40 + PT 40	PT 40 + PT 40 + PT 40 + PT 40
Water Connecting Pipes	Outlet	mm	PT 40 + PT 40 + PT 40 + PT40	PT 40 + PT 40 + PT 40 + PT 40	PT 40 + PT 40 + PT 40 + PT 40
	Independent Unit    Cooling	mm	PT20 (3/4, External)	PT20 (3/4, External)	PT20 (3/4, External)
D: . (M II D)		mm	(755 x 997 x 500) x 4	(755 x 997 x 500) x 4	(755 x 997 x 500) x 4
Dimensions (VV x H x D)		inch	(29-23/32 x 39-1/4 x 19-11/16) x 4	(29-23/32 x 39-1/4 x 19-11/16) x 4	(29-23/32 x 39-1/4 x 19-11/16) x
NI - 187 : I -		kg	(140 x 2) + (127 X 2)	(140 x 3) + (127 x 1)	140 x 4
Net Weight		lbs	(309 x 2) + (280 X 2)	(309 x 3) + (280 x 1)	309 x 4
Transmission Cable (CVV-	-SB)	mm <sup>2</sup>	1.0 ~ 1.5 x 5C	1.0 ~1.5 x 8C	1.0 ~1.5 x 11C
	Name	10°C - 45°C (50°F     -5°C - 45°C (23°F     -5°C (23°F     -5		R410A	R410A
Refrigerant	Cooling	kg	5.8 + 5.8 + 3.0 + 3.0	3.0 + 3.0 + 3.0 + 5.8	3.0 + 3.0 + 3.0 + 3.0
	Control Device		EEV	EEV	EEV
Dower Cupple		Ø 1/ !!-	6, 380 ~ 415, 50	9 / 380 ~ 415 / 50	12 / 380 ~ 415 / 50
Power Supply		Ø, V, Hz	6, 380, 60	9 / 380 / 60	12 / 380 / 60
C 1D 1.1	Cooling	dB(A)	60	61	57
Sound Pressure Level	Heating	dB(A)	65	63	63
S 10 1 1	Cooling	dB(A)	74	75	71
Sound Power Level	Heating	dB(A)	80	77	77

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

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

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

<sup>2.</sup> Capacities are recognitions.

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

4. 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.)

<sup>\*</sup> This product contains Fluorinated Greenhouse Gases. (R410A)

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

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

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

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

## INDOOR UNITS

- WALL MOUNTED UNIT
- SMART DUAL VANE CASSETTE
- ROUND CASSETTE
- CEILING MOUNTED CASSETTE
- CEILING CONCEALED DUCT
- FRESH AIR INTAKE UNIT

- FLOOR STANDING UNIT
- CEILING SUSPENDED UNIT
- CEILING & FLOOR CONVERTIBLE UNIT
- CONSOLE & FLOOR STANDING UNIT
- COMPATIBILITY
- FEATURE FUNCTIONS



## OOR UNITS

#### **INDOOR UNITS LINE-UP**

	kW		1.5	2.2	2.8	3.6	4.5	5.6	6.2	7.1	8.2	9.0	10.6	12.3	14.1	15.8	22.4	28.0
Туре		Btu/h	5k	7k	9k	12k	15k	18k	21k	24k	28k	30k	36k	42k	48k	54k	76k	96k
	Artcool Mirror		•	•	•	•	•	•		•								
4 <sup>th</sup> generation Wall Mounted Unit	Artcool Gallery			•	•	•												
	Standard	-	•	•	•	•	•	•		•		•	•					
	Smart Dual Vane Cassette									•	•	•	•	•	•			
	Round Cassette									•			•		•			
	4 Way Cassette (570 x 570)	m g m	•	•	•	•	•	•	•									
4 <sup>th</sup> generation Ceiling Mounted	4 Way Cassette (840 x 840)									•	•	•	•	•	•	•		
Cassette	4 Way Cassette High Sensible (840 x 840)			•	•	•	•	•		•	•		•	•				
	2 Way Cassette				•	•		•		•								
	1 Way Cassette			•	•	•		•		•								
	High Statics			•	•	•	•	•		•	•		•	•	•	•	•	•
4 <sup>th</sup> generation Ceiling Concealed Duct	Low Statics		•	•	•	•	•	•	•	•								
Duct	High Sensible			•	•	•	•	•		•	•		•	•	•			
4 <sup>th</sup> generation Fresh Air Intak	e Units																•	•
4 <sup>th</sup> generation Floor Standing	Units				•	•												
4 <sup>th</sup> generation Ceiling Suspen	ded Unit							•		•			•		•			
4 <sup>th</sup> generation Console		-		•	•	•	•											
4 <sup>th</sup> generation Floor	Floor Standing Unit with Case			•	•	•	•	•		•								
Standing Unit	Floor Standing Unit without Case			•	•	•	•	•		•								
4 <sup>th</sup> generation	Low Temperature	• LG												•				•
HYDRO KIT	High Temperature	• Lo												•			•	
4 <sup>th</sup> generation Energy	with Humidifier	00-11					•			•		•						
Recovery Ventilator with DX Coil	without Humidifier	00-11					•			•		•						

<sup>1)</sup> If 4th generation indoor units are combined to 2<sup>nd</sup> generation indoor units, several funtions are not available. More detailed information, refer to the "MULTI V Indoor units Compatibility Table"

#### **INDOOR UNITS FEATURE OVERVIEW**

Energy Monitoring	2 Set Point	Occupied / Unoccupied Scheduling Function	Group Control	Test Run (Cooling)	Test Run (Heating)	Model Information Monitoring	Auto Addressing	Refrigerant Leakage Detection	Thermo On / Off Range Setting (Cooling)	Thermo On / Off Range Setting (Heating)	Static Pressure 11 Step Control (Only for Ceiling Concealed Duct Type)	1 Point External Input (On / Off Control)	Filter Sign (Remaining Time)	Auto Rerstart Function Disable / Enable	Wi-Fi Ready
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Advanced Air Conditioning System

COOLING WITH PURIFIED AIR



CAC certification guarantees powerful air purification performance to large space.

#### CAC certification?

The Korea Air Cleaning Association strictly tests the air cleaning function of air conditioner products and provide certification to the product that give credibility to consumers.





#### Air purification Performance Testing Result

Testing institute: Korea Institute of Machinery and Materials.

Test Standard: KACA-CAC-2011, Air purification integrated air conditioner

Maker: LG Electronics

Model Name: RNW1450T2S(14.5kW, 48kBtu/h)

\* This model name is Korean market model name

No	Testing Item	Unit	Testing Result	Standard
1	Class Air Dalisson, Data (CADD)	m³/min	19.1	10.0 m³/min↑
'	Clean Air Delivery Rate (CADR)	m³/h	1145	
2	Harmful Gas Removal Efficiency	%	63	
3	Ozone generation density	ppm	TR	0.01↓
4	Noise Level	dB(A)	48.9	55↓
5	Treatable Area	m²	147	

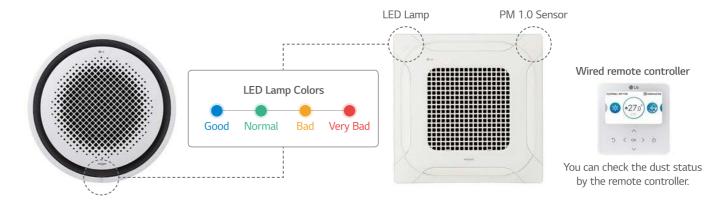
#### 5-Step Air Cleaning Process

5-Step air cleaning process removes invisible, ultra fine dust, odor and germs to ensure a clean and healthy living environment.





The condition of the air is displayed in different colors on the LED display. The remote control can check the dust concentration in numerical values PM 1.0 sensor detects dust density of three sizes (Fine dust, Ultra-fine dust and Micro-fine dust) You can check the indoor air condition on the cassette panel and the remote control.



#### **LG ThinQ App**

Air quality monitoring and operation control can be managed easily through Wi-Fi mobile application LG ThinQ.



#### Advanced Air Conditioning Technology

# **ENERGY EFFICIENCY**



#### 1 Point External Input (On / Off Control)

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

Connection between an indoor unit and external devices directly



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



#### **Energy Monitoring (Accumulated Electric Energy Check)**

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

# Premium wired remote controller Standard wired remote controller Standard wired remote controller Standard wired remote controller Total accumulated electric energy 595kWh

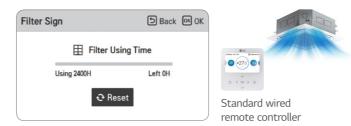
#### Apply for Multistory Building



#### Filter Sign (Remaining Time)

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

#### Remain time until indoor filter cleaning + alarm



Remain time until indoor filter cleaning 2,400hr.





Remain time until indoor filter cleaning 1,729hr.

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#### **WALL MOUNTED UNIT**



#### **Features & Benefits**

- 6 Different Discharge Angles can be Programmed via the Remote Control.
- Easily Detachable Full Surface Cover Helps Clean the Air Conditioner Flawlessly.
- Drain Pipe can be Easily Hidden from Sight.

#### **Key Applications**

Retail

• Hotel

Restaurant

• Multi-family Residence

• Office

Wa	ll Mounted Unit	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	
	lonizer	0	-	O ~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

#### **Energy Display**

LG's Energy Display panel monitors the amount of energy levels used. Save on energy consumption while enjoying the cooling by checking your energy level on the pane.

\* Specifications may vary for each model.

#### Magic Display & Remote Control

With the push of a button on the remote control, indoor unit's LCD display shows the current and total energy use, thus making the users aware of reducing energy consumption.



Push Button for 3 sec

#### Normal Mode Current Setting Temp.



Electric Power
Displays Current Energy Use



#### Fan Speed

Display	Speed
F5	High
FH	Medium-High
F3	Medium
F2	Medium-Low
FI	Low

Sleep Mode



For example, setting 1hr

#### **WALL MOUNTED UNIT**

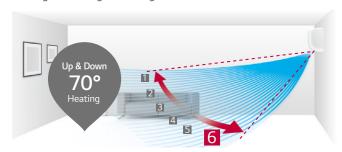
#### 4 Way Swing

Cool air reaches out to the entire room regardless of where the air conditioner is installed.

\* Specifications may vary for each model.

#### 6-Step Vane, Control up to 70°

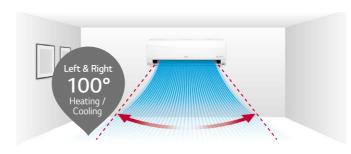
The vertical vane, which moves up and down, has 6 different settings including full swing.



\* Angle can be different from each model and working mode

#### Control up to 100°

The louver can be adjusted by manual.



\* Angle can be different from each model and working mode.

#### Easy and Simple Control

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



Up / Down Swing

#### **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 airflow is increased to 13.0 CMM.



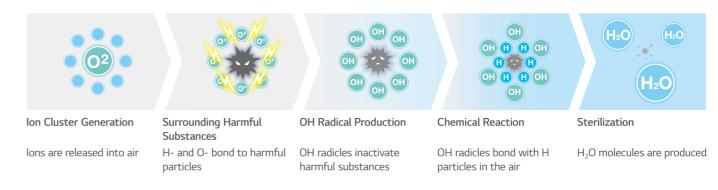
#### **Ionizer** PLUS

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

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

#### Sterilization and Deodorization (Utilizes Over 3 Million Ions)

lonizer+ reduces harmful and contagious microscopic particles by infusing the air passing through the air conditioner with over 3 million ions.



#### Sterilization Performance Evaluations

Sterilize Bacteria (E.coli colon bacillus) over 99.9% in 30 min.



 $\label{thm:conditions:Space:$ 

#### 2.1 odor strength decrease in 60 minutes

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



# OOR UNITS

#### **WALL MOUNTED UNIT**

#### **Auto Cleaning**

The interior of the air conditioner is maintained clean by drying off the heat exchanger, then sterilizing the interior once more.

#### 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.



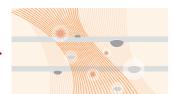
#### Cleans Filter with Regular Airflow

The comprehensive auto cleaning function prevents the formation of bacteria and mold on the heat exchanger, providing an enhancing environment.





By dehumidifying, the auto cleaning function eliminates substances that might be harmful.



The indoor environment remains odorless with the advanced deodorizing function.



By preventing polluting of the heat exchanger caused by various germs and bacteria, the performance and life span of the air conditioner do not wither away even after a period of 10 years.

#### Removes Harmful Particles

Auto Cleaning provides clean air by preventing bacteria, mold and odors that can otherwise accumulate in an indoor unit.





Prevention



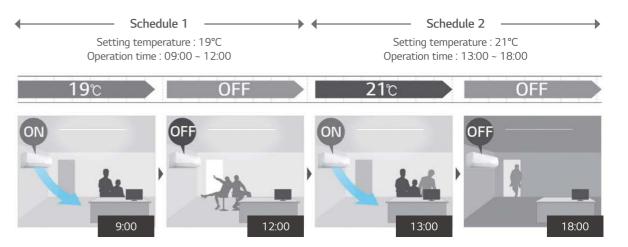


Mold Flimination

#### **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 or after setting period.

% 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 optimize indoor air temperature for a more comfortable environment.



#### **Group Control**

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

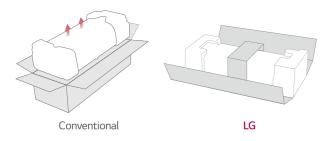


## **WALL MOUNTED UNIT**

### **Quick & Easy Installation**

LG air conditioner is designed for an easy and efficient installation, making possible to install several units in a short period of time. \* Specifications may vary for each model.

### One Simple Packing Box



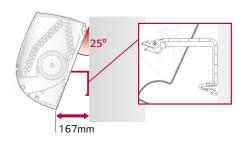
## Installation Plate Improvement

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



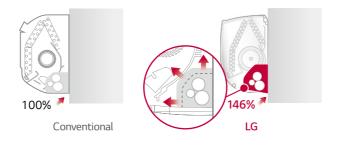
### **Installation Support Clip**

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



### Wider Tubing Space

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



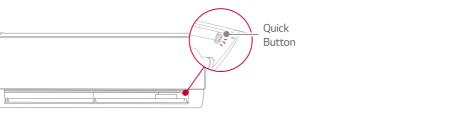
### **Detachable Bottom Cover**

The air conditioner's bottom cover is detachable for easier



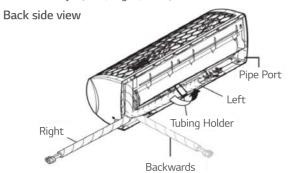
### Quick button for running test

The test button is conveniently located and easy to find.



### 3 Way Flexible Installation

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



### Wi-Fi Control

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

### LG ThinQ

Search "LG ThinQ" on Google market or Appstore then 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 LG ThinQ's impressive feature.



#### Wi-Fi Connectivity

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

Access your air conditioner anytime and from anywhere

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



### \* Can be controlled by multiple users, but not simultaneously.

Straight forward Management

### Simple operation for various functions

















Energy Monitoring

Diagnosis

Management



On / Off, Current Temp. Mode, Set Temp. Vane Control

Reservation

## **ARTCOOL MIRROR**

ARNU05GSJR4 / ARNU07GSJR4 / ARNU09GSJR4 ARNU12GSJR4 / ARNU15GSJR4



Model		Unit	ARNU05GSJR4	ARNU07GSJR4	ARNU09GSJR4	ARNU12GSJR4	ARNU15GSJR4
Cooling Capac	ity	kW	1.6	2.2	2.8	3.6	4.5
Heating Capac	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			Mirror (Black)				
RAL Code			RAL 9005				
Dimensions	Body	mm	837 x 308 x 192				
$(W \times H \times D)$	Shipping	mm	909 x 383 x 256				
	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				
	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 Pressur	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)	54 / 53 / 52	54 / 53 / 52	55 / 54 / 52	55 / 54 / 53	58 / 56 / 54
Davies Cur-l		Ø V II=	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communication	n Cable	mm² x No.	1.0 ~ 1.5 x 2C				

<sup>※</sup> Nominal : Performance tested under EN14511

### Accessories

Chassis	ARNU05GSJR4	ARNU07GSJR4	ARNU09GSJR4	ARNU12GSJR4	ARNU15GSJR4
Drain Pump			-		
Cassette Cover			-		
Refrigerant Leakage Detector			PRLDNVS0		
EEV Kit			PRGK024A0		
Independent Power Module			PRIP0		
Robot Cleaner			-		
Pre Filter (Washable / Anti-fungus)		0			
Ion Generator		0			
CO <sub>2</sub> Sensor					
Ventilation Kit					
IR Receiver			-		
Zone Controller			-		
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact)  PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) 1)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)				
External Input (1 point)	0				
Wi-Fi			0		

ARNU18GSKR4 / ARNU24GSKR4



Model		Unit	ARNU18GSKR4	ARNU24GSKR4
Cooling Capacity		kW	5.6	7.1
		kW	6.3	7.5
Power Input (H / M / L)	Nominal	W	32 / 26 / 16	39 / 26 / 16
Exterior Color			Mirror (Black)	Mirror (Black)
RAL Code			RAL 9005	RAL 9005
Dimensions	Body	mm	998 x 345 x 212	998 x 345 x 212
$(W \times H \times D)$	Shipping	mm	1,080 x 422 x 281	1,080 x 422 x 281
	Туре		Cross Flow Fan	Cross Flow Fan
F	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
	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 Pressure Levels (H / M / L)		dB(A)	43 / 39 / 34	46 / 41 / 34
Sound Power	Levels (H / M / L)	dB(A)	63 / 57 / 54	65 / 60 / 54
D C		Ø V II-	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60
Communication	n Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

<sup>※</sup> Nominal : Performance tested under EN14511

Chassis	ARNU18GSKR4	ARNU24GSKR4	
Drain Pump	-		
Cassette Cover	-		
Refrigerant Leakage Detector	PRLDN	VS0	
EEV Kit	PRGK02	24A0	
Independent Power Module	PRIP	20	
Robot Cleaner	-		
Pre Filter (Washable / Anti-fungus)	0		
Ion Generator	0		
CO <sub>2</sub> Sensor			
Ventilation Kit	-		
IR Receiver	-		
Zone Controller	-		
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible)  INEW PDRYCB320 (Universal input) PDRYCB400 (2 points input) PDRYCB500 (Modbus)		
External Input (1 point)	0		
Wi-Fi	0		

<sup>\*\*</sup> Rated: Max. power input allowed for fan motor

Note: 1. Capacities are based on the following conditions

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

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

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

<sup>3.</sup> I.D : 'Internal Diameter'

<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table 1) Available from April 2020

<sup>\*</sup> Notinial. Performance tested under EN14311

\*Rated: Max. power input allowed for fan motor

Note: 1. Capacities are based on the following conditions

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

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

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

<sup>3.</sup> I.D : 'Internal Diameter'

O: Applied, -: Not applied
 Option: Refer to model name in table
 Available from April 2020

## **ARTCOOL GALLERY**

ARNU07GSF14 / ARNU09GSF14 / ARNU12GSF14



Model		Unit	ARNU07GSF14	ARNU09GSF14	ARNU12GSF14
Cooling Capac	ity	kW	2.2	2.8	3.6
Heating Capac	city	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
$(W \times H \times D)$	Shipping	mm	685 x 670 x 215	685 x 670 x 215	685 x 670 x 215
	Туре		Turbo Fan	Turbo Fan	Turbo Fan
F	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
	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 (15/32)	Ø12 (15/32)	Ø12 (15/32)
Weight	Body	kg	15.0	15.0	15.0
Sound Pressur	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 / 46 / 38
5 6 1		Ø V II-	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

<sup>%</sup> Nominal : Performance tested under EN14511% Rated : Max. power input allowed for fan motor

- Cooling: Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero 2. Due to our policy of innovation some specifications may be changed without notification

- 3. I.D: 'Internal Diameter'

### Accessories

Chassis	ARNU07GSF14	ARNU09GSF14	ARNU12GSF14	
Drain Pump		-		
Cassette Cover		-		
Refrigerant Leakage Detector		PRLDNVS0		
EEV Kit		PRGK024A0		
Independent Power Module		PRIP0		
Robot Cleaner		-		
Pre Filter (Washable / Anti-fungus)		0		
Ion Generator				
CO <sub>2</sub> Sensor				
Ventilation Kit				
IR Receiver		-		
Zone Controller		-		
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible)  NSW PDRYCB320 (Universal input) PDRYCB400 (2 points input) PDRYCB500 (Modbus)			
External Input (1 point)	0			
Wi-Fi	PWFMDD200 <sup>2)</sup>			

## **STANDARD**

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 Capac	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			White	White	White	White	White
RAL Code			RAL 9016				
Dimensions	Body	mm	818 x 316 x 189				
$(W \times H \times D)$	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				
	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	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)	54 / 53 / 52	54 / 53 / 52	55 / 54 / 52	55 / 54 / 53	58 / 56 / 54
Danier Cur - L		Ø V I I=	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C				

Chassis	ARNU05GSJ*4	ARNU07GSJ*4	ARNU09GSJ*4	ARNU12GSJ*4	ARNU15GSJ*4
Drain Pump			-		
Cassette Cover			-		
Refrigerant Leakage Detector			PRLDNVS0		
EEV Kit			PRGK024A0		
Independent Power Module			PRIP0		
Robot Cleaner			-		
Pre Filter (Washable / Anti-fungus)	0				
Ion Generator	0				
CO <sub>2</sub> Sensor					
Ventilation Kit			-		
IR Receiver			-		
Zone Controller			-		
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact)  PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) 1)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)				
External Input (1 point)	0				
Wi-Fi			0		

O: Applied, -: Not applied
 Option: Refer to model name in table
 Available from April 2020

<sup>2)</sup> External installation only

<sup>\*</sup> Notinial: Performance tested under ENT4311

\*\* Rated: Max. power input allowed for fan motor

Note: 1. Capacities are based on the following conditions

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

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

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

<sup>3.</sup> I.D : 'Internal Diameter'

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

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

<sup>1)</sup> Available from April 2020

## **STANDARD**

ARNU18GSK\*4 / ARNU24GSK\*4



Model		Unit	ARNU18GSK*4	ARNU24GSK*4
Cooling Capacity		kW	5.6	7.1
Heating Capac	city	kW	6.3	7.5
Power Input (H / M / L)	Nominal	W	32 / 26 / 16	39 / 26 / 16
Exterior Color			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
F	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
	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 Pressur	Sound Pressure Levels (H / M / L)		43 / 39 / 34	46 / 41 / 34
Sound Power	Levels (H / M / L)	dB(A)	63 / 57 / 54	65 / 60 / 54
Dawar Cur-li		Ø V II=	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

 $<sup>\</sup>times$  Nominal : Performance tested under EN14511

- \*\* Rated: Max. power input allowed for fan motor

  Note: 1. Capacities are based on the following conditions

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

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

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

### Accessories

Chassis	ARNU18GSK*4	ARNU24GSK*4		
Drain Pump		-		
Cassette Cover		-		
Refrigerant Leakage Detector	PRLC	NVS0		
EEV Kit	PRGK	024A0		
Independent Power Module	PR	RIPO		
Robot Cleaner		-		
Pre Filter (Washable / Anti-fungus)	0			
Ion Generator	0			
CO <sub>2</sub> Sensor				
Ventilation Kit		-		
IR Receiver		-		
Zone Controller		-		
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) PDRYCB400 (2 points input) PDRYCB500 (Modbus)			
External Input (1 point)	0			
Wi-Fi		0		

#### ARNU30GSVA4 / ARNU36GSVA4



Model		Unit	ARNU30GSVA4	ARNU36GSVA4
Cooling Capac	ity	kW	8.8	10.4
Heating Capac	city	kW	9.4	10.8
Power Input (H / M / L)	Nominal	W	54 / 43 / 31	85 / 51 / 36
Exterior Color			White	White
RAL Code			RAL 9016	RAL 9016
Dimensions	Body	mm	1,190 x 346 x 265	1,190 x 346 x 265
$(W \times H \times D)$	Shipping	mm	1,265 x 432 x 335	1,265 x 432 x 335
	Туре		Cross Flow Fan	Cross Flow Fan
F	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
	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
D C		Ø V.II-	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60
Communicatio	n Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

<sup>※</sup> Nominal : Performance tested under EN14511

Chassis	ARNU30GSVA4	ARNU36GSVA4
Drain Pump	-	
Cassette Cover	-	
Refrigerant Leakage Detector	PRLDI	NVS0
EEV Kit	-	
Independent Power Module	PRI	PO
Robot Cleaner	-	
Pre Filter (Washable / Anti-fungus)	C	
Ion Generator	-	
CO <sub>2</sub> Sensor	-	
Ventilation Kit	-	
IR Receiver	-	
Zone Controller	-	
PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compat PDRYCB300 (8 points for thermostat compat  NEW PDRYCB320 (Universal input) PDRYCB400 (2 points input) PDRYCB500 (Modbus)		(Universal input) 1) 2 points input)
External Input (1 point)	C	
Wi-Fi	PWFMD	D200 <sup>1)</sup>

<sup>3.</sup> l.D : 'Internal Diameter'

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

<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table 1) Available from April 2020

<sup>\*\*</sup> Rated : Max. power input allowed for fan motor

Note : 1. Capacities are based on the following conditions

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

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

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

<sup>3.</sup> I.D : 'Internal Diameter'

O: Applied, -: Not applied
 Option: Refer to model name in table
 Available from April 2020

<sup>2)</sup> External installation only



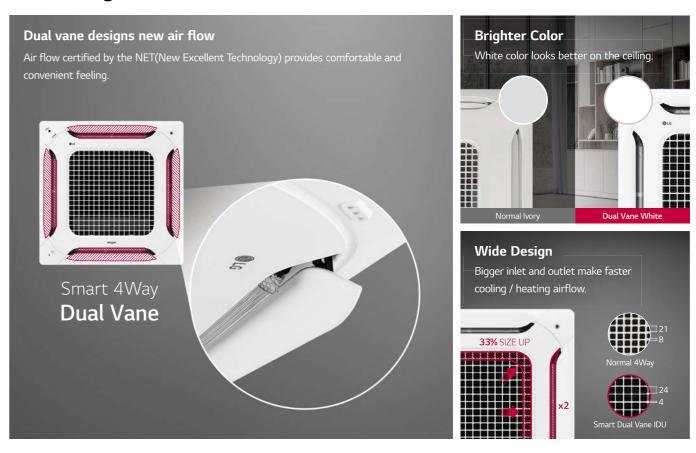
### **Features & Benefits**

- 6 Different Discharge Angles can be Programmed via the Remote Control.
- Easily Detachable Full Surface Cover Helps Clean the Air Conditioner Flawlessly.
- Drain Pipe can be Easily Hidden from Sight.

### **Key Applications**

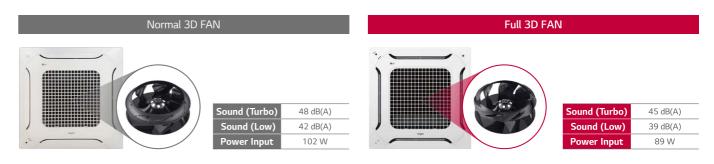
- Retail
- Restaurant
- Office
- Hotel
- Dormitory
- Restaurant

## **New Design**



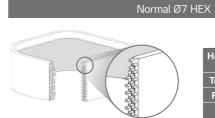
### High Air flow & Low noise with Full 3D Fan

Full 3D fan decreases air resistance, makes High Airflow and Low Sound Level.



### High Efficient Heat Exchanger (HEX)

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



Heat Transfer Area	3.32m² (100%)
Tube Column	12 Column
Fin per Inch	19
Efficiency	100%



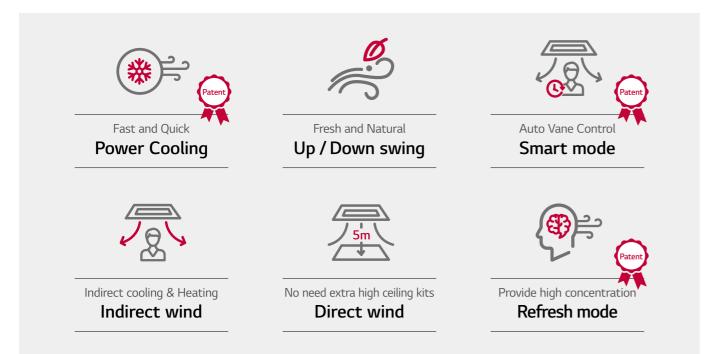
Heat Transfer Area	3.45m² (104%)
Tube Column	18 Column
Fin per Inch	21
Efficiency	110%
<del></del>	

## **SMART DUAL VANE CASSETTE**

### **Various Airflow**

### Dual Vane leads the new types wind

Innovative dual vane designs each of the best airflow over various spaces.



### Power Cooling

Powerful airflow is always faster cooling and heating (4 Vane Control Logic).



Reached time to set temperature



<Beginning Temperature 31°C, Approaching temperature 26°C>

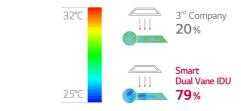
- % Smart Dual Vane Indoor Unit 14.5kW % Data Based on actual test of LG Test Chamber, single product test result (start temp.: 33°C, Setting Temp.: 26 °C, 3rd Company: Cooling Autoswing, LG: Natural Dual Swing Mode)

### Up / Down swing

Up / Down swing provides fresh and uniform airflow (Dual Swing).



Cooling Temperature Distribution rate

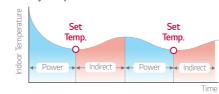


- <3<sup>rd</sup> company Auto swing, LG Dual auto swing mode>
- % Smart Dual Vane Indoor Unit 14.5kW % Data Based on actual test of LG Test Chamber, single product test result (start temp.: 33°C, Setting Temp.: 26 °C, 3<sup>rd</sup> Company: Cooling Autoswing, LG: Natural Dual Swing Mode)

IDU automatically controls power and indirect wind to keep feeling good. (Power  $\rightarrow$  Reached Setting Temp.  $\rightarrow$  Indirect Airguide → Unreached Setting Temp. → Power)



Change of airflow by Temperature



### Indirect wind

Dual Vane designs indirect wind without separate airquide Kit.







Normal 4way with Air guide

Smart Dual Vane IDU

### Direct wind

No need high ceiling kit, and airflow is controlled to reach the floor by angles of vane.

(3rd Company: Single Vane 70°, LG High Ceiling: Dual Vane 85°)



Comparison of flow height



 $\ensuremath{\,\times\,} 3^{\ensuremath{\scriptscriptstyle \text{Td}}}$  Company : High Ceiling Installation Kit Manual, LG : Direct wind

### Refresh mode

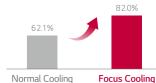
IDU controls temperature and air flow to Induce brainwave change, so that it provides high concentration.



Concentration Performance

Vocabulary Test Performance





 $\ensuremath{\mathbb{X}}$  Data based on the results of EEG measurements through the sleep polysomnograpy in Seoul Sleep Environment Research

## **SMART DUAL VANE CASSETTE**

### **Various Airflow**

### Human detecting Direct / Indirect airflow

Human sensing function finds users to provide their favorite airflow.

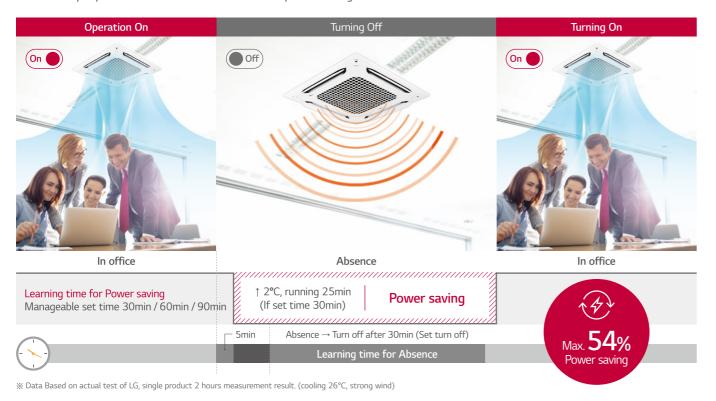




 $\ensuremath{\ensuremath{\%}}$  Available only for products with Human Detecting sensor.

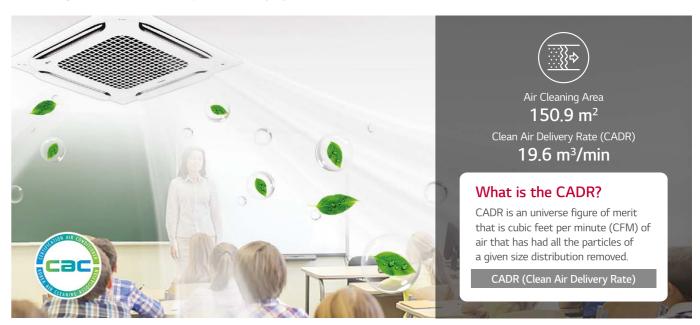
### Human detecting On / Off Learning operation system

IDU senses people to switch On / Off for Max. 54% power saving.



### Everyday High performance of Air cleaning

Air cleaning function makes clean spaces for everyday.



% Korean Air Cleaning Association Certification Standards (Jun, 2019)

### Convenient and Powerful 5 Steps Air cleaning

Easy to manage air cleaning system with one-touch air cleaning filter.



## **SMART DUAL VANE CASSETTE**

ARNU24GTBB4 / ARNU28GTBB4 / ARNU30GTBB4



Model		Unit	ARNU24GTBB4	ARNU28GTBB4	ARNU30GTBB4		
		kW	7.1	8.2	9.0		
Cooling Capacity		kcal/h	6,100	7,100	7,700		
		Btu/h	24,200	28,000	30,700		
kW		kW	8.0	9.2	10.0		
Heating Capacity k		kcal/h	6,900	8,000	8,600		
		Btu/h	27,300	31,500	34,100		
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate		
		mm	840 x 840 x 204	840 x 840 x 204	840 x 840 x 204		
Dimensions	Body	inch	33.0 x 33.0 x 8	33.0 x 33.0 x 8	33.0 x 33.0 x 8		
$W \times D \times H$ )	5 . 5 . 1	mm	950 x 950 x 35	950 x 950 x 35	950 x 950 x 35		
	Front Panel	inch	37.4 x 37.4 x 1.3	37.4 x 37.4 x 1.3	37.4 x 37.4 x 1.3		
	Rows x Columns x FPI		3 x 8 x 21	3 x 8 x 21	3 x 8 x 21		
Coil	Face Area	mns x FPI 3 x 8 x 21		0.33	0.33		
	Туре		Full 3D Turbo Fan	Full 3D Turbo Fan	Full 3D Turbo Fan		
Motor Output x Numb		W	51 x 1	51 x 1	51 x 1		
Fan -	Running Cuurent	А	0.31	0.34	0.43		
		CMM	18 / 17 / 15	19 / 17 / 15	21 / 19 / 16		
	Air Flow Rate (H / M / L)	cfm	635 / 600 / 530	671 / 600 / 530	741 / 681 / 565		
	Drive		Direct Direct		Direct		
	Motor Type		BLDC	BLDC	BLDC		
emperature C	Control		Microprocessor, Thermostat for cooling and heating				
ound Absorbi	ing Thermal Insulation Materi	ial	Foaned polystrene	Foaned polystrene	Foaned polystrene		
Safty Device			Fuse	Fuse	Fuse		
	Liquid Side	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)		
ipe Connections	Gas Side	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)		
.ormections	Drain Pipe (Internal Dia.)	mm (inch)	25 (1)	25 (1)	25 (1)		
let Weight	Body	kg(lbs)	21 (46.3)	21 (46.3)	21 (46.3)		
loise Level (S	ound Press, 1.5m, H / M / L)	dB(A)	39 / 37 / 35 40 / 38 / 35		43 / 40 / 36		
		~	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50		
ower Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60		
Refrigerant Co	ontrol		EEV	EEV	EEV		
Power Cord			H05RN-F 1.5 x 3C	H05RN-F 1.5 x 3C	H05RN-F 1.5 x 3C		
ransmission (	Cable		CVV-SB 1.25 x 2C	CVV-SB 1.25 x 2C	CVV-SB 1.25 x 2C		
anel Color			Noble White (RAL 9003)	Noble White (RAL 9003)	Noble White (RAL 9003)		
anel Name (A	Accessory)		PT-AAGW0 / PT-AFGW0	PT-AAGW0 / PT-AFGW0	PT-AAGW0 / PT-AFGW0		
	Cooling (Rate)	W	32 / 27 / 20	37 / 30 / 22	48 / 36 / 25		
Power Input	Heating (Rate)	W	32 / 27 / 20	37 / 30 / 22	48 / 36 / 25		
	Cooling (Rate)	А	0.31 / 0.26 / 0.21	0.34 / 0.28 / 0.22	0.43 / 0.34 / 0.25		
Current Input	Heating (Rate)	A	0.31 / 0.26 / 0.21	0.34 / 0.28 / 0.22	0.43 / 0.34 / 0.25		

<sup>\*</sup> Available from may 2020

ARNU36GTAB4 / ARNU42GTAB4 / ARNU48GTAB4



Model		Unit	ARNU36GTAB4	ARNU42GTAB4	ARNU48GTAB4
		kW	10.6	12.3	14.1
Cooling Capacity		kcal/h	9,100	10,600	12,100
		Btu/h	36,200	42,000	48,100
		kW	11.9	13.8	15.9
Heating Capacity		kcal/h	10,200	11,000	13,200
	Bt		40,600	43,800	51,200
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
		mm	840 x 840 x 288	840 x 840 x 288	840 x 840 x 288
Dimensions (W x D x H)	Body	inch	33.0 x 33.0 x 11.3	33.0 x 33.0 x 11.3	33.0 x 33.0 x 11.3
		mm	950 x 950 x 35	950 x 950 x 35	950 x 950 x 35
	Front Panel ————inch		37.4 x 37.4 x 1.3	37.4 x 37.4 x 1.3	37.4 x 37.4 x 1.3
0 11	Rows x Columns x FPI		3 x 12 x 21	3 x 12 x 21	3 x 12 x 21
Coil	Face Area	m³	0.5	0.5	0.5
	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	Running Cuurent	А	0.62	0.85	0.95
		CMM	29 / 26 / 22	33 / 29 / 26	34 / 30 / 28
	Air Flow Rate (H / M / L)	cfm	1,024 / 918 / 777	1,165 / 1,024 / 918	1,200 / 1,059 / 988
	Drive		Direct	Direct	Direct
	Motor Type		BLDC	BLDC	BLDC
Temperature (	Control		Mic	roprocessor, Thermostat for cooling and heat	ing
Sound Absorb	ping Thermal Insulation Mater	ial	Foaned polystrene	Foaned polystrene	Foaned polystrene
Safty Device			Fuse	Fuse	Fuse
	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)
Lonnections	Drain Pipe (Internal Dia.)	mm (inch)	25 (1)	25 (1)	25 (1)
Net Weight	Body	kg(lbs)	26 (57.3)	26 (57.3)	26 (57.3)
Noise Level (S	Sound Press, 1.5m, H / M / L)	dB(A)	43 / 40 / 37	47 / 43 / 40	48 / 44 / 42
			1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60
Refrigerant Co	ontrol		EEV	EEV	EEV
Power Cord			H05RN-F 1.5 x 3C	H05RN-F 1.5 x 3C	H05RN-F 1.5 x 3C
Fransmission (	Cable		CVV-SB 1.25 x 2C	CW-SB 1.25 x 2C	CVV-SB 1.25 x 2C
Panel Color			Noble White (RAL 9003)	Noble White (RAL 9003)	Noble White (RAL 9003)
Panel Name (	Accessory)		PT-AAGW0 / PT-AFGW0	PT-AAGW0 / PT-AFGW0	PT-AAGW0 / PT-AFGW0
	Cooling (Rate)	W	69 / 49 / 37	97 / 69 / 49	110 / 76 / 61
Power Input	Heating (Rate)	W	69 / 49 / 37	97 / 69 / 49	110 / 76 / 61
_	Cooling (Rate)	А	0.62 / 0.46 / 0.36	0.85 / 0.62 / 0.46	0.95 / 0.69 / 0.56
Current Input	Heating (Rate)	A	0.62 / 0.46 / 0.36	0.85 / 0.62 / 0.46	0.95 / 0.69 / 0.56

<sup>\*</sup> Available from may 2020

# DOOR UNITS

## **ROUND CASSETTE**



### **Features & Benefits**

- Premium design to match your interior space
- Pleasant airflow for optimal comfort
- Air purification
- Improved and simple installation

### **Key Applications**

- Retail
- School
- Office
- Hotel
- DormitoryRestaurant

## **Premium Design to Complete the Space**

Subtly revealed elegance. Sense that stands out in any interior. A body design that naturally fits your space, adding class to your style. Panels styled with clean whites and modern blacks, perfecting your interior.



### Comfort

### Perfect Round Flow

Perfect round flow without blind spots. (This product can only be installed on an open ceiling)







### Visible, Intuitive Airflow

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





INDOOR UNITS FEATURE

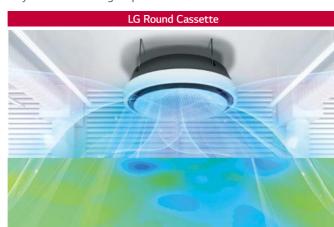
## **ROUND CASSETTE**

### Comfort

### 30% Faster in Cooling

With greater airflow, it gets cooler 30% faster, spreading cool air evenly without missing a spot.





18 minutes to reach the set temperature

12 minutes to reach the set temperature

### Clean Air

### Powerful and Convenient 5-step Air Purification

With the semi-permanent 5-step air filter, you don't have to worry about maintenance cost anymore.



### Installation

### Minimal exposure of installations

Pipes are brought together in one place to minimize exposure. Hanger covers hide installations to add a clean, sophisticated look. (This product can only be installed on an open ceiling)



INDOOR UNITS SPECIFICATION 162 | 163

## **ROUND CASSETTE**

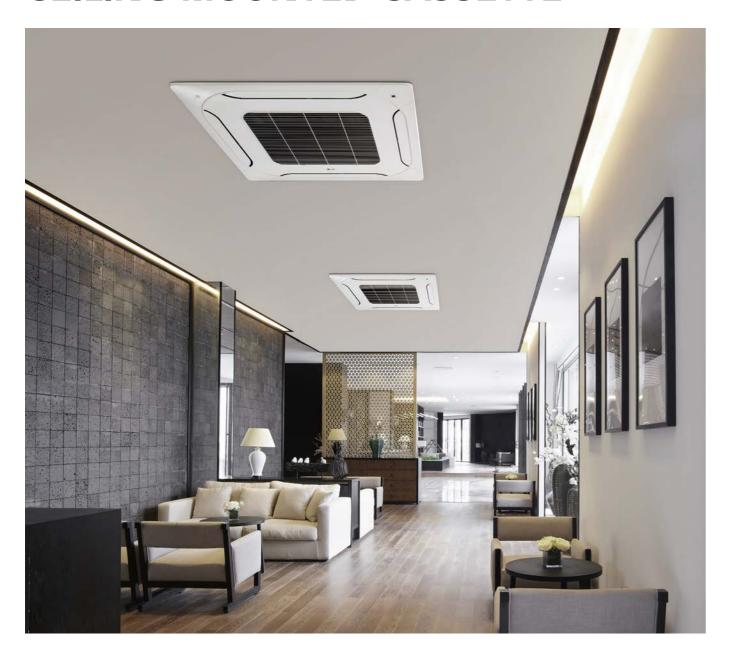
ARNU24GTYA4 / ARNU36GTYA4 / ARNU48GTYA4



Model		Unit	ARNU24GTYA4	ARNU36GTYA4	ARNU48GTYA4	
Caalina Canasitu	Rated	kW	7.1	10.6	14.1	
Cooling Capacity		Btu/h	24,200	36,200	48,100	
	Rated	kW	8.0	11.9	15.9	
eating Capacity Btu/h		27,300	40,600	54,200		
Power Input	H/M/L	W	44 / 36 / 29	63 / 47 / 36 98 / 70 / 4		
Running Current	H/M/L	А	0.47 / 0.40 / 0.32	0.67 / 0.52 / 0.40	0.99 / 0.74 / 0.47	
	Туре	-	3D Turbo Fan	3D Turbo Fan	3D Turbo Fan	
Indoor Fan	Air Flow Rate (H / M / L)	m³/min	22 / 21 / 19	27 / 24 / 21	32 / 28 / 23	
	Туре	-	Brushless DC	Brushless DC	Brushless DC	
	Drive	-	Direct	Direct	Direct	
Indoor Fan Motor	Output	W x No.	157 x 1	157 x 1	157 x 1	
	FLA (Full Load Ampere)	А	1.97	1.97	1.97	
= 1	(Rows x Columns x FPI) x No.	-	(3 x 12 x 21) x 1	(3 x 12 x 21) x 1	(3 x 12 x 21) x 1	
Heat Exchanger	Face Area	m <sup>2</sup>	0.5	0.5	0.5	
	Net (W x H x D)	mm	1,050 x 330 x 1,050	1,050 x 330 x 1,050	1,050 x 330 x 1,050	
Dimensions	Shipping (W x H x D)	mm	1,137 x 395 x 1,132	1,137 x 395 x 1,132	1,137 x 395 x 1,132	
	Net	kg	30.0	30.0	30.0	
Weight	Shipping	kg	37.9	37.9	37.9	
Exterior	Color (RAL Code)	-	White (9003)	White (9003)	White (9003)	
Air Filter	Туре	-	Long life	Long life	Long life	
Temperature Control		-	Micro	processor, Thermostat for cooling and h	neating	
Sound Absorbing / Thermal Insulation Ma	terial	-		Foamed polystrene		
Protection Divice		-	Fuse	Fuse	Fuse	
	Туре	-	R410A	R410A	R410A	
Refrigerant	Control Type	-	EEV	EEV	EEV	
Drain Pipe	O.D / I.D	mm (inch)	32 / 25	32 / 25	32 / 25	
	Liquid	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)	
D: :	Gas	mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)	
Piping Connection	Connection Type (Liquid)	-	Flare	Flare	Flare	
	Connection Type (Gas)	-	Flare	Flare	Flare	
C 1D 1 1	Cooling (H / M / L)	dB(A)	39 / 37 / 34	43 / 39 / 37	47 / 44 / 39	
Sound Pressure Level	Heating (H / M / L) dB(A) 39 / 37 / 34 43 / 39 / 37		47 / 44 / 39			
C 1D 1 1	Cooling (H / M / L)	dB(A)	48 / 46 / 43	52 / 48 / 46	56 / 53 / 48	
Sound Power Level	Heating (H / M / L)	dB(A)	48 / 46 / 43	52 / 48 / 46	56 / 53 / 48	
	-	Ø, V, Hz	1, 220 ~ 230 ~ 240, 50/60	1, 220 ~ 230 ~ 240, 50/60	1, 220 ~ 230 ~ 240, 50/60	
Power Supply	Running Current by voltage	А	0.47 - 0.45 - 0.43	0.67 - 0.64 - 0.61	0.99 - 0.95 - 0.91	
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	

<sup>%</sup> Panel integrated product% This product can only be installed on an open ceiling

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### **Features & Benefits**

- Human detection control allowing energy savings through saving operation & comfort through wind direction operation
- New multi-functional 4 Way cassette panel for large sizes with aesthetic shape
- The independent vane operation feature allows user to control vanes by desired and perceptible comfort flow

### **Key Applications**

Data:	
RETAIL	

• School

Dormitory

Office

Restaurant

	Cassette	4 Way	2 Way	1 Way
Smart	VVi-Fi	0	0	0
Energy Efficiency	Human Detect Sensor	0	-	-
Health	Auto Cleaning	-	0	-
	Drain Pump	0	0	0
	Sleep Mode	0	0	0
Comfort	Timer (On / Off)	0	0	0
Collifort	Timer (Weekly)	0	0	0
	Two Thermistor Control	0	0	0
	Group Control	0	0	0

## **Human Detect Sensor & Humidity Sensor**

The interior of the air conditioner is maintained clean by drying off the heat exchanger, then sterilizing the interior once more.



### Direction control based on human motion

Air flow direction is controlled automatically by motion sensor that detects the activity of people every 10 seconds.



### Detection range



### On / Off mode

The indoor unit automatically stops when detecting absence. It runs as the s us mode when sensing human body.











### Temperature control mode

Energy savings by automatically setting target temperature during absence. (5 / 10 / 15 / 30 / 60min)





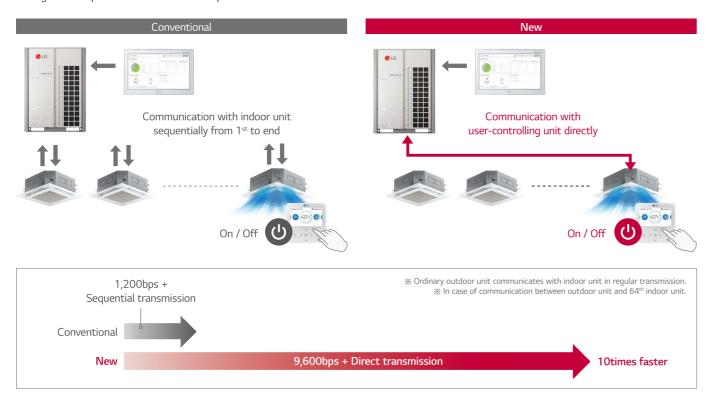




## **CEILING MOUNTED CASSETTE**

### **Quick Control**

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



**Group Control** 

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



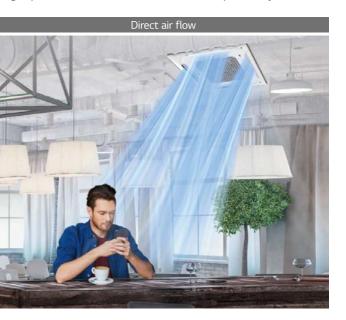
\* Fan Auto function is applicable only in the ceiling

concealed duct.

## **Independent Vane Control**

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



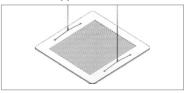


### **Auto Elevation Grille**

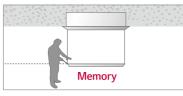
Easy filter cleaning with elevation grill.



### 4-Point Support Structure



### Memory for User's Level





**Auto Leveling** 



- \*\*Except ARNU05GTRC4, ARNU07GTRC4, ARNU09GTRC4, ARNU12GTRC4, ARNU15GTQC4, ARNU18GTQC4, ARNU21GTQC4

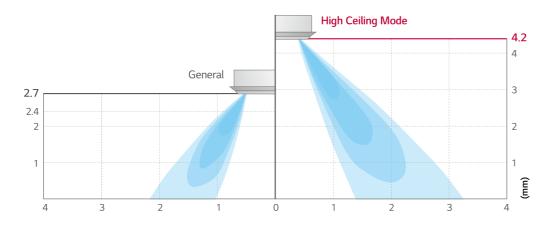
  \*\*Applied to Cassette panel PT-UMC1

# OOR UNITS

## **CEILING MOUNTED CASSETTE**

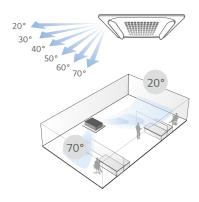
### **High Ceiling Mode**

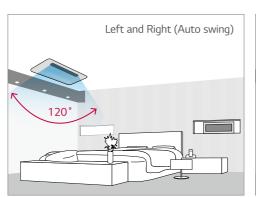
High ceiling mode provides powerful cooling and heating up to 4.2m in height, from ceiling to floor.

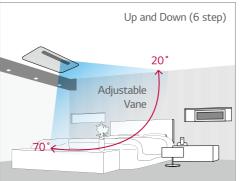


## 6-Step Vane Control

The Independent Vane Operation feature uses separate motors, making it possible to control all four vanes independently. There are 6 different steps to control air flow direction. Also 1 way cassette has a vane able to execute auto swing between left and right as 120 degree.

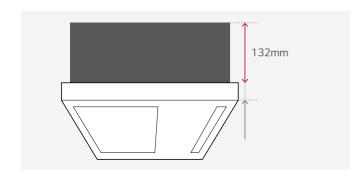






### **Minimized Height**

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



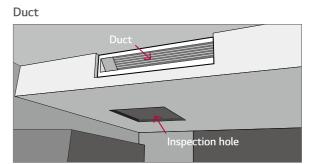
Size Comparison (Unit:mm)							
	A company	B company	LG				
1 Way cassette	215	230	132				

### Flexible Installation

The inspection access hole doesn't require additional ducted space allowing for simple installation scene to be possible.

#### 1 Way cassette

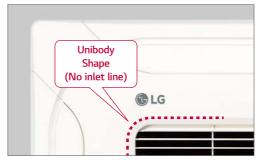


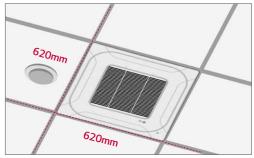


## **Compact and Stylish Design**

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

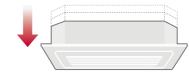






## **Compact Size**

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



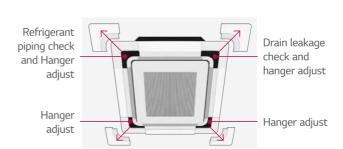
Capacity	Height
7.1 ~ 9.0kW	204mm
10.6kW	246mm
12.3 ~ 15.8kW	288mm

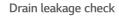
X Length width: 840 x 840mm

### **Convenient Panel Installation**

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

### Detachable Corner Design



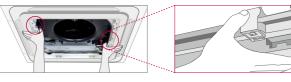




Hanger adjust



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



## **4 Way CASSETTE** (570 X 570)

ARNU05GTRB4 / ARNU07GTRB4 / ARNU09GTRB4 / ARNU12GTRB4 ARNU15GTQB4 / ARNU18GTQB4 / ARNU21GTQB4



Model		Unit	ARNU05GTRB4	ARNU07GTRB4	ARNU09GTRB4	ARNU12GTRB4	ARNU15GTQB4	ARNU18GTQB4	ARNU21GTQB4
Cooling Capaci	ity	kW	1.6	2.2	2.8	3.6	4.5	5.6	6.0
Heating Capac	ity	kW	1.8	2.5	3.2	4.0	5.0	6.3	6.8
Power Input (H / M / L)	Nominal	W	13/12/11	13/12/11	14/13/12	17 / 15 / 13	24 / 21 / 18	25 / 22 / 19	28 / 23 / 20
Dimensions	Body	mm	570 x 214 x 570	570 x 256 x 570	570 x 256 x 570	570 x 256 x 570			
$(W \times H \times D)$	Shipping	mm	667 x 285 x 646	667 x 327 x 646	667 x 327 x 646	667 x 327 x 646			
	Туре		Turbo Fan						
Fan	Motor Output x Number	W	43 x 1						
FdII	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	11.0 / 10.0 / 9.3	11.2 / 11.0 / 10.0	12.0 / 11.1 / 9.4
	Motor Type		BLDC						
Air 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)					
COMMODIA	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)						
Weight	Body	kg	12.6	12.6	13.7	13.7	15.0	15.0	15.0
Sound Pressure	re Levels (H / M / L)	dB(A)	29 / 27 / 26	29 / 27 / 26	30 / 29 / 27	32 / 30 / 27	36 / 34 / 32	37 / 35 / 34	40 / 38 / 34
Sound Power L	Levels (H / M / L)	dB(A)	45 / 43 / 42	45 / 43 / 42	46 / 43 / 42	48 / 46 / 43	50 / 48 / 46	51 / 50 / 46	53 / 51 / 46
Downer Cumply		Ø, V, Hz	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply			1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communication	n Cable	mm² x No.	1.0 ~ 1.5 x 2C						
	Model Name		PT-UQC PT-QCHW0						
Decoration	Exterior Color		Morning Fog						
Panel	RAL Code		RAL 9001						
(Accessory)	Net Dimensions (W x H x D)	mm	700 x 22 x700 620 x 20 x 620	700 x 22 x700 620 x 20 x 620	700 x 22 x700 620 x 20 x 620	700 x 22 x700 620 x 20 x 620	700 x 22 x700 620 x 20 x 620	700 x 22 x700 620 x 20 x 620	700 x 22 x700 620 x 20 x 620
	Net Weight	kg	3.0 / 3.0	3.0 / 3.0	3.0 / 3.0	3.0 / 3.0	3.0 / 3.0	3.0 / 3.0	3.0 / 3.0

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

### Accessories

Chassis	ARNU05GTRB4 ARNU07GTRB4 ARNU09GTRB4 ARNU12GTRB4 ARNU15GTQB4 ARNU18GTQB4 ARNU21GTQB4
Drain Pump	0
Cassette Cover	PTDCQ
Refrigerant Leakage Detector	PRLDNVS0
EEV Kit	PRGK024A0 (-4.5kW)
Independent Power Module	PRIPO PRIPO
Robot Cleaner	
Pre Filter (Washable / Anti-fungus)	0
Ion Generator	
CO <sub>2</sub> Sensor	
Ventilation Kit	PTVK430
IR Receiver	
Zone Controller	-
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) PDRYCB400 (2 points input) PDRYCB500 (Modbus)
External Input (1 point)	0
Wi-Fi	PWFMDD200

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

ARNU05GTRC4 / ARNU07GTRC4 / ARNU09GTRC4 / ARNU12GTRC4 ARNU15GTQC4 / ARNU18GTQC4 / ARNU21GTQC4



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Model		Unit	ARNU05GTRC4	ARNU07GTRC4	ARNU09GTRC4	ARNU12GTRC4	ARNU15GTQC4	ARNU18GTQC4	ARNU21GTQC4
Cooling Capac	ity	kW	1.6	2.2	2.8	3.6	4.5	5.6	6.0
Heating Capac	tity	kW	1.8	2.5	3.2	4.0	5.0	6.3	6.8
Power Input (H / M / L)	Nominal	W	13 / 12 / 11	13/12/11	14/13/12	17 / 15 / 13	24 / 21 / 18	25 / 22 / 19	28 / 23 / 20
Dimensions	Body	mm	570 x 214 x 570	570 x 256 x 570	570 x 256 x 570	570 x 256 x 570			
$(W \times H \times D)$	Shipping	mm	667 x 285 x 646	667 x 327 x 646	667 x 327 x 646	667 x 327 x 646			
	Туре		Turbo Fan						
-	Motor Output x Number	W	43 x 1						
Fan	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	11.0 / 10.0 / 9.3	11.2 / 11.0 / 10.0	12.0 / 11.1 / 9.4
	Motor Type		BLDC						
Air 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)						
Weight	Body	kg	12.6	12.6	13.7	13.7	15.0	15.0	15.0
Sound Pressur	re Levels (H / M / L)	dB(A)	29 / 27 / 26	29 / 27 / 26	30 / 29 / 27	32 / 30 / 27	36 / 34 / 32	37 / 35 / 34	40 / 38 / 34
Sound Power I	Levels (H / M / L)	dB(A)	45 / 43 / 42	45 / 43 / 42	46 / 43 / 42	48 / 46 / 43	50 / 48 / 46	51 / 50 / 46	53 / 51 / 46
D 6 1		<i>a</i>	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communicatio	n Cable	mm² x No.	1.0 ~ 1.5 x 2C						
	Model Name		PT-UQC PT-QCHW0						
Decoration	Exterior Color		Morning Fog						
Panel	RAL Code		RAL 9001						
(Accessory)	Net Dimensions (W x H x D)	mm	700 x 22 x700 620 x 20 x 620	700 x 22 x700 620 x 20 x 620	700 x 22 x700 620 x 20 x 620	700 x 22 x700 620 x 20 x 620	700 x 22 x700 620 x 20 x 620	700 x 22 x700 620 x 20 x 620	700 x 22 x700 620 x 20 x 620
	Net Weight	kg	3.0 / 3.0	3.0 / 3.0	3.0 / 3.0	3.0 / 3.0	3.0 / 3.0	3.0 / 3.0	3.0 / 3.0

Chassis	ARNU05GTRC4 ARNU07GTRC4 ARNU09GTRC4 ARNU12GTRC4 ARNU15GTQC4 ARNU18GTQC4 ARNU21GTQC4
Drain Pump	0
Cassette Cover	PTDCQ
Refrigerant Leakage Detector	PRLDNVS0
EEV Kit	PRGK024A0 (~4.5kW)
Independent Power Module	PRIPO
Robot Cleaner	
Pre Filter (Washable / Anti-fungus)	0
Ion Generator	-
CO <sub>2</sub> Sensor	
Ventilation Kit	PTVK430
IR Receiver	-
Zone Controller	
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact)  PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)
External Input (1 point)	0
Wi-Fi	-

Option : Refer to model name in table

1) Available from April 2020

<sup>\*\*</sup>Rated: Max. power input allowed for fan motor

Note: 1. Capacities are based on the following conditions

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

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

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

O: Applied, -: Not applied
 Option: Refer to model name in table
 Available from April 2020

## **4 Way CASSETTE** (840 X 840)

ARNU24GTPC4 / ARNU28GTPC4 / ARNU30GTPC4 / ARNU36GTNC4



Model		Unit	ARNU24GTPC4	ARNU28GTPC4	ARNU30GTPC4	ARNU36GTNC4
Cooling Capac	ity	kW	7.1	8.2	9.0	10.6
Heating Capac	city	kW	8.0	9.2	10.0	11.9
Power Input (H / M / L)	Nominal	W	31 / 26 / 23	40 / 31 / 25	40 / 34 / 27	70 / 53 / 43
Dimensions	Body	mm	840 x 204 x 840	840 x 204 x 840	840 x 204 x 840	840 x 246 x 840
$(W \times H \times D)$	Shipping	mm	922 x 276 x 917	922 x 276 x 917	922 x 276 x 917	922 x 318 x 917
	Туре		Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
Fan	Motor Output x Number	W	30 x 1	30 x 1	30 x 1	135 x 1
ran	Air Flow Rate (H / M / L)	m³/min	17.0 / 15.0 / 13.0	19.0 / 16.0 / 14.0	24.3 / 22.8 / 19.5	25.0 / 21.0 / 19.0
	Motor Type		BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter	Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø9.52 (3/8)	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)	Ø15.88 (5/8)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	20.8	20.8	20.8	23.5
Sound Pressur	re Levels (H / M / L)	dB(A)	36 / 34 / 31	39 / 35 / 33	40 / 36 / 33	43 / 40 / 37
Sound Power	Levels (H / M / L)	dB(A)	46 / 44 / 43	52 / 46 / 44	58 / 57 / 54	56 / 53 / 51
Douges Cumply		Ø, V, Hz	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		⊌, v, ⊓∠	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communication	n Cable	mm² x No.	1.0 ~ 1.5 x 2C			
	Model Name		PT-UMC1 PT-MCHW0	PT-UMC1 PT-MCHW0	PT-UMC1 PT-MCHW0	PT-UMC1 PT-MCHW0
Decoration	Exterior Color		Morning Fog	Morning Fog	Morning Fog	Morning Fog
Panel (Accessory)	RAL Code		RAL 9001	RAL 9001	RAL 9001	RAL 9001
	Net Dimensions (W x H x D)	mm	950 x 25 x 950 950 x 35 x 950	950 x 25 x 950 950 x 35 x 950	950 x 25 x 950 950 x 35 x 950	950 x 25 x 950 950 x 35 x 950
	Net Weight	kg	5.0 / 6.3	5.0 / 6.3	5.0 / 6.3	5.0 / 6.3

<sup>※</sup> Nominal : Performance tested under EN14511

### Accessories

Chassis	ARNU24GTPC4	ARNU28GTPC4	ARNU30GTPC4	ARNU36GTNC4			
Drain Pump		0					
Cassette Cover		F	PTDCM				
Refrigerant Leakage Detector		PR	LDNVS0				
EEV Kit			-				
Independent Power Module			PRIP0				
Robot Cleaner			-				
Pre Filter (Washable / Anti-fungus)			0				
Ion Generator			-				
CO <sub>2</sub> Sensor			-				
Ventilation Kit		P.	TVK430				
IR Receiver			-				
Zone Controller			-				
Dry Contact (with Additional Accessory)		PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)					
External Input (1 point)			0				
Wi-Fi		PWI	FMDD200				

ARNU42GTMC4 / ARNU48GTMC4 / ARNU54GTMC4



Model		Unit	ARNU42GTMC4	ARNU48GTMC4	ARNU54GTMC4
Cooling Capacity		kW	12.3	14.1	15.8
Heating Capacity		kW	13.8	15.9	18.0
Power Input (H / M / L)	Nominal	W	104 / 75 / 53	120 / 80 / 62	135 / 93 / 70
Dimensions	Body	mm	840 x 288 x 840	840 x 288 x 840	840 x 288 x 840
$(W \times H \times D)$	Shipping	mm	922 x 360 x 917	922 x 360 x 917	922 x 360 x 917
	Туре		Turbo Fan	Turbo Fan	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	30.0 / 27.0 / 24.0	31.0 / 29.0 / 27.0	34.0 / 32.0 / 27.0
	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 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	25.6	25.6	26.5
Sound Pressu	re Levels (H / M / L)	dB(A)	44 / 41 / 38	46 / 43 / 41	50 / 48 / 44
Sound Power	Levels (H / M / L)	dB(A)	58 / 55 / 50	60 / 56 / 55	60 / 58 / 55
D 6 1		<i>a</i>	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60
Communicatio	n Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
	Model Name		PT-UMC1 PT-MCHW0	PT-UMC1 PT-MCHW0	PT-UMC1 PT-MCHW0
Decoration Panel (Accessory)	Exterior Color		Morning Fog	Morning Fog	Morning Fog
	RAL Code		RAL 9001	RAL 9001	RAL 9001
	Net Dimensions (W x H x D)	mm	950 x 25 x 950 950 x 35 x 950	950 x 25 x 950 9 50 x 35 x 950	950 x 25 x 950 950 x 35 x 950
	Net Weight	kg	5.0 / 6.3	5.0 / 6.3	5.0 / 6.3

Chassis	ARNU42GTMC4	ARNU48GTMC4	ARNU54GTMC4					
Drain Pump		0						
Cassette Cover		PTDCM						
Refrigerant Leakage Detector		PRLDNVS0						
EEV Kit		-						
Independent Power Module		PRIP0						
Robot Cleaner		-						
Pre Filter (Washable / Anti-fungus)		0						
Ion Generator								
CO <sub>2</sub> Sensor		-						
Ventilation Kit		PTVK430						
IR Receiver		-						
Zone Controller		-						
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)							
External Input (1 point)		0						
Wi-Fi	PWFMDD200							

<sup>※</sup> Rated : Max. power input allowed for fan motorNote : 1. Capacities are based on the following conditions

<sup>-</sup> Cooling: Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero - Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero 2. Due to our policy of innovation some specifications may be changed without notification 3. I.D: 'Internal Diameter'

<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table 1) Available from April 2020

<sup>\*\*</sup> Nated: Max. power input allowed for fan motor

Note: 1. Capacities are based on the following conditions

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

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

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

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

<sup>1)</sup> Available from April 2020

## 4 Way CASSETTE HIGH SENSIBLE (840 X 840)

ARNU07GTNA4 / ARNU09GTNA4 / ARNU12GTNA4 ARNU15GTNA4 / ARNU18GTNA4



Model		Unit	ARNU07GTNA4	ARNU09GTNA4	ARNU12GTNA4	ARNU15GTNA4	ARNU18GTNA4
Cooling Capac	ity	kW	2.2	2.8	3.6	4.5	5.6
Heating Capac	city	kW	2.5	3.2	4	5	6.3
Power Input (H / M / L)	Nominal	W	18 / 15 / 12	19 / 15 / 12	22 / 17 / 14	25 / 17 / 14	27 / 18 / 14
Dimensions	Body	mm	840 x 246 x 840				
$(W \times H \times D)$	Shipping	mm	922 x 318 x 917				
	Туре		Turbo Fan				
Fan	Motor Output x Number	W	135 x 1				
FdII	Air Flow Rate (H / M / L)	m³/min	13.0 / 12.0 / 11.0	13.5 / 12.0 / 11.0	14.0 / 13.0 / 12.0	15.0 / 13.0 / 12.0	16.0 / 14.0 / 12.0
	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)				
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)				
Weight	Body	kg	23.5	23.5	23.5	23.5	23.5
Sound Pressur	re Levels (H / M / L)	dB(A)	35 / 33 / 30	35 / 33 / 30	37 / 35 / 33	39 / 35 / 33	40 / 35 / 33
Sound Power	Levels (H / M / L)	dB(A)	42 / 38 / 36	42 / 38 / 36	43 / 40 / 38	44 / 40 / 38	45 / 41 / 38
Dannan Consulto		Ø, V, Hz	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ю, V, ПZ	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C				
	Model Name		PT-UMC1 PT-MCHW0	PT-UMC1 PT-MCHW0	PT-UMC1 PT-MCHW0	PT-UMC1 PT-MCHW0	PT-UMC1 PT-MCHW0
Decoration	Exterior Color		Morning Fog				
Panel (Accessory)	RAL Code		RAL 9001				
	Net Dimensions (W x H x D)	mm	950 x 25 x 950 950 x 35 x 950	950 x 25 x 950 950 x 35 x 950	950 x 25 x 950 950 x 35 x 950	950 x 25 x 950 950 x 35 x 950	950 x 25 x 950 950 x 35 x 950
	Net Weight	kg	5.0 / 6.3	5.0 / 6.3	5.0 / 6.3	5.0 / 6.3	5.0 / 6.3

<sup>※</sup> Nominal : Performance tested under EN14511

### Accessories

Chassis	ARNU07GTNA4	ARNU09GTNA4	ARNU12GTNA4	ARNU15GTNA4	ARNU18GTNA4			
Drain Pump		0						
Cassette Cover			PTDCM					
Refrigerant Leakage Detector			PRLDNVS0					
EEV Kit			-					
Independent Power Module			PRIP0					
Robot Cleaner			-					
Pre Filter (Washable / Anti-fungus)			0					
Ion Generator			-					
CO <sub>2</sub> Sensor			-					
Ventilation Kit			PTVK430					
IR Receiver			-					
Zone Controller			-					
Dry Contact (with Additional Accessory)		PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)						
External Input (1 point)			0					
Wi-Fi			PWFMDD200					

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

ARNU24GTMA4 / ARNU28GTMA4 ARNU36GTMA4 / ARNU42GTMA4



Model		Unit	ARNU24GTMA4	ARNU28GTMA4	ARNU36GTMA4	ARNU42GTMA4
Cooling Capacity		kW	7.1	8.2	10.6	12.3
Heating Capa	city	kW	8	9.2	11.9	13.8
Power Input (H / M / L)	Nominal	W	47 / 39 / 31	52 / 43 / 31	64 / 47 / 34	104 / 75 / 53
Dimensions	Body	mm	840 x 288 x 840			
$(W \times H \times D)$	Shipping	mm	922 x 360 x 917			
	Туре		Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
_	Motor Output x Number	W	135 x 1	135 x 1	135 x 1	135 x 1
Fan	Air Flow Rate (H / M / L)	m³/min	22.0 / 20.0 / 18.0	23.0 / 21.0 / 18.0	26.0 / 23.0 / 20.0	30.0 / 26.0 / 23.0
	Motor Type		BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter	Pre Filter	Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø9.52 (3/8)	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)	Ø15.88 (5/8)
COTITICCTIONS	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	25.6	25.6	25.6	25.6
Sound Pressu	re Levels (H / M / L)	dB(A)	42 / 40 / 38	43 / 41 / 38	46 / 42 / 39	49 / 45 / 42
Sound Power	Levels (H / M / L)	dB(A)	48 / 45 / 43	49 / 47 / 43	52 / 48 / 44	55 / 51 / 48
D C l		Ø 1/11-	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communicatio	on Cable	mm² x No.	1.0 ~ 1.5 x 2C			
	Model Name		PT-UMC1 PT-MCHW0	PT-UMC1 PT-MCHW0	PT-UMC1 PT-MCHW0	PT-UMC1 PT-MCHW0
Decoration Panel (Accessory)	Exterior Color		Morning Fog	Morning Fog	Morning Fog	Morning Fog
	RAL Code		RAL 9001	RAL 9001	RAL 9001	RAL 9001
	Net Dimensions (W x H x D)	mm	950 x 25 x 950 950 x 35 x 950	950 x 25 x 950 950 x 35 x 950	950 x 25 x 950 950 x 35 x 950	950 x 25 x 950 950 x 35 x 950
	Net Weight	kg	5.0 / 6.3	5.0 / 6.3	5.0 / 6.3	5.0 / 6.3

<sup>※</sup> Nominal : Performance tested under EN14511

Chassis	ARNU24GTMA4	ARNU28GTMA4	ARNU36GTMA4	ARNU42GTMA4		
Drain Pump	0					
Cassette Cover		F	PTDCM			
Refrigerant Leakage Detector		PR	LDNVS0			
EEV Kit			-			
Independent Power Module			PRIP0			
Robot Cleaner			-			
Pre Filter (Washable / Anti-fungus)			0			
Ion Generator			=			
CO <sub>2</sub> Sensor			-			
Ventilation Kit		P.	TVK430			
IR Receiver			-			
Zone Controller			-			
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact)  PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) 1)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)					
External Input (1 point)			0			
Wi-Fi		PWI	FMDD200			

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

<sup>※</sup> Rated : Max. power input allowed for fan motor Note : 1. Capacities are based on the following conditions

<sup>-</sup> Cooling: Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero - Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero 2. Due to our policy of innovation some specifications may be changed without notification

Option : Refer to model name in table

<sup>1)</sup> Available from April 2020

<sup>※</sup> Rated : Max. power input allowed for fan motor Note : 1. Capacities are based on the following conditions

<sup>-</sup> Cooling: Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero - Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero 2. Due to our policy of innovation some specifications may be changed without notification

Option : Refer to model name in table

<sup>1)</sup> Available from April 2020

## **2 Way CASSETTE**

ARNU09GTSC4 / ARNU12GTSC4 ARNU18GTSC4 / ARNU24GTSC4



Model		Unit	ARNU09GTSC4	ARNU12GTSC4	ARNU18GTSC4	ARNU24GTSC4
Cooling Capacity		kW	2.8	3.6	5.6	7.1
Heating Capac	city	kW	3.2	4	6.3	8
Power Input (H / M / L)	Nominal	W	16 / 14 / 11	18 / 14 / 11	19 / 16 / 14	31 / 22 / 14
Dimensions	Body	mm	830 x 225 x 600			
$(W \times H \times D)$	Shipping	mm	1,033 x 270 x 665			
	Туре		Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
_	Motor Output x Number	W x No.	37 x 1	37 x 1	37 x 1	37 x 1
Fan	Air Flow Rate (H / M / L)	m³/min	10.8 / 9.8 / 9.1	11.1 / 10.3 / 9.1	11.8 / 10.8 / 9.8	14.5 / 12.4 / 10.3
	Motor Type		BLDC	BLDC	BLDC	BLDC
Air 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)	Ø9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	Ø12.7 (1/2)	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)	Ø25 (1)
Weight	Body	kg	18.1	18.1	18.1	18.1
Sound Pressur	re Levels (H / M / L)	dB(A)	33 / 31 / 29	34 / 32 / 29	35 / 33 / 31	40 / 37 / 33
Sound Power	Levels (H / M / L)	dB(A)	42 / 40 / 38	43 / 41 / 39	44 / 42 / 40	48 / 45 / 40
D 6 1		<i>a</i>	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C			
	Model Name		PT-USC	PT-USC	PT-USC	PT-USC
	Exterior Color		Morning Fog	Morning Fog	Morning Fog	Morning Fog
Decoration Panel	RAL Code		RAL 9001	RAL 9001	RAL 9001	RAL 9001
(Accessory)	Net Dimensions (W x H x D)	mm	1,100 x 28 x 690			
	Net Weight	kg	4.7	4.7	4.7	4.7

<sup>%</sup> Nominal : Performance tested under EN14511% Rated : Max. power input allowed for fan motor

### Accessories

Chassis	ARNU09GTSC4	ARNU12GTSC4	ARNU18GTSC4	ARNU24GTSC4			
Drain Pump		0					
Cassette Cover							
Refrigerant Leakage Detector		PRLD	NVS0				
EEV Kit		PRGK024A	0 (~5.6kW)				
Independent Power Module		PR	PO				
Robot Cleaner							
Pre Filter (Washable / Anti-fungus)		(	)				
Ion Generator							
CO <sub>2</sub> Sensor							
Ventilation Kit							
IR Receiver							
Zone Controller							
Dry Contact (with Additional Accessory)		PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)					
External Input (1 point)		(	)				
Wi-Fi		PWFM	DD200				

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

# 1 Way CASSETTE

ARNU07GTUC4 / ARNU09GTUC4 / ARNU12GTUC4 ARNU18GTTC4 / ARNU24GTTC4



Model		Unit	ARNU07GTUC4	ARNU09GTUC4	ARNU12GTUC4	ARNU18GTTC4	ARNU24GTTC4
Cooling Capac	city	kW	2.2	2.8	3.6	5.6	7.1
Heating Capa	city	kW	2.5	3.2	4.0	6.3	7.1
Power Input (H / M / L)	Nominal	W	20 / 18 / 16	22 / 20 / 18	24 / 22 / 20	38 / 28 / 24	51 / 33 / 26
Dimensions	Body	mm	860 x 132 x 450	860 x 132 x 450	860 x 132 x 450	1,180 x 132 x 450	1,180 x 132 x 450
$(W \times H \times D)$	Shipping	mm	1,129 x 259 x 538	1,129 x 259 x 538	1,129 x 259 x 538	1,499 x 259 x 538	1,499 x 259 x 538
	Туре		Cross Flow Fan				
F	Motor Output x Number	W x No.	30 x 1				
Fan	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	13.3 / 12.1 / 10.9	14.6 / 13.3 / 11.5
	Motor Type		BLDC	BLDC	BLDC	BLDC	BLDC
Air Filter			Pre Filter				
	Liquid Side	mm (inch)	Ø6.35 (1/4)	Ø6.35 (1/4)	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)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø15.88 (5/8)
CONNECTIONS	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)				
Weight	Body	kg	13.6	13.6	13.6	15.6	15.6
Sound Pressu	re Levels (H / M / L)	dB(A)	32 / 29 / 25	35 / 34 / 32	38 / 35 / 32	40 / 37 / 35	43 / 40 / 36
Sound Power	Levels (H / M / L)	dB(A)	47 / 44 / 41	50 / 48 / 47	52 / 50 / 47	56 / 51 / 48	59 / 53 / 50
D C		Ø V II-	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C				
	Model Name		PT-UUC (Grill) PT-UUD (Panel)	PT-UUC (Grill) PT-UUD (Panel)	PT-UUC (Grill) PT-UUD (Panel)	PT-UTC (Grill) PT-UTD (Panel)	PT-UTC (Grill) PT-UTD (Panel)
Decoration Panel (Accessory)	Exterior Color		Noble White				
	RAL Code		RAL 9003				
	Net Dimensions (W x H x D)	mm	1,100 x 34 x 500 1,100 x 34 x 500	1,100 x 34 x 500 1,100 x 34 x 500	1,100 x 34 x 500 1,100 x 34 x 500	1,420 x 34 x 500 1,420 x 34 x 500	1,420 x 34 x 500 1,420 x 34 x 500
	Net Weight	kg	4.6 / 5.3	4.6 / 5.3	4.6 / 5.3	5.5 / 6.5	5.5 / 6.5

<sup>※</sup> Nominal : Performance tested under EN14511

Chassis	ARNU07GTUC4 ARNU09GTUC4 ARNU12GTUC4	ARNU18GTTC4 ARNU24GTTC4
Drain Pump	0	0
Cassette Cover	-	-
Refrigerant Leakage Detector	PRLDNVS0	PRLDNVS0
EEV Kit	PRGK024A0	-
Independent Power Module	PRIP0	PRIP0
Robot Cleaner	-	-
Pre Filter (Washable / Anti-fungus)	0	0
Ion Generator	-	-
CO <sub>2</sub> Sensor	-	-
Ventilation Kit	-	-
IR Receiver	-	-
Zone Controller	-	-
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) PDRYCB400 (2 points input) PDRYCB500 (Modbus)	PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible) PDRYCB400 (2 points input) PDRYCB500 (Modbus)
External Input (1 point)	0	0
Wi-Fi	-	-

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

Note: 1. Capacities are based on the following conditions

<sup>-</sup> Cooling: Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero - Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero 2. Due to our policy of innovation some specifications may be changed without notification

<sup>3.</sup> I.D : 'Internal Diameter'

Option : Refer to model name in table

<sup>1)</sup> Available from April 2020

<sup>※</sup> Rated : Max. power input allowed for fan motor Note : 1. Capacities are based on the following conditions

<sup>-</sup> Cooling: Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero - Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero 2. Due to our policy of innovation some specifications may be changed without notification

Option : Refer to model name in table

<sup>1)</sup> Available from April 2020

# 1 Way CASSETTE

ARNU07GTUD4 / ARNU09GTUD4 / ARNU12GTUD4



Model Ui		Unit	ARNU07GTUD4	ARNU09GTUD4	ARNU12GTUD4
Cooling Capacity k		kW	2.2	2.8	3.6
Heating Capacity		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
FdII	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	13.6	13.6	13.6
Sound Pressur	re Levels (H / M / L)	dB(A)	32 / 29 / 25	35 / 34 / 32	38 / 35 / 32
Sound Power I	Levels (H / M / L)	dB(A)	47 / 44 / 41	50 / 48 / 47	52 / 50 / 47
Power Supply		Ø, V, Hz	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		⊌, v, ⊓∠	1, 220, 60	1, 220, 60	1, 220, 60
Communicatio	n Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
	Model Name		PT-UUC (Grill) PT-UUD (Panel)	PT-UUC (Grill) PT-UUD (Panel)	PT-UUC (Grill) PT-UUD (Panel)
Decoration Panel	Exterior Color		Noble White	Noble White	Noble White
	RAL Code		RAL 9003	RAL 9003	RAL 9003
(Accessory)	Net Dimensions (W x H x D)	mm	1,100 x 34 x 500 1,100 x 34 x 500	1,100 x 34 x 500 1,100 x 34 x 500	1,100 x 34 x 500 1,100 x 34 x 500
	Net Weight	kg	4.6 / 5.3	4.6 / 5.3	4.6 / 5.3

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

### Accessories

Chassis	ARNU07GTUD4	ARNU09GTUD4	ARNU12GTUD4		
Drain Pump		0			
Cassette Cover		-			
Refrigerant Leakage Detector		PRLDNVS0			
EEV Kit		PRGK024A0			
Independent Power Module		PRIP0			
Robot Cleaner		-			
Pre Filter (Washable / Anti-fungus)		0			
Ion Generator					
CO <sub>2</sub> Sensor		-			
Ventilation Kit		-			
IR Receiver		-			
Zone Controller		-			
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)				
External Input (1 point)	0				
Wi-Fi		PWFMDD200			

### ARNU18GTTD4 / ARNU24GTTD4



Model		Unit	ARNU18GTTD4	ARNU24GTTD4
Cooling Capac	city	kW	5.6	7.1
Heating Capacity		kW	6.3	7.1
Power Input (H / M / L) Nominal W		W	38 / 28 / 24	51 / 33 / 26
Dimensions	Body	mm	1,180 x 132 x 450	1,180 x 132 x 450
$(W \times H \times D)$	Shipping	mm	1,499 x 259 x 538	1,499 x 259 x 538
	Туре		Cross Flow Fan	Cross Flow Fan
F	Motor Output x Number	W x No.	30 x 1	30 x 1
Fan	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	15.6	15.6
Sound Pressu	re Levels (H / M / L)	dB(A)	40 / 37 / 35	43 / 40 / 36
Sound Power	Levels (H / M / L)	dB(A)	56 / 51 / 48	59 / 53 / 50
D 6 1		<i>a</i>	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
	Model Name		PT-UTC (Grill) PT-UTD (Panel)	PT-UTC (Grill) PT-UTD (Panel)
Decoration Panel	Exterior Color		Noble White	Noble White
	RAL Code		RAL 9003	RAL 9003
(Accessory)	Net Dimensions (W x H x D)	mm	1,420 × 34 × 500 1,420 × 34 × 500	1,420 x 34 x 500 1,420 x 34 x 500
	Net Weight	kg	5.5 / 6.5	5.5 / 6.5

<sup>※</sup> Nominal : Performance tested under EN14511

Chassis	ARNU18GTTD4	ARNU24GTTD4				
Drain Pump	0					
Cassette Cover						
Refrigerant Leakage Detector	PRLDNVS	50				
EEV Kit						
Independent Power Module	PRIPO PRIPO					
Robot Cleaner	-					
Pre Filter (Washable / Anti-fungus)	0					
Ion Generator						
CO <sub>2</sub> Sensor	-					
Ventilation Kit	-					
IR Receiver	-					
Zone Controller	-					
Dry Contact (with Additional Accessory)	PDRYCB000 (1 poi PDRYCB300 (8 points for th NEW PDRYCB320 (Ur PDRYCB400 (2 p PDRYCB500 (N	niversal input) <sup>1)</sup> pints input)				
External Input (1 point)	0					
Wi-Fi	PWFMDD2	200				

<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table 1) Available from April 2020

<sup>\*\*</sup> Nated: Max. power input allowed for fan motor

Note: 1. Capacities are based on the following conditions

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

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

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

O: Applied, -: Not applied
 Option: Refer to model name in table
 Available from April 2020

## **CEILING CONCEALED DUCT**



### **Features & Benefits**

• E.S.P. control function can make air volume controlled easily with remote controller.

### **Key Applications**

- Hotel / Conference Center
- Retail / Shopping Center
- School

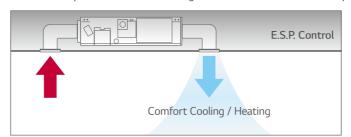
- Church
- Historic Building
- Office

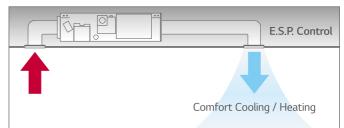
	Duct	High	Middle	Low
Smart	Wi-Fi	0	0	0
Energy Efficiency	E.S.P. Control	0	0	0
	Drain Pump	0	0	0
	Timer (On / Off)	0	0	0
Comfort	Timer (Weekly)	0	0	0
	Two Thermistor Control	0	0	0
	Group Control	0	0	0

### $\divideontimes$ $\bigcirc$ : Applied, - : Not applied

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

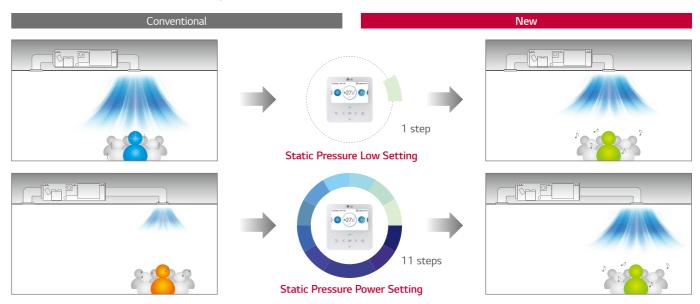
User has an easy access to air volume selection via remote controller secured by the E.S.P. control function. The BLDC motor can control fan speed and air volume regardless of the external static pressure. No additional accessories are necessary to control air flow.





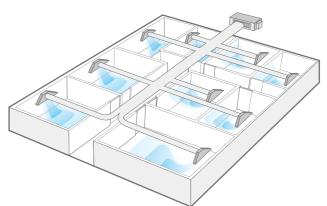
## **Static Pressure 11 Steps Control**

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



### **Operation for Multiple Rooms**

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

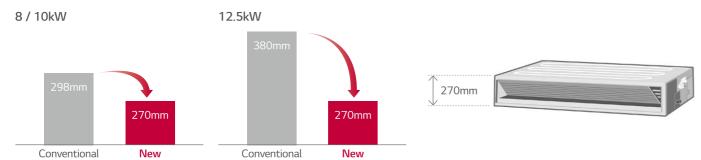


INDOOR UNITS FEATURE

## **CEILING CONCEALED DUCT**

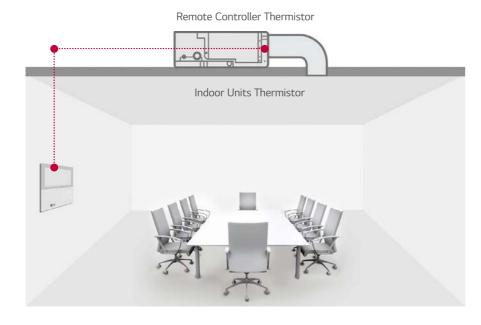
### **Minimized Height**

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



### **Two Thermistors Control**

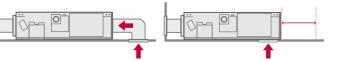
The indoor temperature can be checked using the thermi-stors in the remote controller as well as from the indoor unit. There may be a significant difference between ceiling and floor air temperature. Two thermistors can optimize indoor air temperature for a more comfortable environment.



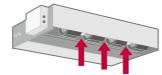
## Flexible Installation (Low Static Duct Only)

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

Air intake at the rear or bottom







## **HIGH STATIC**

ARNU07GM1A4 / ARNU09GM1A4 / ARNU12GM1A4



Model Ur		Unit	ARNU07GM1A4	ARNU09GM1A4	ARNU12GM1A4
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		W	39 / 30 / 25	40 / 32 / 26	46 / 38 / 31
Dimensions	Body	mm	900 x 270 x 700	900 x 270 x 700	900 x 270 x 700
$(W \times H \times D)$	Shipping	mm	1,100 x 338 x 773	1,100 x 338 x 773	1,100 x 338 x 773
	Туре		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output x Number	W x No.	136 x 1	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
Fan	External Static Pressure (High Mode)	mmAq (Pa)	6 (59)	6 (59)	6 (59)
i di i	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
	External Static Pressure (Standard Mode)	mmAq (Pa)	2.5 (25)	2.5 (25)	2.5 (25)
	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)
COTTICCTIONS	Drain Pipe (Internal Dia.)	mm (inch)	25 (1)	25 (1)	Ø25 (1)
Weight	Body	kg	25.5	25.5	25.5
Sound Pressu	re Levels (H / M / L)	dB(A)	26 / 24 / 23	27 / 25 / 23	27 / 25 / 23
Sound Power	Levels (H / M / L)	dB(A)	55 / 54 / 51	55 / 54 / 52	56 / 54 / 52
D C 1		Ø 1/ 11-	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

<sup>※</sup> Nominal : Performance tested under EN14511

Chassis	ARNU07GM1A4	ARNU09GM1A4	ARNU12GM1A4				
Drain Pump		0					
Cassette Cover							
Refrigerant Leakage Detector		PRLDNVS0					
EEV Kit		PRGK024A0 (~5.6kW)					
Independent Power Module		PRIP0					
Robot Cleaner		-					
Pre Filter (Washable / Anti-fungus)		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) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) 1)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)						
External Input (1 point)	0						
Wi-Fi		PWFMDD200					

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

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

<sup>4.</sup> The Sound Pressure test condition is based on 50 Pa for middle static duct.

Option : Refer to model name in table

<sup>1)</sup> Available from April 2020

## **HIGH STATIC**

ARNU15GM1A4 / ARNU18GM1A4 / ARNU24GM1A4



Model Unit		Unit	ARNU15GM1A4	ARNU18GM1A4	ARNU24GM1A4
Cooling Capacity k\		kW	4.5	5.6	7.1
Heating Capac	Heating Capacity		5.0	6.3	8.0
Power Input (H / M / L)	Nominal	W	67 / 53 / 46	85 / 63 / 55	91 / 74 / 58
Dimensions	Body	mm	900 x 270 x 700	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	1,100 x 338 x 773
	Туре		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output x Number	W x No.	136 x 1	136 x 1	136 x 1
	Air Flow Rate (H / M / L)	m³/min	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)
	Air Flow Rate (H / M / L) (Standard Mode)	m³/min	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)
	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)
00111100010115	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	25.5	25.5	26.5
Sound Pressur	re Levels (H / M / L)	dB(A)	30 / 27 / 23	31 / 28 / 25	32 / 29 / 26
Sound Power Levels (H / M / L)		dB(A)	59 / 57 / 55	59 / 57 / 55	59 / 58 / 56
Dawar Cupply			1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

<sup>※</sup> Nominal : Performance tested under EN14511

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

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

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

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

  3. I.D: 'Internal Diameter'

  - 4. The Sound Pressure test condition is based on 50 Pa for middle static duct.

### Accessories

Chassis	ARNU15GM1A4	ARNU18GM1A4	ARNU24GM1A4				
Drain Pump		0					
Cassette Cover		-					
Refrigerant Leakage Detector		PRLDNVS0					
EEV Kit		PRGK024A0 (~5.6kW)					
Independent Power Module		PRIP0					
Robot Cleaner		-					
Pre Filter (Washable / Anti-fungus)		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)  PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)						
External Input (1 point)	0						
Wi-Fi		PWFMDD200					

### ARNU28GM2A4 / ARNU36GM2A4 / ARNU42GM2A4 ARNU48GM3A4 / ARNU54GM3A4



Model		Unit	ARNU28GM2A4	ARNU36GM2A4	ARNU42GM2A4	ARNU48GM3A4	ARNU54GM3A4
Cooling Capac	ity	kW	8.2	10.6	12.3	14.1	15.8
Heating Capac	tity	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
$(W \times H \times D)$	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				
	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)
Tuil	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)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)				
Weight	Body	kg	38.0	38.0	39.5	44.0	44.0
Sound Pressur	re Levels (H / M / L)	dB(A)	36 / 34 / 33	37 / 36 / 34	38 / 37 / 36	39 / 37 / 35	42 / 40 / 39
Sound Power	Levels (H / M / L)	dB(A)	59 / 57 / 55	60 / 59 / 57	62 / 61 / 60	63 / 60 / 59	65 / 64 / 62
D C 1		Ø V.II-	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communicatio	n Cable	mm² x No.	1.0 ~ 1.5 x 2C				

<sup>\*</sup> Nominal : Performance tested under EN14511

Chassis	ARNU28GM2A4	ARNU36GM2A4	ARNU42GM2A4	ARNU48GM3A4	ARNU54GM3A4			
Drain Pump		0						
Cassette Cover			-					
Refrigerant Leakage Detector			PRLDNVS0					
EEV Kit			-					
Independent Power Module			PRIP0					
Robot Cleaner			-					
Pre Filter (Washable / Anti-fungus)			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) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) PDRYCB400 (2 points input) PDRYCB500 (Modbus)							
External Input (1 point)	0							
Wi-Fi			PWFMDD200					

<sup>\*\*</sup> Rated : Max. power input allowed for fan motor

<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table 1) Available from April 2020

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

<sup>4.</sup> The Sound Pressure test condition is based on 50 Pa for middle static duct.

O: Applied, -: Not applied
 Option: Refer to model name in table
 Available from April 2020

## **HIGH STATIC**

ARNU48GM3B4 / ARNU54GM3B4 / ARNU76GB8A4 / ARNU96GB8A4



Model		Unit	ARNU48GM3B4	ARNU54GM3B4	ARNU76GB8A4	ARNU96GB8A4
Cooling Capacity		kW	14.1	15.8	22.4	28.0
Heating Capac	city	kW	15.9	18.0	25.2	31.5
Power Input (H / M / L)	Nominal	W	172 / 105 / 65	260 / 215 / 172	765 / 500 / 500	800 / 750 / 750
Dimensions	Body	mm	1,250 x 360 x 700	1,250 x 360 x 700	1,562 x 460 x 688	1,562 x 460 x 688
$(W \times H \times D)$	Shipping	mm	1,450 x 428 x 773	1,560 x 415 x 770	1,806 x 537 x 825	1,806 x 537 x 825
	Туре		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output x Number	W x No.	500 x 1	500 x 1	375 x 2	375 x 2
	Air Flow Rate (H / M / L) (High Mode-Factory Set)	m³/min	40.0 / 34.0 / 28.0	50.0 / 45.0 / 40.0	60.0 / 50.0 / 50.0	72.0 / 64.0 / 64.0
Fan	External Static Pressure (High Mode)	mmAq (Pa)	6 (59)	6 (59)	22 (216)	22 (216)
	Air Flow Rate (H / M / L) (Standard Mode)	m³/min	40.0 / 34.0 / 28.0	50.0 / 45.0 / 40.0	64.0 / 50.0 / 50.0	76.0 / 64.0 / 64.0
	External Static Pressure (Standard Mode)	mmAq (Pa)	5 (49)	5 (49)	15 (147)	15 (147)
	Motor Type		BLDC	BLDC	BLDC	BLDC
Air Filter			-	-	Pre Filter	Pre Filter
	Liquid Side	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	Ø15.88 (5/8)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø22.2 (7/8)
Connections	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	44.0	44.0	87.0	87.0
Davier Cumply		Ø V II=	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communicatio	on Cable	mm² x No.	1.0 ~ 1.5 x 2C			

<sup>※</sup> Nominal : Performance tested under EN14511

### Accessories

Chassis	ARNU48GM3B4	ARNU54GM3B4	ARNU76GB8A4	ARNU96GB8A4			
Drain Pump		0					
Cassette Cover		-					
Refrigerant Leakage Detector		PRLDI	NVS0				
EEV Kit		C	)				
Independent Power Module		PRI	P0				
Robot Cleaner		-					
Pre Filter (Washable / Anti-fungus)		C	)				
Ion Generator							
CO <sub>2</sub> Sensor							
Ventilation Kit		-					
IR Receiver		PWLRV	/N000				
Zone Controller		ABZ	CA				
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact)  PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) 1)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)						
External Input (1 point)		C	)				
Wi-Fi		PWFMI	DD200				

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

## **LOW STATIC**

ARNU05GL1G4 / ARNU07GL1G4 / ARNU09GL1G4



Model Uni		Unit	ARNU05GL1G4	ARNU07GL1G4	ARNU09GL1G4	
Cooling Capacity		kW	1.7	2.2	2.8	
Heating Capa	city	kW	1.9	2.5	3.2	
Power Input (H / M / L)	Nominal	W	29 / 26 / 24	31 / 28 / 24	39 / 29 / 24	
Dimensions	Body	mm	700 x 190 x 700	700 x 190 x 700	700 x 190 x 700	
$(W \times H \times D)$	Shipping	mm	862 x 255 x 781	862 x 255 x 781	862 x 255 x 781	
	Туре		Sirocco Fan	Sirocco Fan	Sirocco Fan	
	Motor Output x Number	W x No.	19 x 1	19 x 1	19 x 1	
	Air Flow Rate (H / M / L) (High Mode-Factory Set)	m³/min	6.7 / 6.2 / 5.5	7.5 / 6.5 / 5.5	9.0 / 7.0 / 5.5	
Fan	External Static Pressure (High Mode)	mmAq (Pa)	2.54 (25)	2.54 (25)	2.54 (25)	
	Air Flow Rate (H / M / L) (Standard Mode)	m³/min	6.7 / 6.2 / 5.5	7.5 / 6.5 / 5.5	9.0 / 7.0 / 5.5	
	External Static Pressure (Standard Mode)	mmAq (Pa)	0 (0)	0 (0)	0 (0)	
	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)	
COMMICCHOMS	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)	Ø25 (1)	
Weight	Body	kg	17.5	17.5	17.5	
Sound Pressu	re Levels (H / M / L)	dB(A)	25 / 24 / 22	26 / 24 / 22	28 / 25 / 22	
Sound Power	Levels (H / M / L)	dB(A)	48 / 46 / 45	50 / 47 / 45	53 / 49 / 45	
5 6 1		~	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	

Chassis	ARNU05GL1G4	ARNU07GL1G4	ARNU09GL1G4				
Drain Pump		0					
Cassette Cover		-					
Refrigerant Leakage Detector		PRLDNVS0					
EEV Kit		PRGK024A0					
Independent Power Module		PRIP0					
Robot Cleaner		-					
Pre Filter (Washable / Anti-fungus)		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) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)						
External Input (1 point)		0					
Wi-Fi		PWFMDD200					

 $<sup>\</sup>fint \mathbb{R}$  Rated : Max. power input allowed for fan motor

Note: 1. Capacities are based on the following conditions
- Cooling: Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
- Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero

Due to our policy of innovation some specifications may be changed without notification
 I.D: 'Internal Diameter'

<sup>4.</sup> The Sound Pressure test condition is based on 50 Pa for middle static duct.

Option : Refer to model name in table

1) Available from April 2020

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

<sup>3.</sup> I.D : 'Internal Diameter'
4. L2, L3 : The Sound Pressure test condition is based on 20 Pa (Static Pressue) as standard.

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

<sup>1)</sup> Available from April 2020

## **LOW STATIC**

ARNU12GL2G4 / ARNU15GL2G4 / ARNU18GL2G4



Model Unit		Unit ARNU12GL2G4		ARNU15GL2G4	ARNU18GL2G4
Cooling Capac	Cooling Capacity		3.6	4.5	5.6
Heating Capa	Heating Capacity		4.0	5.0	6.3
Power Input (H / M / L)	Nominal	W	41 / 34 / 29	56 / 41 / 34	71 / 56 / 41
Dimensions	Body	mm	900 x 190 x 700	900 x 190 x 700	900 x 190 x 700
$(W \times H \times D)$	Shipping	mm	1,062 x 255 x 781	1,062 x 255 x 781	1,062 x 255 x 781
	Туре		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 1, 5 x 1
	Air Flow Rate (H / M / L) (High Mode-Factory Set)	m³/min	10.0 / 8.5 / 7.0	12.5 / 10.0 / 8.5	15.0 / 12.5 / 10.0
Fan	External Static Pressure (High mode)	mmAq (Pa)	2.54 (25)	2.54 (25)	2.54 (25)
	Air Flow Rate (H / M / L) (Standard Mode)	m³/min	10.0 / 8.5 / 7.0	12.5 / 10.0 / 8.5	15.0 / 12.5 / 10.0
	External Static Pressure (Standard Mode)	mmAq (Pa)	0 (0)	0 (0)	0 (0)
	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	23.0	23.0	23.0
Sound Pressu	Sound Pressure Levels (H / M / L)		30 / 27 / 25	33 / 30 / 28	35 / 32 / 29
Sound Power	Levels (H / M / L)	dB(A)	50 / 47 / 46	54 / 51 / 47	56 / 54 / 51
Davies Cur-l		Ø V II=	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

### Accessories

Chassis	ARNU12GL2G4	ARNU15GL2G4	ARNU18GL2G4				
Drain Pump		0					
Cassette Cover		-					
Refrigerant Leakage Detector		PRLDNVS0					
EEV Kit		0					
Independent Power Module		PRIP0					
Robot Cleaner		-					
Pre Filter (Washable / Anti-fungus)		0					
Ion Generator							
CO <sub>2</sub> Sensor							
Ventilation Kit		-					
IR Receiver		PWLRVN000					
Zone Controller		ABZCA					
PDRYCB000 (1 point contact)  PDRYCB300 (8 points for thermostat compatible)  PDRYCB320 (Universal input)  PDRYCB400 (2 points input)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)							
External Input (1 point)		0					
Wi-Fi		PWFMDD200					

ARNU21GL3G4 / ARNU24GL3G4



Model		Unit	ARNU21GL3G4	ARNU24GL3G4
Cooling Capacity		kW	6.2	7.1
Heating Capa	city	kW	7.0	8.0
Power Input (H / M / L)	Nominal	W	72 / 53 / 48	103 / 63 / 48
Dimensions	Body	mm	1,100 x 190 x 700	1,100 x 190 x 700
$(W \times H \times D)$	Shipping	mm	1,262 x 255 x781	1,262 x 255 x781
	Туре		Sirocco Fan	Sirocco Fan
	Motor Output x Number	W x No.	19 x 2	19 x 2
	Air Flow Rate (H / M / L) (High Mode-Factory Set)	m³/min	17.5 / 14.0 / 12.0	20.0 / 16.0 / 12.0
Fan	External Static Pressure (High Mode)	mmAq (Pa)	2.54 (25)	2.54 (25)
	Air Flow Rate (H / M / L) (Standard mode)	m³/min	17.5 / 14.0 / 12.0	20.0 / 16.0 / 12.0
	External Static Pressure (Standard Mode)	mmAq (Pa)	0 (0)	0 (0)
	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)	Ø15.88 (5/8)	Ø15.88 (5/8)
COMMECTIONS	Drain Pipe (Internal Dia.)	mm (inch)	Ø25 (1)	Ø25 (1)
Weight	Body	kg	27.0	27.0
Sound Pressu	re Levels (H / M / L)	dB(A)	35 / 29 / 28	36 / 33 / 28
Sound Power	Levels (H / M / L)	dB(A)	59 / 55 / 54	63 / 59 / 55
			1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60
Communicatio	on Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

Chassis	ARNU21GL3G4	ARNU24GL3G4				
Drain Pump	0					
Cassette Cover						
Refrigerant Leakage Detector	PRLDNVS0					
EEV Kit	-					
Independent Power Module	PRIPO PRIPO					
Robot Cleaner						
Pre Filter (Washable / Anti-fungus)	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) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)					
External Input (1 point)	0					
Wi-Fi	PWFMDD200					

Nominal : Performance tested under EN14511
 Rated : Max. power input allowed for fan motor
 Note : 1. Capacities are based on the following conditions

<sup>-</sup> Cooling: Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero - Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero 2. Due to our policy of innovation some specifications may be changed without notification

 <sup>3.</sup> I.D.: 'Internal Diameter'
 4. L2, L3: The Sound Pressure test condition is based on 20 Pa (Static Pressue) as standard.

<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table 1) Available from April 2020

<sup>\*\*</sup> Nominal: Performance tested under EN14511

\*\* Rated: Max. power input allowed for fan motor

Note: 1. Capacities are based on the following conditions

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

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

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

 <sup>3.</sup> I.D.: 'Internal Diameter'
 4. L2, L3: The Sound Pressure test condition is based on 20 Pa (Static Pressue) as standard.

O: Applied, -: Not applied
 Option: Refer to model name in table
 Available from April 2020

## **LOW STATIC**

ARNU07GL4G4 / ARNU09GL4G4 / ARNU12GL5G4



Model Unit		Unit	ARNU07GL4G4	ARNU09GL4G4	ARNU12GL5G4	
kW		kW	2.2	2.8	3.6	
Cooling Capacity k		kcal/h	1,900	2,400	3,100	
		Btu/h	7,500	9,600	12,300	
		kW	2.5	3.2	4.0	
Heating Capa	city	kcal/h	2,200	2,800	3,400	
		Btu/h	8,500	10,900	13,600	
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	
Dimensions	Body	mm	700 x 190 x 460	700 x 190 x 460	900 x 190 x 460	
$(W \times H \times D)$		inch	27.5 x 7.5 x 18.2	27.5 x 7.5 x 18.2	35.4 x 7.5 x 18.2	
C :1	Rows x Columns x FPI		(2 x 6 x 14) x 2	(2 x 6 x 14) x 2	(2 x 6 x 18) x 2	
Coil	Face Area	m <sup>2</sup>	0.12	0.12	0.17	
	Туре		Sirocco Fan	Sirocco Fan	Sirocco Fan	
	Motor Output x Number	W×EA	19 x 1	19 x 1	19 x 1+5x 1	
	Running Current	А	0.4	0.4	0.76	
	Air Flow Rate (H / M / L) (High Mode-Factory set) External Static Pressure	CMM	7.5 / 6.5 / 5.5	9.0 / 7.0 / 5.5	10.0 / 8.5 / 7.0	
		cfm	270 / 230 / 200	320 / 250 / 200	360 / 310 / 250	
Fan		mmAq (Pa)	1 (10)	1 (10)	1 (10)	
	Air Flow Rate (H / M / L) (Standard Mode) External Static Pressure	CMM	7.5 / 6.5 / 5.5	9.0 / 7.0 / 5.5	10.0 / 8.5 / 7.0	
		cfm	270 / 230 / 200	320 / 250 / 200	360 / 310 / 250	
		mmAq (Pa)	0 (0)	0 (0)	0 (0)	
	Drive		Direct	Direct	Direct	
	Motor Type		BLDC	BLDC	BLDC	
Temperature (	Control		Microprocessor Thermostat for cooling and heating	Microprocessor Thermostat for cooling and heating	Microprocessor Thermostat for cooling and heating	
Sound Absorb	oing Thermal Insulation Mater	rial	Foamed polystrene	Foamed polystrene	Foamed polystrene	
Air Filter			-	-	-	
Safety Filter			Fuse	Fuse	Fuse	
	Liquid Side	mm (inch)	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)	
CONNECTIONS	Drain Pipe (Internal Dia.)	mm	25.0	25.0	25.0	
Net Weight		kg (lbs)	14.6 (32.2)	14.6 (32.2)	20 (44.1)	
Gross Weight	:	kg (lbs)	17.8 (39.0)	17.8 (39.0)	22.2 (49.0)	
Noise Level (S	Sound Pressure, H / M / L)	dB(A)	27 / 26 / 23	30 / 26 / 23	31 / 29 / 26	
Power Supply		Ø, V, Hz	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	
Refrigerant Co	ontrol		EEV	EEV	EEV	
Power Cable		mm <sup>2</sup>	CV2.5 x 3C	CV2.5 x 3C	CV2.5 x 3C	
communicatio	on 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. Capacities are based on the following conditions:

- 1. Capacities are based on the following conditions:

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

  2 Capacities are not capacities.

- 2. Capacities are net capacities

- 2. Capacities are net capacities
  3. Due to our policy of innovation some specifications may be changed without prior notification
  4. To be added for more available Models
  5. EEV: Electronic Expansion Valve
  6. Noise Level is Standard Mode (for actual High Mode (factory set) condition, Noise level may exceed the standard level by 1.5dB(A)

### ARNU15GL5G4 / ARNU18GL5G4 / ARNU24GL6G4



Model		Unit	ARNU15GL5G4	ARNU18GL5G4	ARNU24GL6G4
		kW	4.5	5.6	7.1
Cooling Capac	ity	kcal/h	3,900	4,800	6,100
		Btu/h	15,400	19,100	24,200
		kW	5.0	6.3	8.0
Heating Capac	city	kcal/h	4,300	5,400	6,900
		Btu/h	17,100	21,500	27,300
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions	Body	mm	900 x 190 x 460	900 x 190 x 460	1,100 x 190 x 460
$(W \times H \times D)$		inch	35.4 x 7.5 x 18.2	35.4 x 7.5 x 18.2	43.3 x 7.5 x 18.2
0 11	Rows x Columns x FPI		(2 x 6 x 18) x 2	(2 x 6 x 18) x 2	(2 x 6 x 18) x 2
Coil	Face Area	m <sup>2</sup>	0.17	0.17	0.22
	Туре		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output x Number	W×EA	19 x 1+5x 1	19 x 1+5x 1	19 x 2
	Running Current	А	0.76	0.76	0.97
	Air Flow Rate (H / M / L)	CMM	12.5 / 10.0 / 8.5	15.0 / 12.5 / 10.0	20.0 / 16.0 / 12.0
	(High Mode-Factory set) External Static Pressure	cfm	450 / 360 / 810	530 / 450 / 360	710 / 570 / 430
Fan		mmAq (Pa)	1 (10)	1 (10)	1 (10)
	Air Flow Rate (H / M / L) (Standard Mode)	CMM	12.5 / 10.0 / 8.5	15.0 / 12.5 / 10.0	20.0 / 16.0 / 12.0
		cfm	450 / 360 / 810	530 / 450 / 360	710 / 570 / 430
	External Static Pressure	mmAq (Pa)	0 (0)	0 (0)	0 (0)
	Drive		Direct	Direct	Direct
	Motor Type		BLDC	BLDC	BLDC
Temperature C	Control		Microprocessor Thermostat for cooling and heating	Microprocessor Thermostat for cooling and heating	Microprocessor Thermostat for cooling and heating
Sound Absorb	ing Thermal Insulation Mater	rial	Foamed polystrene	Foamed polystrene	Foamed polystrene
Air Filter			-	-	-
Safety Filter			Fuse	Fuse	Fuse
	Liquid Side	mm (inch)	6.35 (1/4)	6.35 (1/4)	9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	12.7 (1/2)	12.7 (1/2)	15.88 (5/8)
CONTICCUONS	Drain Pipe (Internal Dia.)	mm	25.0	25.0	25.0
Net Weight		kg (lbs)	20 (44.1)	20 (44.1)	22 (48.5)
Gross Weight		kg (lbs)	22.2 (49.0)	22.2 (49.0)	25.8 (56.9)
Noise Level (S	ound Pressure, H / M / L)	dB(A)	34 / 31 / 29	36 / 34 / 31	39 / 35 / 32
Power Supply		Ø, V, Hz	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Refrigerant Co	ontrol		EEV	EEV	EEV
-		mm <sup>2</sup>	CV2.5 x 3C	CV2.5 x 3C	CV2.5 x 3C
communication Cable					

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

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

- 2. Capacities are net capacities
  3. Due to our policy of innovation some specifications may be changed without prior notification
  4. To be added for more available Models
  5. EEV :Electronic Expansion Valve
  6. Noise Level is Standard Mode (for actual High Mode (factory set) condition, Noise level may exceed the standard level by 1.5dB(A)

## **HIGH SENSIBLE**

ARNU07GM2A4 / ARNU09GM2A4 / ARNU12GM2A4 / ARNU15GM2A4 ARNU28GM2A4 / ARNU36GM2A4 / ARNU42GM2A4



Model		Unit	ARNU07GM2A4	ARNU09GM2A4	ARNU12GM2A4	ARNU15GM2A4	ARNU28GM2A4	ARNU36GM2A4	ARNU42GM2A4
Cooling Capac	ity	kW	2.2	2.8	3.6	4.5	8.2	10.6	12.3
Heating Capac	city	kW	2.5	3.2	4.0	5.0	9.2	11.9	13.8
Power Input	Nominal	W	30	30	30	30	123	184	231
Dimensions (W x H x D)	Body	mm	1,250 x 270 x 700						
	Туре		Sirocco Fan						
	Motor Output x Number	W	350 x 1						
	Air Flow Rate (H / M / L)	CMM	12.8 / 7.7 / 7.7	12.8 / 7.7 / 7.7	13.6 / 8.7 / 8.7	13.6 / 8.7 / 8.7	28.0 / 24.0 / 21.0	32.0 / 28.0 / 24.0	38.0 / 33.0 / 28.0
	(High Mode-Factory Set)	cfm	452 / 272 / 272	452 / 272 / 272	480 / 307 / 307	480 / 307 / 307	989 / 848 / 742	1,130 / 989 / 848	1,342 / 1,165 / 989
Fan	External Static Pressure	mmAq (Pa)	6 (59)	6 (59)	6 (59)	6 (59)	6 (59)	6 (59)	6 (59)
	Air Flow Rate (H / M / L)	CM	12.8 / 7.7 / 7.7	12.8 / 7.7 / 7.7	13.6 / 8.7 / 8.7	13.6 / 8.7 / 8.7	28.0 / 24.0 / 21.0	32.0 / 28.0 / 24.0	38.0 / 33.0 / 28.0
	(Standard Mode) External Static Pressure	cfm	452 / 272 / 272	452 / 272 / 272	480 / 307 / 307	480 / 307 / 307	989 / 848 / 742	1,130 / 989 / 848	1,342 / 1,165 / 989
		mmAq (Pa)	5 (49)	5 (49)	5 (49)	5 (49)	5 (49)	5 (49)	5 (49)
	Motor Type		BLDC						
Air Filter			-	-	-	-	-	-	-
Safety Device			Fuse						
	Liquid Side	mm (inch)	Ø9.52 (3/8)						
Pipe Connections	Gas Side	mm (inch)	Ø15.88 (5/8)						
001111000110115	Drain Pipe (Internal Dia.)	mm (inch)	25 (1)	25 (1)	25 (1)	25 (1)	25 (1)	25 (1)	25 (1)
Net Weight	Body	kg (lbs)	38.0 (84)	38.0 (84)	38.0 (84)	38.0 (84)	38.0 (84)	38.0 (84)	39.5 (87)
Sound Pressure Levels (H / M / L) dB(A)		dB(A)	38 / 36 / 36	38 / 36 / 36	38 / 36 / 36	38 / 36 / 36	36 / 34 / 33	37 / 36 / 34	38 / 37 / 36
Sound Power I	Sound Power Levels (H / M / L) dB(A)		54 / 53 / 53	54 / 53 / 53	53 / 52 / 52	53 / 52 / 52	59 / 57 / 55	60 / 59 / 57	62 / 61 / 60
D C		Ø 1/ 11-	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Transmission (	Cable		1.0 ~ 1.5 x 2C						

- ※ Nominal : Performance tested under EN14511

- \*\* Nominal: Performance tested under EN 145 IT

  \*\* Rated: Max. power input allowed for fan motor

  Note: 1. Capacities are based on the following conditions

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

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

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

  3. I.D: 'Internal Diameter'

### Accessories

Chassis	ARNU07GM2A4 ARNU09GM2A4 ARNU12GM2A4 ARNU15GM2A4 ARNU28GM2A4 ARNU36GM2A4 ARNU42GM2A4
Drain Pump	0
Cassette Cover	-
Refrigerant Leakage Detector	PRLDNVS0
EEV Kit	
Independent Power Module	PRIPO
Robot Cleaner	
Pre Filter (Washable / Anti-fungus)	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) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)
External Input (1 point)	0
Wi-Fi	PWFMDD200

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

ARNU18GM3A4 / ARNU24GM3A4 / ARNU28GM3A4



Model		Unit	ARNU18GM3A4	ARNU24GM3A4	ARNU28GM3A4
Cooling Capac	ity	kW	5.6	7.1	8.2
Heating Capacity		kW	6.3	8.0	9.2
Power Input	Nominal	W	50	75	75
Dimensions (W x H x D)	Body	mm	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
	Туре		1,250 x 360 x 700	1,250 x 360 x 700	1,250 x 360 x 700
	Motor Output x Number	W	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Air Flow Rate (H / M / L)	CMM	350 x 1	350 x 1	350 x 1
	(High Mode-Factory Set)	cfm	32.7 / 26.7 / 23.0	35.5 / 30.6 / 26.2	35.5 / 30.6 / 26.2
Fan	External Static Pressure	mmAq (Pa)	1,155 / 943 / 812	1,254 / 1,081 / 925	1,254 / 1,081 / 925
	Air Flow Rate (H / M / L) (Standard Mode)	CM	6 (59)	6 (59)	6 (59)
		cfm	32.7 / 26.7 / 23.0	35.5 / 30.6 / 26.2	35.5 / 30.6 / 26.2
	External Static Pressure	mmAq (Pa)	1,155 / 943 / 812	1,254 / 1,081 / 925	1,254 / 1,081 / 925
	Motor Type		5 (49)	5 (49)	5 (49)
Air Filter			BLDC	BLDC	BLDC
Safety Device			-	-	-
	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)
COMMICCHOMS	Drain Pipe (Internal Dia.)	mm (inch)	25 (1)	25 (1)	25 (1)
Net Weight	Body	kg (lbs)	44 (97)	44 (97)	44 (97)
Sound Pressu	re Levels (H / M / L)	dB(A)	39 / 37 / 36	40 / 38 / 37	40 / 38 / 37
Sound Power	Levels (H / M / L)	dB(A)	53 / 52 / 51	54 / 53 / 52	54 / 53 / 52
D 6 1		a 1/11	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60
Transmission (	Cable		1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

<sup>\*</sup> Nominal: Performance tested under EN14511

Chassis	ARNU18GM3A4	ARNU24GM3A4	ARNU28GM3A4		
Drain Pump	0				
Cassette Cover		-			
Refrigerant Leakage Detector	PRLDNVS0				
EEV Kit		-			
Independent Power Module		PRIP0			
Robot Cleaner		-			
Pre Filter (Washable / Anti-fungus)	0				
Ion Generator					
CO <sub>2</sub> Sensor		-			
Ventilation Kit		-			
IR Receiver		PWLRVN000			
Zone Controller		ABZCA			
PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible)  PDRYCB320 (Universal input) PDRYCB400 (2 points input) PDRYCB500 (Modbus)					
External Input (1 point)	0				
Wi-Fi		PWFMDD200			

Option : Refer to model name in table

1) Available from April 2020

<sup>\*\*</sup> Normal: Performance tested under EN 14511

\*\* Rated: Max. power input allowed for fan motor

Note: 1. Capacities are based on the following conditions

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

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

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

3. I.D: 'Internal Diameter'

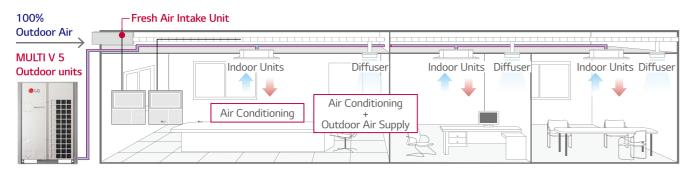
O: Applied, -: Not applied
 Option: Refer to model name in table
 Available from April 2020

INDOOR UNITS FEATURE

## FRESH AIR INTAKE UNIT

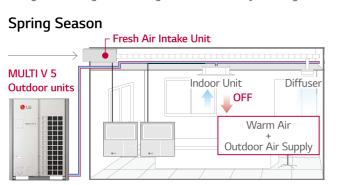
### Fresh Outdoor Air Supply

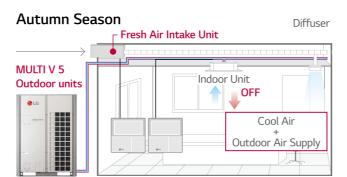
The LG Fresh Air Intake Unit (FAU) is the alternative solution for ventilation, which supplies the fresh outdoor air indoors as well as being able to cool and heat air inside simultaneously. It means the indoor space can have positive air pressure consistently, which can block cold, hot or contaminated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



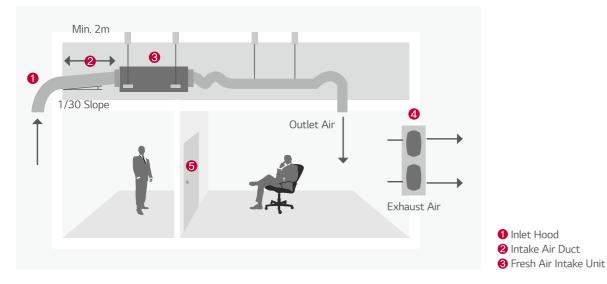
### **Economic Operation**

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





### **Installation Scene**



- 1 Inlet Hood 2 Intake Air Duct
- 4 Exhaust Fan **6** Door

## FRESH AIR INTAKE UNIT

ARNU76GB8Z4 / ARNU96GB8Z4



Model		Unit	ARNU76GB8Z4	ARNU96GB8Z4
Cooling Capac	city	kW	22.4	28.0
Heating Capac	city	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
$(W \times H \times D)$	Shipping	mm	1,806 x 537 x 825	1,806 x 537 x 825
Fan	Туре		Sirocco Fan	Sirocco Fan
	Motor Output x Number	W x No.	375 x 1	375 x 1
	Air Flow Rate (H / M / L) (High Mode-Factoty 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
D.	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)
Connections	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
D C h		Ø 1/11-	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

- ※ Nominal: Performance tested under EN14511
  ※ Rated: Max. power input allowed for fan motor

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

   Cooling: Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero

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

  2. Capacities are net capacities

  - 3. Noise Level is under standard mode [For actual High Mode (Factory set) condition, Noise Level may exceed the standard level by 1.5dB(A) ] 4. Due to our policy of innovation some specifications may be changed without prior notification.

### **▲** CAUTION

1. Operation range (Cooling: 5°C ~ 43°C, Heating: -5°C ~ 43°C)

2. Installation of exhaust fan is recommended for a sealed room.

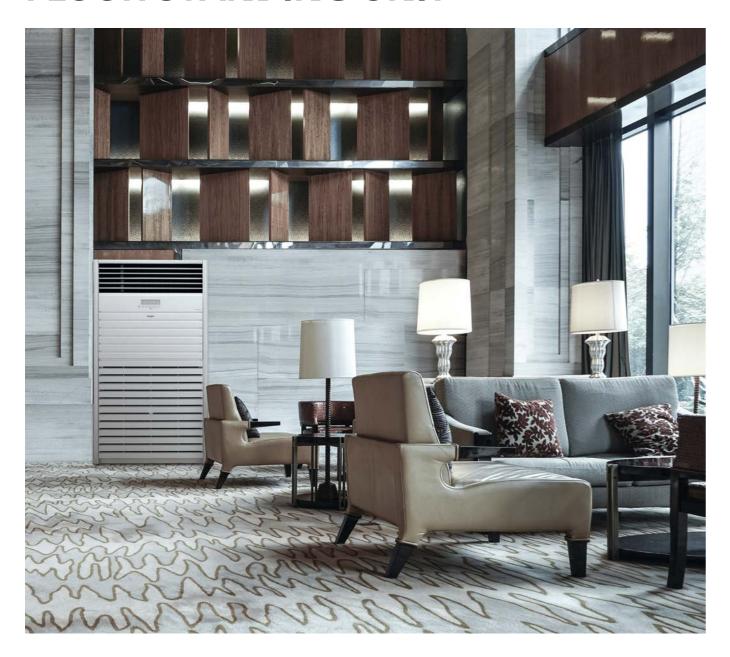
3. Indoor Unit Connection

Ν	lo	Connection Condition	Combination	
	1	Fresh air intake units only are connected with outdoor units	<ol> <li>The total capcity of fresh air intak unit should be 50 ~ 100% of outdoor unit.</li> <li>The max quantity of fresh air intake is 4 units.</li> </ol>	
	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.	

Chassis	ARNU76GB8Z4	ARNU96GB8Z4			
Drain Pump					
Cassette Cover					
Refrigerant Leakage Detector	PRLDNVS0				
EEV Kit					
Independent Power Module	PRIP0				
Robot Cleaner	-				
Pre Filter (Washable / Anti-fungus)	0				
Ion Generator	-				
CO <sub>2</sub> Sensor	-				
Ventilation Kit					
IR Receiver	PWLR	/N000			
Zone Controller					
Dry Contact (with Additional Accessory)	PDRYCB300 (8 points fo PDRYCB400 (	PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible) PDRYCB400 (2 points input) PDRYCB500 (Modbus)			
External Input (1 point)	rnal Input (1 point)				
Wi-Fi	PWFM	DD200			

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

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### **Features & Benefits**

• The powerful air speed and volume means the air flow can reach up to 15m away from the air conditioner.

### **Key Applications**

- Retail
- Shop
- Office
- Restaurant

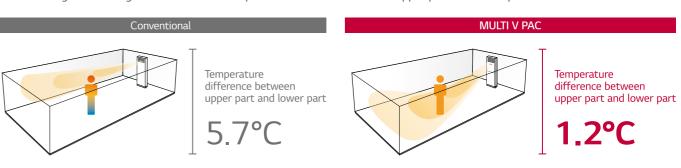
## Simple & Elegant Design

With its stylish design, LG's new floor standing air conditioner enhances the overall indoor interior.



## **Less Temperature Difference**

Power cooling and heating will minimize the temperature difference between upper part and lower part of the room.



- % Temperature difference between upper part and lower part
- \*\* Test Condition: Indoor temperature 12°C, Outdoor temperature 7°C, Setting Temperature 30°C \*\* Measure Condition: After 3 hours heating operation (average temperature)

## 15m Long Power Cooling

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



Туре	Floor Standing
Air Flow (m³/min)	37
Air Speed (m/s)	4.5

※ Based on 131.8m<sup>2</sup>

## **FLOOR STANDING UNIT**

ARNU48GPTA4 ARNU96GPFA4



Model	Indepndent Unit			ARNU48GPTA4	ARNU96GPFA4
Capacity	Cooling Nom kW		kW	14.1	28.0
	Heating	Nom	kW	15.9	31.5
	Cooling	oling Nom w		250	400
	Heating	Nom	W	250	400
Power Input	Cooling	Rated	W	250	400
	Heating	Rated	W	250	400
Power Supply			Ø, V, Hz	1, 220, 60	1, 220, 60
A:	Cooling	Power / H / M / L	m³/min	37 / 33 / 28 / 24	68 / 61 / - / 50
Airflow Rate	Heating	Power / H / M / L	m³/min	37 / 33 / 28 / 24	68 / 61 / - / 50
Sound Pressure		Power / H / M / L	dB(A)	54 / 51 / 49 / 45	60 / 57 / - / 53
Dimension	Body	W×H×D	mm	590 x 1,840 x 440	1,050 x 1,880 x 495
Net Weight			kg	48.0	113.0
	Liquid		mm	9.52	9.52
Piping Connection	Gas		mm	15.88	22.2
	Drain	I.D	mm	-	-

- \*\* This product contains Fluorinated Greenhouse Gases. (R410A)
  \*\* Nom.: Performance tested under EN14511
  \*\* Rated: Max power input allowed for fan motor
  Note: 1. Capacities are based on the following conditions

  Cooling: Indoor temp. 27°C (86.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero
  Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero

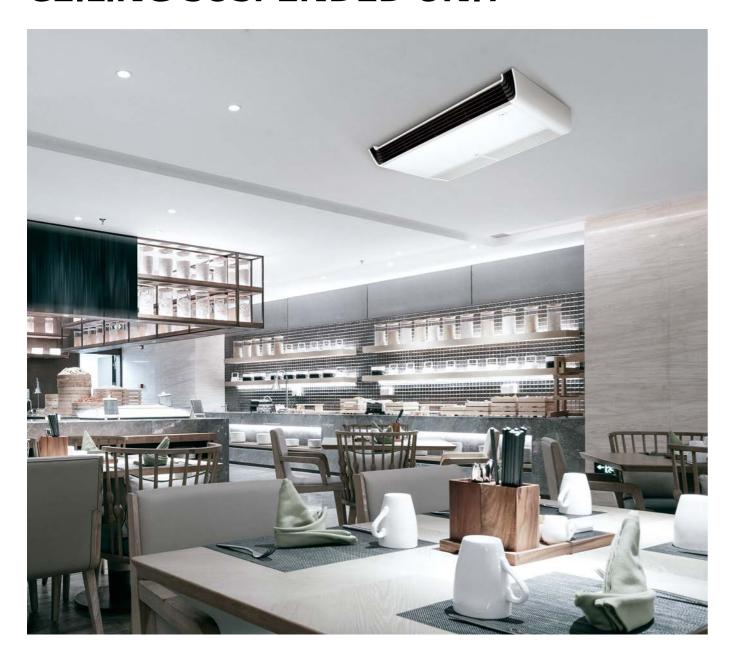
  2. Due to our policy of innovation some specifications may be changed without notification
  3. I.D: 'Internal Diameter'

Model		ARNU07GCE*4	ARNU09GCE*4	
	Simple (1 Contact Point with Case)	PDRYCB000		
Dry	2 Contact Point	PDRYCB400		
Contact	For Thermostat (On-Off / Mode / Fan Speed)	PDRYCB300 / NEW PDRYCB320		
	Modbus Communication	PDRYCB500		
EEV Kit fo	r MULTI V Indoor			
IR Receive	r	PWLRVN000		

	Wireless Remote Controller						
Premium	Stand	ard III	Stand	lard II	Simple	Simple for Hotel	wireless Remote Controller
255)		944 1	ALL U M		4 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	
PREMTA000 PREMTA000A PREMTA000B	PREMTB100 (White)	PREMTBB10 (Black)	PREMTB001 (White)	PREMTBB01 (Black)	PQRCVCL0Q (Black) PQRCVCL0QW (White)	PQRCHCA0Q (Black) PQRCHCA0QW (White)	PQWRHQ0FDB

# OOR UNITS

## **CEILING SUSPENDED UNIT**



### **Features & Benefits**

• The powerful air speed and volume means the air flow can reach up to 15m away from the air conditioner.

### **Key Applications**

- Retail
- Shop
- Office
- Restaurant

## **Differentiated Design**

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





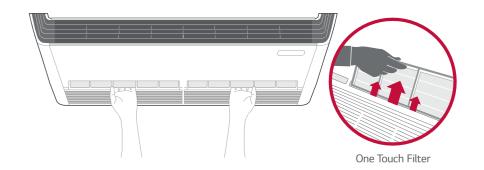
## **Powerful Cooling & Heating**

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



### 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.



## **CEILING SUSPENDED UNIT**

### **Two Thermistors Control**

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



### Wi-Fi Control

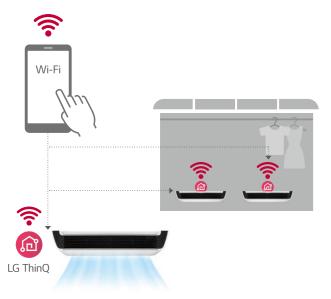
Control your air conditioners via using the smart internet devices as Android or iOS based smartphones. This advanced technology provides you the best convenience.

### LG ThinQ



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

Access your air conditioner anytime and from anywhere



### Easy Registration and Log-in

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

App Store ●●●●○ LTE 오전 10	0:26 @ 63% <b>•</b>
<b>く</b> LG Account	
LG Ac	count
Experience a variety of LG ser	vices with your LG Account.
Email ID	
Password	
SIGN	IN
Reset password	Create account
SIGN IN WITH YOUR S	SNS ACCOUNTS
G Sign in with Goog	ile
Sign in with Face	book
Copyright © LG Electronics. All Righ	nts Reserved. (Customer support)

## **CEILING SUSPENDED UNIT**

ARNU18GV1A4 / ARNU24GV1A4 ARNU36GV2A4 / ARNU48GV2A4



Model		Unit	ARNU18GV1A4	ARNU24GV1A4	ARNU36GV2A4	ARNU48GV2A4
Cooling Capac	ity	kW	5.6	7.1	10.6	14.1
Heating Capac	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			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
$(W \times H \times D)$	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
F	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)
COTTICCTIONS	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 Pressur	re Levels (H / M / L)	dB(A)	36 / 34 / 33	37 / 35 / 33	48 / 46 / 44	49 / 47 / 44
Sound Power	Levels (H / M / L)	dB(A)	61 / 59 / 56	62 / 59 / 56	68 / 66 / 64	68 / 67 / 66
D C		Ø V II-	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C			

<sup>\*</sup> Nominal: Performance tested under EN14511

### Accessories

Chassis	ARNU18GV1A4	ARNU24GV1A4	ARNU36GV2A4	ARNU48GV2A4	
Drain Pump	-				
Cassette Cover		-			
Refrigerant Leakage Detector		PRLDI	VVS0		
EEV Kit		_			
Independent Power Module		PRI	P0		
Robot Cleaner		-			
Pre Filter (Washable / Anti-fungus)	0				
Ion Generator		-			
CO <sub>2</sub> Sensor		-			
Ventilation Kit		-			
IR Receiver		-			
Zone Controller		-			
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)				
External Input (1 point)	0				
Wi-Fi		PWFMI	DD200		

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

## **CEILING & FLOOR CONVERTIBLE UNIT**

ARNU09GVEA4 / ARNU12GVEA4



Model		Unit ARNU09GVEA4		ARNU12GVEA4	
Cooling Capac	ity	kW	2.8	3.6	
Heating Capac	city	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	
$(W \times H \times D)$	Shipping	mm	975 x 279 x 562	975 x 279 x 562	
	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	
	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)	
COTTICCTIONS	Drain Pipe (Internal Dia.)	mm (inch)	Ø16 (5/8)	Ø16 (5/8)	
Weight	Body	kg	13.3	13.3	
Sound Pressure 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	
D C l		Ø V II-	1, 220 ~ 240, 50	1, 220 ~ 240, 50	
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	
Communicatio	n Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	

<sup>※</sup> Nominal : Performance tested under EN14511

Chassis	ARNU09GVEA4	ARNU12GVEA4		
Drain Pump				
Cassette Cover	-			
Refrigerant Leakage Detector	PRLDI	NVS0		
EEV Kit	PRGKC	024A0		
Independent Power Module	PRI	PO		
Robot Cleaner	-			
Pre Filter (Washable / Anti-fungus)	0			
Ion Generator				
CO <sub>2</sub> Sensor	-			
Ventilation Kit	-			
IR Receiver	-			
Zone Controller	-			
Dry Contact (with Additional Accessory)  NEW PDRYCB320  PDRYCB400 (		point contact) r thermostat compatible) ((Universal input) 1) 2 points input) 0 (Modbus)		
External Input (1 point)	0			
Wi-Fi	PWFMD	DD200 1)		

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

Rated: Max. power input allowed for fan motor
 Note: 1. Capacities are based on the following conditions

<sup>-</sup> Cooling: Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero - Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero 2. Due to our policy of innovation some specifications may be changed without notification

<sup>3.</sup> I.D : 'Internal Diameter'

Option : Refer to model name in table

<sup>1)</sup> Available from April 2020

<sup>※</sup> Rated: Max. power input allowed for fan motor
Note: 1. Capacities are based on the following conditions

<sup>-</sup> Cooling: Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero - Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero 2. Due to our policy of innovation some specifications may be changed without notification

<sup>3.</sup> I.D : 'Internal Diameter'

Option : Refer to model name in table

<sup>1)</sup> Available from April 2020

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# OOR UNITS

## **CONSOLE & FLOOR STANDING UNIT**



### **Features & Benefits**

- Ideal for Installation Beneath a Window
- Unit Requires Minimal Installation Space
- Fitted with a Washable Long-life Filter

### **Key Applications**

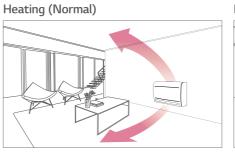
- School
- Office
- Church
- Historic Building

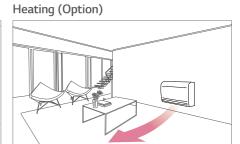
Flo	oor standing	Console	Floor Standing Unit
Smart	Wi-Fi	0	0
Energy Efficiency	Jet Cool	-	0
Health	Lonizer	0	-
Fast Cooling & Heating	Jet Cool	0	-
	Sleep Mode	0	0
	Timer (On / Off)	0	0
Comfort	Timer (Weekly)	0	0
	Two Thermistor Control	0	0
	Group Control	0	0

## **Installation Support Clip**

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



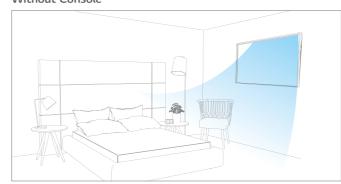




### **Block Cold Draft**

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

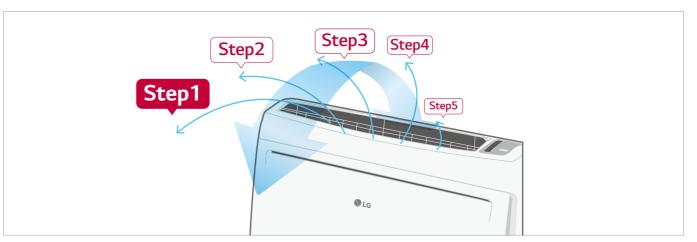
Without Console





## 5-Step Vane Control

There are 5 different stages to control air flow direction.



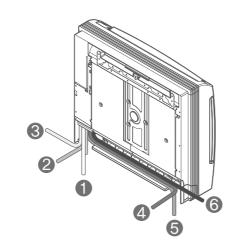
# OOR UNITS

## **CONSOLE & FLOOR STANDING UNIT**

### 3 Way Flexible Installation

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)

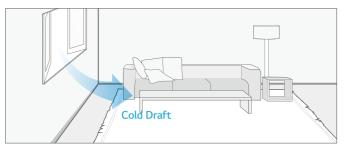




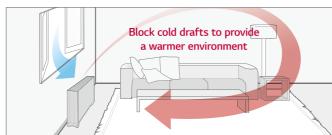
### **Block Cold Draft**

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

Without Floor Standing

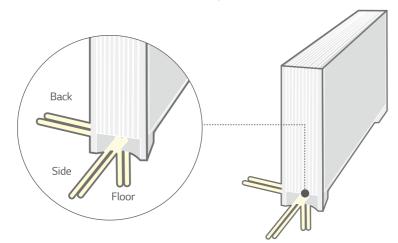






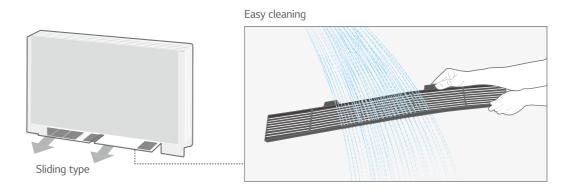
## 3 Way Flexible Installation

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



## **Sliding Type Filter**

Easy maintenance and extended product life with sliding type filter.



### Wi-Fi Control

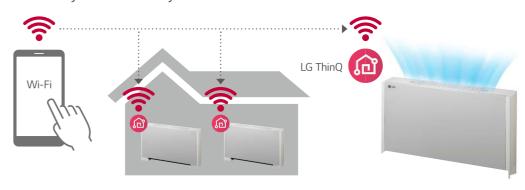
Control your air conditioners via using the smart internet devices as Android or iOS based smartphones. This advanced technology provides you the best convenience.

### LG ThinQ



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

Access your air conditioner anytime and from anywhere



## **CONSOLE**

ARNU07GQAA4 / ARNU09GQAA4



Model		Unit	ARNU07GQAA4	ARNU09GQAA4
Cooling Capac	ity	kW	2.2	2.8
Heating Capac	city	kW	2.5	3.2
Power Input (H / M / L)	Nominal	W	15 / 12 / 10	15/12/10
Exterior Color			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	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 Pressur	Sound Pressure Levels (H / M / L)		37 / 34 / 28	37 / 34 / 28
Sound Power	Sound Power Levels (H / M / L)		53 / 50 / 44	53 / 50 / 44
Davier Cumply		Ø V II=	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60
Communication	n Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

<sup>※</sup> Nominal : Performance tested under EN14511

### Accessories

Chassis	ARNU07GQAA4	ARNU15GQAA4		
Drain Pump		-		
Cassette Cover	-			
Refrigerant Leakage Detector	PRLI	DNVS0		
EEV Kit	PRGK	(024A0		
Independent Power Module	PRIPO			
Robot Cleaner				
Pre Filter (Washable / Anti-fungus)	0			
Ion Generator	0			
CO <sub>2</sub> Sensor				
Ventilation Kit		-		
IR Receiver		-		
Zone Controller		-		
PDRYCB000 (1 point co PDRYCB300 (8 points for thermo: Dry Contact (with Additional Accessory)  New PDRYCB320 (Univers PDRYCB400 (2 points i PDRYCB500 (Modbu		0 (Universal input) <sup>1)</sup> (2 points input)		
External Input (1 point)	0			
Wi-Fi	PWFMDD200			

ARNU12GQAA4 / ARNU15GQAA4



Model		Unit	ARNU12GQAA4	ARNU15GQAA4
Cooling Capac	ity	kW	3.6	4.5
Heating Capac	city	kW	4.0	5.0
Power Input (H / M / L)	Nominal	W	18 / 15 / 13	24 / 19 / 17
Exterior Color			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
F	Motor Output x Number	W x No.	48 x 1	48 x 1
Fan	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
	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)
COTTICCTIONS	Drain Pipe (Internal Dia.)	mm (inch)	Ø12 (15/32)	Ø12 (15/32)
Weight	Body	kg	14.0	14.0
Sound Pressur	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
Danier Cim-Li		Ø V.I.I=	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60
Communication	on Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

<sup>※</sup> Nominal : Performance tested under EN14511

Chassis	ARNU12GQAA4	ARNU15GQAA4		
Drain Pump	-			
Cassette Cover				
Refrigerant Leakage Detector	PRLDI	NVS0		
EEV Kit	PRGKO	)24A0		
Independent Power Module	PRI	PO		
Robot Cleaner	-			
Pre Filter (Washable / Anti-fungus)	0			
Ion Generator	0			
CO <sub>2</sub> Sensor				
Ventilation Kit	-			
IR Receiver	-			
Zone Controller	-			
PDRYCB000 (1 point contact)  PDRYCB300 (8 points for thermostat compatible)  PDRYCB320 (Universal input) 1)  PDRYCB320 (Universal input) 1)  PDRYCB400 (2 points input)  PDRYCB500 (Modbus)		(Universal input) 1) 2 points input)		
External Input (1 point)	0			
Wi-Fi	PWFMI	DD200		

<sup>\*\*</sup> Nominal: Performance tested under EN 145 IT

\*\* Rated: Max. power input allowed for fan motor

Note: 1. Capacities are based on the following conditions

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

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

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

3. I.D: 'Internal Diameter'

<sup>※ ○ :</sup> Applied, - : Not applied Option : Refer to model name in table 1) Available from April 2020

<sup>\*\*</sup> Nominal: Performance tested under EN 14511

\*\* Rated: Max. power input allowed for fan motor

Note: 1. Capacities are based on the following conditions

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

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

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

3. I.D: 'Internal Diameter'

O: Applied, -: Not applied
 Option: Refer to model name in table
 Available from April 2020

## **FLOOR STANDING UNIT**

ARNU07GCEA4 / ARNU09GCEA4 / ARNU12GCEA4 ARNU15GCEA4 / ARNU18GCFA4 / ARNU24GCFA4



A : Floor Standing with case

Model		Unit	ARNU07GCEA4	ARNU09GCEA4	ARNU12GCEA4	ARNU15GCEA4	ARNU18GCFA4	ARNU24GCFA4
Cooling Capac	ity	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating Capac	ity	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			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			
ran	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	27.0	27.0	27.0	27.0	34.0	34.0
Sound Pressur	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
Davis Const.		Ø V II-	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communicatio	n Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C				

<sup>※</sup> Nominal : Performance tested under EN14511

### Accessories

Chassis	ARNU07GCEA4 ARNU09GCEA4 ARNU12GCEA4 ARNU15GCEA4	ARNU18GCFA4 ARNU24GCFA4
Drain Pump	-	-
Cassette Cover	-	-
Refrigerant Leakage Detector	PRLDNVS0	PRLDNVS0
EEV Kit	PRGK024A0	-
Independent Power Module	PRIPO	PRIP0
Robot Cleaner	-	-
Pre Filter (Washable / Anti-fungus)	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) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) PDRYCB400 (2 points input) PDRYCB500 (Modbus)	PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible) NEW PDRYCB320 (Universal input) PDRYCB400 (2 points input) PDRYCB500 (Modbus)
External Input (1 point)	0	0
Wi-Fi	PWFMDD200	PWFMDD200

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

ARNU07GCEU4 / ARNU09GCEU4 / ARNU12GCEU4 ARNU15GCEU4 / ARNU18GCFU4 / ARNU24GCFU4



※ U : Floor Standing without case

Model		Unit	ARNU07GCEU4	ARNU09GCEU4	ARNU12GCEU4	ARNU15GCEU4	ARNU18GCFU4	ARNU24GCFU4
Cooling Capacity		kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating Capac	ity	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				
F	Motor Output x Number	W x No.	19 x 1, 5 x 1	19 x 2	19 x 2			
Fan	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	20.0	20.0	20.0	20.0	26.0	26.0
Sound Pressure 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
D 6 1		a.v	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60	1, 220, 60
Communicatio	n Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C				

<sup>%</sup> Nominal : Performance tested under EN14511
% Rated : Max. power input allowed for fan motor

Chassis	ARNU07GCEU4 ARNU09GCEU4 ARNU12GCEU4 ARNU15GCEU4	ARNU18GCFU4 ARNU24GCFU4
Drain Pump	-	-
Cassette Cover	-	-
Refrigerant Leakage Detector	PRLDNVS0	PRLDNVS0
EEV Kit	PRGK024A0	-
Independent Power Module	PRIPO	PRIP0
Robot Cleaner	-	-
Pre Filter (Washable / Anti-fungus)	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) PDRYCB300 (8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) 1) PDRYCB400 (2 points input) PDRYCB500 (Modbus)	PDRYCB000 (1 point contact) PDRYCB300 (8 points for thermostat compatible) NEW PDRYCB320 (Universal input) PDRYCB400 (2 points input) PDRYCB500 (Modbus)
External Input (1 point)	0	0
Wi-Fi	PWFMDD200	PWFMDD200

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

<sup>\*\*</sup> Nominal: Performance tested under EN 145 IT

\*\* Rated: Max. power input allowed for fan motor

Note: 1. Capacities are based on the following conditions

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

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

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

3. I.D: 'Internal Diameter'

Option : Refer to model name in table

1) Available from April 2020

Note: 1. Capacities are based on the following conditions

<sup>-</sup> Cooling: Indoor temp. 27°C (80.6°F) DB / 19°C (66.2°F) WB, Outdoor temp. 35°C (95°F) DB / 24°C (75.2°F) WB, Interconnecting piping length 7.5m, Level difference of zero - Heating: Indoor temp. 20°C (68°F) DB / 15°C (59°F) WB, Outdoor temp. 7°C (44.6°F) DB / 6°C (42.8°F) WB, Interconnecting piping length 7.5m, Level difference of zero 2. Due to our policy of innovation some specifications may be changed without notification

<sup>3.</sup> I.D: 'Internal Diameter'

Option : Refer to model name in table

<sup>1)</sup> Available from April 2020

## **COMPATIBILITY**

	New		Required	Controller	
No.	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	* Neccesary 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	Neccesary 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     3 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 activeated using just one control device.)  * Combined with MULTI V Water S outdoor unit, this function is not available.
4	Group Control	Group Control can use Additional function	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 PRLDNVS0 must be separately ordered
9	Thermo On / Off range Setting (Cooling)	User can set cooling thermo On / Off range with wired remote controller for prevention overcooling	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 Steps)	0	-	* Thermo On / Off temperature setting (4 step)
11	Static Pressure 11 Step Control (Only for Ceiling Concealed Duct Type)	Depends on the installation environment, 4th generation Ceiling Concealed Duct can control the static pressure by 11 steps for providing comfortable environment	0	-	* Only applied in Ceiling Concealed Duct
12	1 point External Input (On / Off control)	Indoor unit can control external devices without purchasing Dry contact as an accessory (All 4th generation indoors)	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 5
16	Comfort Cooling setting	set the outdoor unit Comfort cooling operation value	0	0	* Available only with MULTI V 5
17	Smart Load Control setting	Change the outdoor unit's Smart Load Control stage value.	0	0	* Available only with MULTI V 5
18	ODU Refrigerant Noise Reduction setting	set the outdoor unit's refrigerant noise reduction function	0	0	* Available only with MULTI V 5
19	Low noise mode time setting	set the start and end time of the outdoor unit's low noise mode operation	0	0	* Available only with MULTI V 5

Note: 1. No.1, 2, 3, 8: Functions are available to use together with 4th generation Indoor units only. If used together 2nd generation indoor unit and 4th generation indoor unit functions will not be activate. Combined with MULTI V WATER S outdoor unit this function is not available

2. No. 4, 5, 6, 7, 9, 10, 11, 12, 13, 14: If used together 2nd generation indoor unit and 4th generation indoor unit these functions will be activate only in 4th generation indoor

3. 2nd generation indoor unit: Ceiling & Floor Convertible Unit, Ceiling Suspended Unit, HYDRO KIT (Low Temp. / High Temp.), ERV DX (with Humidifier, without Humidifier),
AHU Communication Kit

## **FEATURE FUNCTIONS**

Premium	Standard III	ed Remote Contr Standard II		ıple	Centralized Controller				
(PREMTA000 PREMTA000A PREMTA000B)	(PREMTB100) (PREMTBB10)	(PREMTBB01)	Simple for Hotel (PQRCHCAOQ/QW)	Simple (PQRCVCLOQ/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	-	-	-	-	-	-	-
○ (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	-

 $\divideontimes$  O : Applied, - : Not applied

# **COMPATIBILITY**

				Premium	Stand	lard III	Stan	dard ll	Sim	ple	Simple f	or Hotel	Wireless		Dry Co	ontact	
		Contro	oller	261 (200)													
	Produ	ıct		PREMTA000 PREMTA000A PREMTA000B	PREMTBB10	PREMTB100	PREMTBB01	PREMTB001	PQRCVCLOQ	PQRCVC0QW	PQRCHCA0Q	PQRCHCA0QW	PWLSSB21H (H/P) PWLSSB21C (C/O)	Simple Dry Contact PDRYCB000	2 points Dry Contact PDRYCB400	Dry Contact for Thermostat PDRYCB300 NEW PDRYCB320 <sup>2)</sup>	For Modbus PDRYCB500
		Smart Dual Vain Cassette	ARNU24GTBB4 ARNU28GTBB4 ARNU30GTBB4 ARNU36GTBB4 ARNU42GTBB4 ARNU48GTBB4	0	(	)	(	0	(	)	(	)	0	0	0	0	0
	Ceiling Mounted	Round Cassette	ARNU24GTYA4 ARNU36GTYA4 ARNU48GTYA4	0	(	O		0	(	)	(	O	0	0	0	0	0
	Cassette	4 Way	ARNU-A4 ARNU-C4 ARNU-D4	0		)	(	0	(	)	(	)	0	0	0	0	0
		2 Way / 1 Way	ARNU-C4	0	C	)	(	0	(	)	(	)	0	0	0	0	0
		High Sensible	ARNU-A4	0	C	)	(	0	C	)	(	0	Δ	0	0	0	0
	Ceiling Concealed Duct	High / Mid Statics	ARNU-A4	0	C	)	(	0	(	)	(	0	Δ	0	0	0	0
		Low Statics	ARNU-G4	0	C	)	(	0	(	)	(	0	Δ	0	0	0	0
	FAU (Fresh Air intake Unit)		ARNU-Z4	0	C	)	(	0	(	)	(	)	Δ	0	0	0	0
MULTIV	Convertible & Ceiling Suspended Unit		ARNU-A4	0	C	)	(	0	(	)	(	)	0	0	0	0	0
INM	Console		ARNU-A4	0	C	)	(	0	(	)	(	)	0	0	0	0	0
	Floor Standing Unit		ARNU-A4 ARNU-U4	0	C	)	(	0	(	)	(	0	0	0	0	0	0
			ARNU-A4	0	C	)	(	0	(	)	(	)	0	0	0	0	0
	Wall Mounted Unit		ARNU-R4	0	C	)	(	0	(	)	(	)	0	0	0	0	0
			ARNU-A4 ARNU-C4 ARNU-N4	0	C	)	(	0	(	)	(	)	0	0	0	0	0
	HYDRO KIT <sup>1)</sup>	ARNH-A4	•10	-	-	-		-		-		-	-	0	-	0	-
	Ventiletie	veridiator	Da II	0	C	)	(	0		-		-	-	0	-	-	0
	Ventilation	Energy Recovery Ventilator with DX coil		0	C	)	(	0		-		-	-	0	-	-	0
	AHU Comm	unication Kit	•10 •10	0	C	)	(	0		-		-	Δ	-	-	-	-

<sup>%</sup> O: Compatible,  $\triangle$ : Need wired remote controller / IR receiver, - : Not compatible 1) It has a separate remote controller 2) Available from April 2020

# **FEATURE FUNCTIONS**

C	N.		Wire	ed Remote Contr	oller		Wireless	Mr. F. C
Controlle	r Name	Premium	Standard III	Standard II	Simple	Simple (Hotel)	Remote Controller	Wi-Fi Controller
Model Na	me	255 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	)	300 000 000 000 000 000 000 000 000 000				● LG
		PREMTA000 PREMTA000A PREMTA000B	PREMTB100 PREMTBB10	PREMTB001 PREMTBB01	PQRCVCL0Q PQRCVCL0QW	PQRCHCA0Q PQRCHCA0QW	NEW PWLSSB21H (H/P) PWLSSB21C (C/O)	PWFMDD200
	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	
Basic	Vane Control (Louver Angle)	0	0	0	0	0	0	0
	E.S.P (External Static Pressure)	0	0	0	0	0	-	-
	Electric Failure Compensation	0	0	0	0	0	-	0
	Indoor Temperature Display	0	0	0	0	0	0	
	ALL Button Lock (Child Lock)	0	0	0	0	0	-	-
	Schedule / Timer	Weekly~Yearly	Weekly~Yearly	Weekly	-	-	Sleep / On / Off	Weekly
	Additional Mode Setting 1)	0	0	0	-	-	-	-
	Time Display	0	0	0	-	-	0	-
	Humid. Display	0	0	-	-	-	-	-
	Advanced Lock (mode, set point, set point range, On / Off Lock)	Advanced Lock	Advanced Lock	-	-	-	-	-
Advanced	Filter Sign	0	0	0	-	-	-	-
	Energy Management 2)	0	0	0	-	-	-	-
	Dual Set Point	0	0	-	-	-	-	-
	Human Detection	-	0	-	-	-	-	-
	Temp, Humidity Compensation	0	0	-	-	-	-	-
	Wifi AP mode setting	0	0	0	0	0	0	-
	Operation Status LED	0	0	0	0	0	-	-
	Wireless Remote Controller Receiver	O <sub>3)</sub>	-	○3)	O <sub>3)</sub>	○3)	-	-
ETC	Display	5 inch Color	4.3 inch Color	4.3 inch Mono	2.6 inch Mono	2.6 inch Mono	2 inch Mono	-
	Size (W x H x D, mm)	137 x 121 x 16.5	120 x 120 x 16	120 x 120 x 16	64 x 120 x 15	64 x 120 x 15	51 x 153 x 26	-
	Black Light Control for Screen Saver	0	0	-	-	-	-	-

C: Applied, -: Not Applied
 I) It might not be indicated or operated at the partial product
 Centralized control (PACEZA000 / PACS5A000 / PACP5A000 / PLNWKB000) and PDI (PQNUD1S40 / PPWRDB000) should be installed for this function
 For ceiling type duct
 Note: 1. Indoor unit should have functions requested by the controller
 If you need more detail, please refer to the manual of product. (http://partner.lge.com: Home> Doc.Library> Manual)

# HOT WATER SOLUTIONS



# **DT WATER SOLUTIC**

# **HYDRO KIT**

#### **HYDRO KIT Features**

#### Features & Benefits

- Lower operation cost 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, infloor or radiant heat. Where cold water is needed such as fan coil unit and chilled beam.



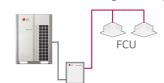




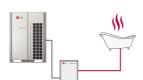
Radiant Heating / Cooling

Radiator

Floor heating



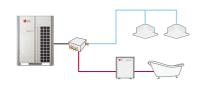
Fan Coil Unit Heating / Cooling











Combination

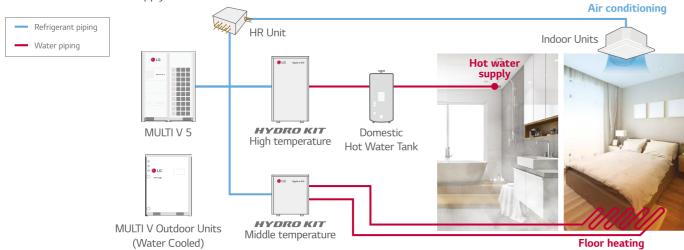
HR unit (Cooling & Hot water)



Thermal Storage System

# **System Diagram**

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



# **Eco-friendly Green Energy Solution**

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





CO<sub>2</sub> Emissions

(%)
120
100%
100
60
40
20
Oil Boiler Gas Boiler HYDRO KIT

Conventional System

HYDRO KIT

# Saving Cost through High Efficiency

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

#### 1st Proposal MULTI V 5 HYDRO KIT

(Air Conditioning + Hot Water Supply + Floor Heating)

## $2^{nd}$ Proposal MULTI V 5 Air-Conditioning + Gas Boiler

(Hot Water Supply + Floor Heating)

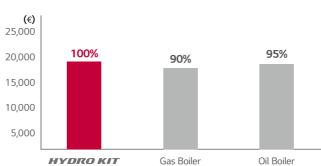
#### 3rd Proposal MULTI V 5 Air-Conditioning + Oil Boiler

(Hot Water Supply + Floor Heating)

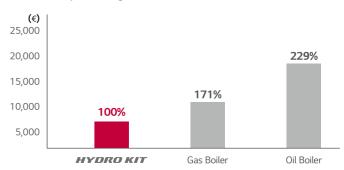
#### **Analysis Conditions**

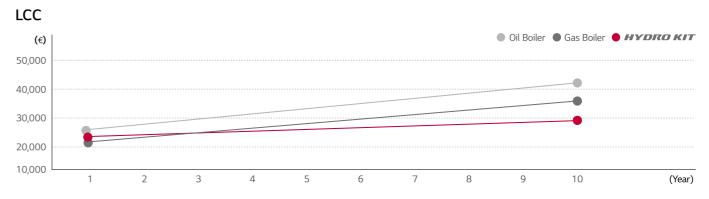
- Building Type : Dormitory, Flats
- Cooling / Floor Heating / Sanitary Hot Water for 10 years
- Cooling : MULTI V IV Indoor Unit
- Floor Heating : Medium Temp. HYDRO KIT (1ea)
- Sanitary Hot Water : High Temp. HYDRO KIT (2ea), Sanitary Hot Water Tanks
- Electricity Cost : Average Cost in EU
- Gas Cost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

#### **Initial Costs**



#### **Annual Operating Costs**





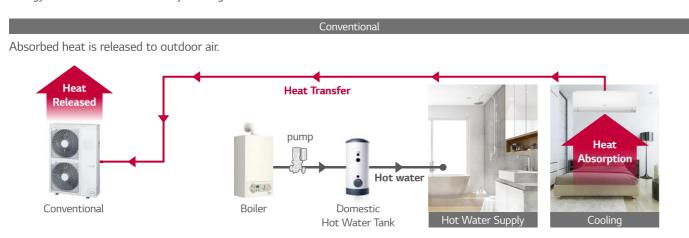
HOT WATER SOLUTION FEATURE

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# **HYDRO KIT**

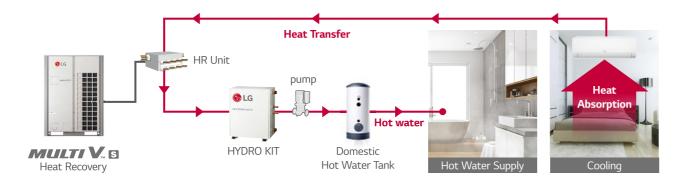
# **Energy Saving through MULTI V 5 Heat Recovery**

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



#### HYDRO KIT

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



# **High Temperature Concept of HYDRO KIT**

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

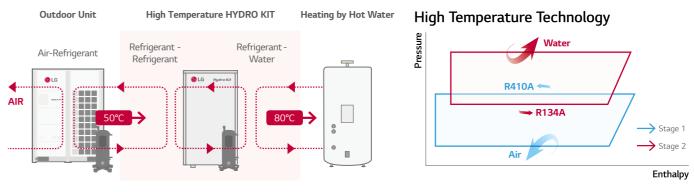
#### **Dual Inverter Cascade Cycle Technology**

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

#### High Volume of Hot Water

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

# High Temperature HYDRO KIT Cycle Diagram



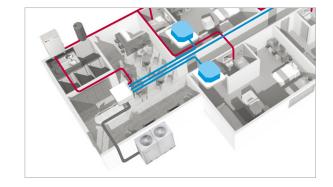
# **Various Applications**

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



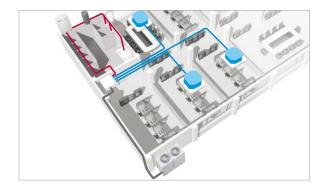
# **Hotel Application**

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



# **Office Application**

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



# **HYDRO KIT**

ARNH04GK2A4 / ARNH10GK2A4



Model		Unit	ARNH04GK2A4	ARNH10GK2A4	
Cooling Capac	ity	kW	12.3	28.0	
Heating Capac	Heating Capacity kW		13.8	31.5	
Power Input	Nominal	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	
$(W \times H \times D)$	Shipping	mm	677 x 687 x 418	677 x 687 x 418	
	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 Pressur	re Levels (H / M / L)	dB(A)	26	26	
D C h	B 6 1		1, 220 ~ 240, 50	1, 220 ~ 240, 50	
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60	
Communicatio	n Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	

- % 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 5 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.

#### Accessories

Chassis	ARNH04GK2A4	ARNH10GK2A4				
Drain Pump		-				
Cassette Cover						
Refrigerant Leakage Detector	PR	LDNVS0				
EEV Kit		-				
Independent Power Module		0				
Robot Cleaner		-				
Pre Filter (Washable / Anti-fungus)						
Ion Generator						
CO <sub>2</sub> Sensor						
Ventilation Kit						
IR Receiver		-				
Zone Controller		-				
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact) PDRYCB300(8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) 1)					
External Input (1 point)	0					
Wi-Fi	PWFMDD200					

O: Applied, -: Not applied
 Option: Refer to model name in table
 Available from April 2020

ARNH04GK3A4/ ARNH08GK3A4



Model Unit		Unit	ARNH04GK3A4	ARNH08GK3A4
Heating Capac	ity	kW	13.8	25.2
Power Input	Power Input Nominal W		2,300	5,000
Exterior Color			Morning Gray	Morning Gray
RAL Code			RAL 7030	RAL 7030
Dimensions (W x H x D)	Body	mm	520 x 1,080 x 330	520 x 1,080 x 330
	Shipping	mm	682 x 1,168 x 423	682 x 1,168 x 423
	Liquid Side	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)
Pipe Connections	Gas Side	mm (inch)	Ø15.88 (5/8)	Ø19.05 (3/4)
COMPCCIONS	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	87.0	91.0
Sound Pressur	re Levels (H / M / L)	dB(A)	43	46
D C		Ø V II-	1, 220 ~ 240, 50	1, 220 ~ 240, 50
Power Supply		Ø, V, Hz	1, 220, 60	1, 220, 60
Communication	n Cable	mm² x No.	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C

※ Nominal : Performance tested under EN14511

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

   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.

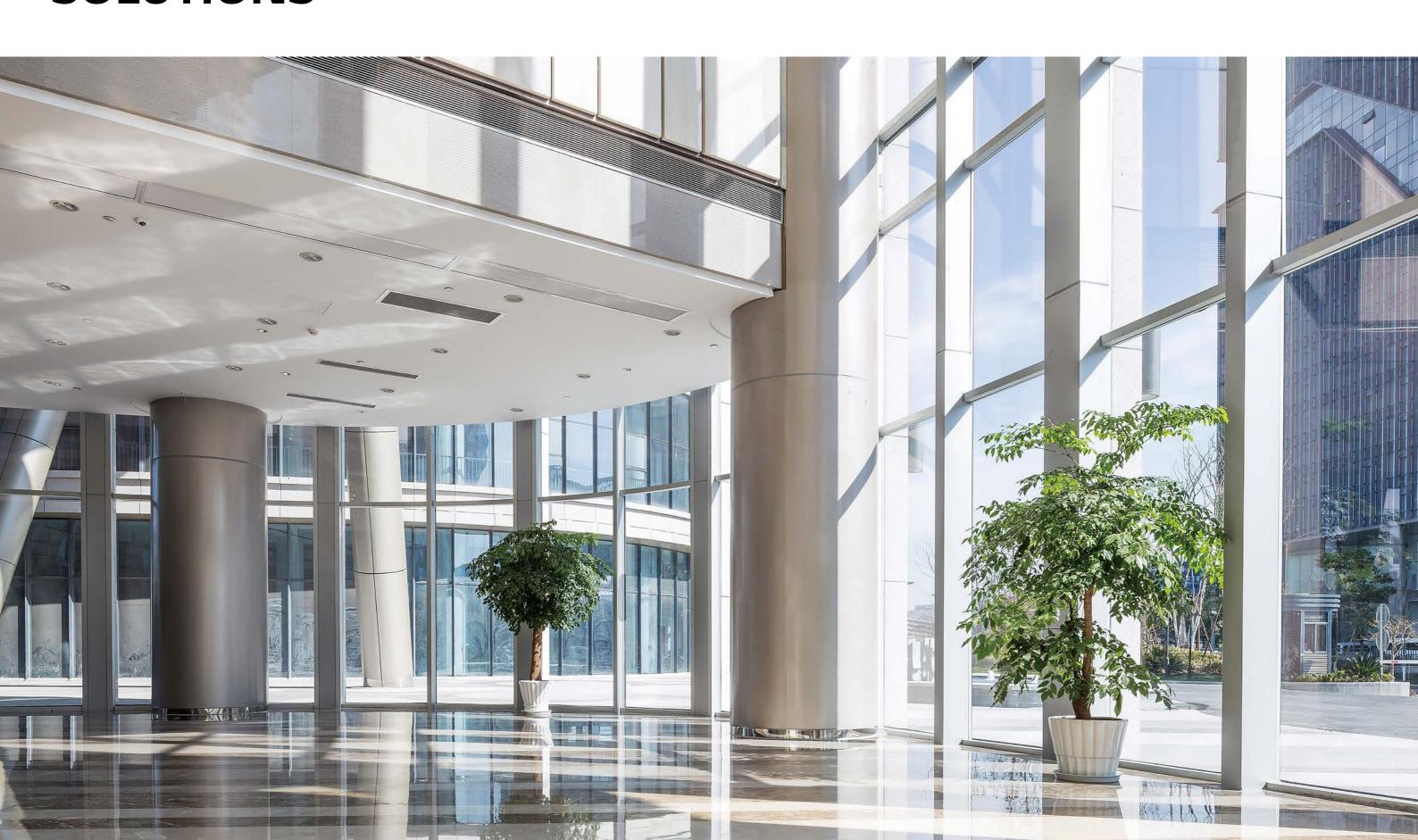
#### **Accessories**

Chassis	ARNH04GK3A4	ARNH08GK3A4				
Drain Pump		-				
Cassette Cover						
Refrigerant Leakage Detector	PRLD	NVS0				
EEV Kit		-				
Independent Power Module		0				
Robot Cleaner		-				
Pre Filter (Washable / Anti-fungus)		-				
Ion Generator	-					
CO <sub>2</sub> Sensor						
Ventilation Kit						
IR Receiver		-				
Zone Controller		-				
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact) PDRYCB300(8 points for thermostat compatible)  NEW PDRYCB320 (Universal input) 1)					
External Input (1 point)	0					
Wi-Fi	PWFMDD200					

O: Applied, -: Not applied
 Option: Refer to model name in table
 Available from April 2020

# VENTILATION SOLUTIONS

- ERV
- ERV WITH DX COIL

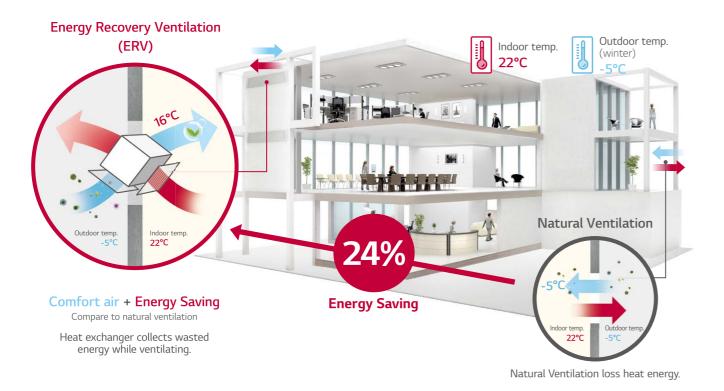


VENTILATION SOLUTIONS FEATURE

# **ERV**

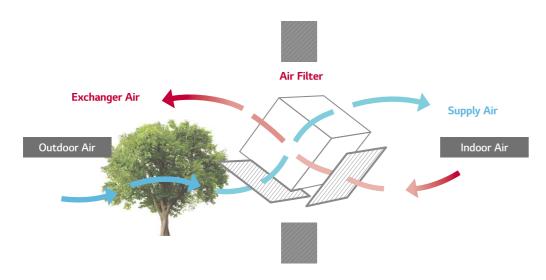
# **Necessity of ERV**

Natural ventilation loss cooling, heating energy when exhausting polluted air inside. Heat exchanger in ERV collects the cooling, heating energy to save energy while supplying fresh air.



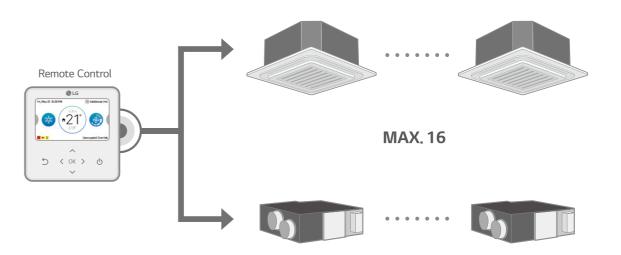
# **High Efficiency Heat Exchanger**

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



# **Interlocking with Air Conditioning System**

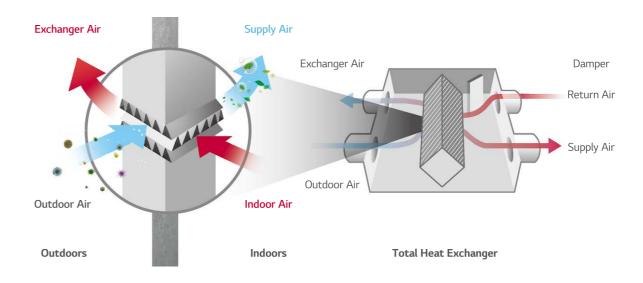
- LG ERV can be interlocked with air conditioners and controlled individually.
- This function can be operated when the system is connected with a remote control.



# **Compulsory Exhausting System**

The exhausting system using high static and sirocco fan removes contaminants effectively from indoor air.

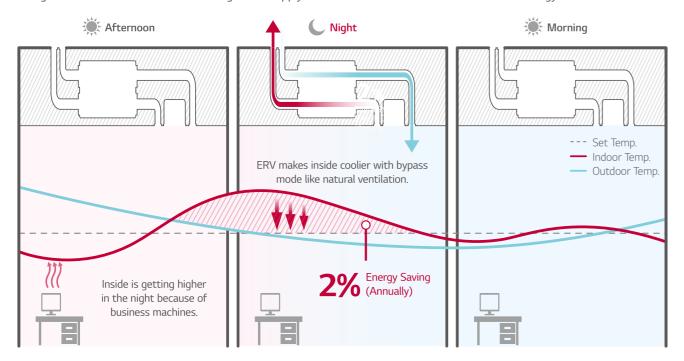
Supply and exhaust air flows are completely separated in the total heat exchanger, LG ERV can filter out the impurities before supplying outdoor air and make indoor air fresh and healthy.



# **ERV**

# **Night Time Free Cooling**

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

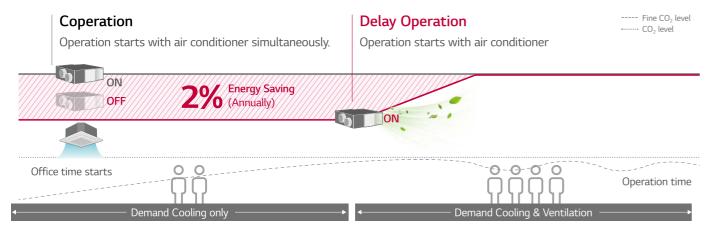


- \*\* This function is operated with 'Night Time Free Cooling' on remote controller. (with MULTI V only)
  \*\* Energy saving ratio can be differed by weather condition.
  \*\* Test Condition

- Office (49,000ft²) / Occupancy : 30 / Area : London, UK ERV (1000 CMH) + MULTI V 4 (12HP) Unit Combination
- Other conditions are subject to BREEAM.

# **Delay Operation**

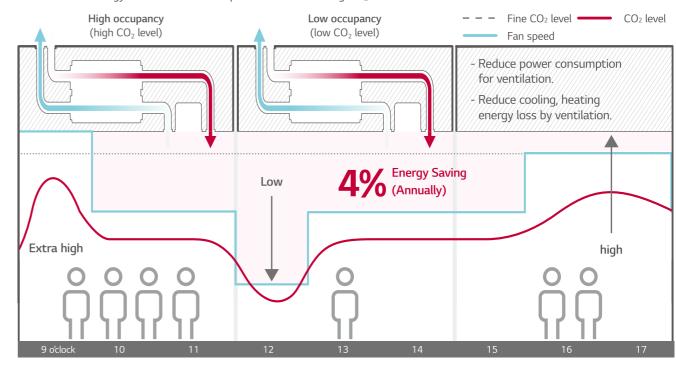
When you turn on the air conditioner and ERV at the same time, Delay Operation can reduce unnecessary heating and cooling energy loss slows down automatically ERV operation.



- \* 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.
- 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> Auto Operation

LG ERV reduces energy loss with auto fan speed control following CO<sub>2</sub> level

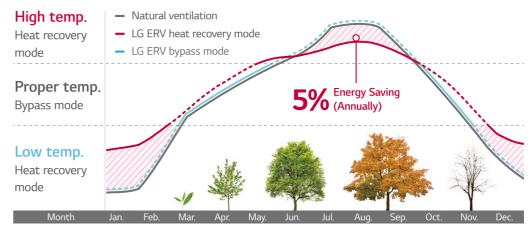


- \* This function is operated with 'Night Time Free Cooling' on remote controller. (with MULTI V only)
- Energy saving ratio can be differed by weather condition.
   Test Condition

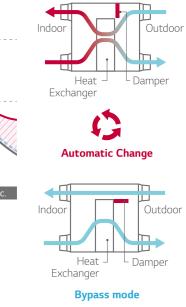
  - Office (49,000ft²) / Occupancy : 30 / Area : London, UK ERV (1000 CMH) + MULTI V 4 (12HP) Unit Combination
  - Other conditions are subject to BREEAM.

# **Seasonal Auto Operation**

LG ERV senses outdoor temperature and operates automatically following weather condition.



- \* This function is operated with 'Auto' mode by wired remote control.
- \* Energy saving ratio can be differed by weather condition.
- Office (49,000ft<sup>2</sup>) / Occupancy : 30 / Area : London, UK - ERV (1,000 CMH) + MULTI V 4 (12HP) Unit Combination
- Other conditions are subject to BREEAM.



**Heat Recovery Mode** 

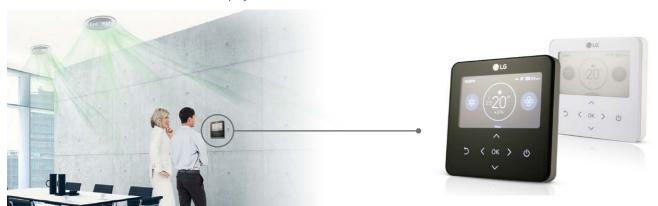
# **ERV**

# CO<sub>2</sub> Level Monitoring

CO<sub>2</sub> sensor senses CO<sub>2</sub> level in the room. Users can monitor CO<sub>2</sub> 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 new wired remote controller.



#### Main Display

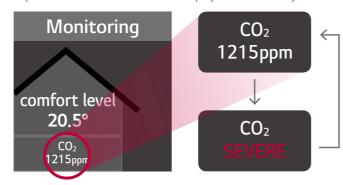
If the CO<sub>2</sub> level is above 900ppm in the room, the red mark is on.



% The remote controller screen image may change.

#### **Further Information**

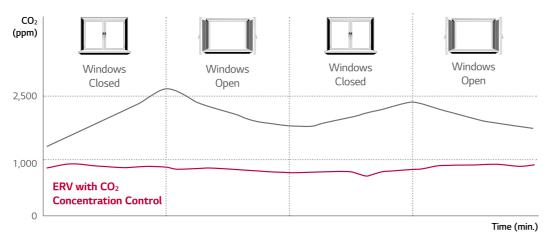
CO<sub>2</sub> level and room condition are displayed continuously.



## CO<sub>2</sub> Concentration Control

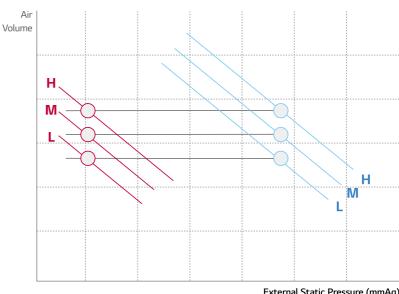
Using CO<sub>2</sub> sensor, LG ERV controls exhaust air flow automatically to keep indoor air fresh under settled CO<sub>2</sub> concentration.





#### **External Static Pressure Control**

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



External Static Pressure (mmAq)

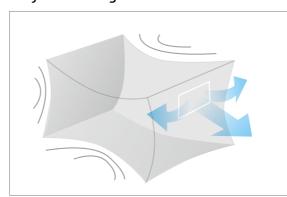
#### **Fast Ventilation Mode**

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

> Exhausting and Supplying

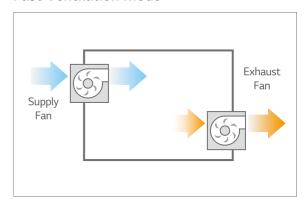
Simultaneously

#### Only Exhausting



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

#### Fast Ventilation Mode

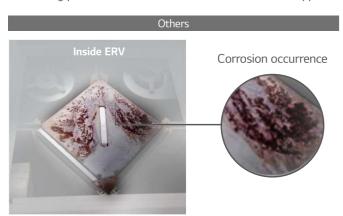


# **NTILATION SOLUTION**

# **ERV**

# **High Durability**

LG ERV durability is increased through bacteria-resistant material of heat exchanger and corrosion protection coating. It prevents shortening product life due to corrosion and mold and supplies high quality air to inside by minimizing the bacteria.





Corrosion
protection coating
+ Finish insulator

Heat exchanger and filter





Visible

• Indoor CO2 level

time to change filters

• Alarm for filter change / Remained

# **Easy Controller**

Wired remote controller is easy for usage.



#### Easy

- Navigation buttons, easy to use
- Easy installation setting



#### Convenient

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

# **Group Control**

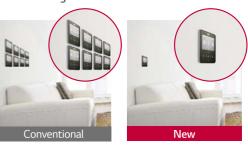
One wired remote control up to sixteen ERV (Including air conditioning) you can reduce the remote installation costs and enjoy good looking interior wall effect.

#### Several units combination

16 units group control is available with 1 remote controller.



Good looking interior



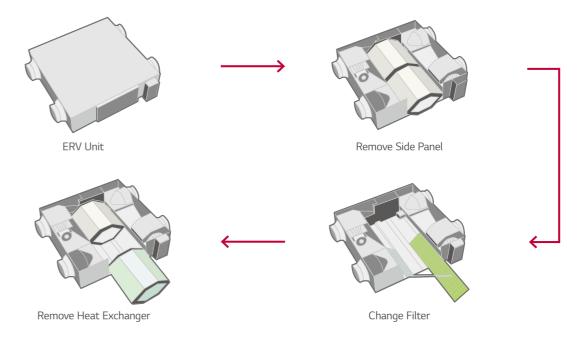
Controller & installation cost saving



\* 16 units (Including ERV, air conditioner) + 1 remote controller

# Easy Cleaning and Filter Change

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



# **ERV**

LZ-H025GBA4 / LZ-H035GBA4 / LZ-H050GBA4



Model	Model			LZ-H025GBA4	LZ-H035GBA4	LZ-H050GBA4
Nominal Capa	city		CMH (CFM)	250 (147)	350 (206)	500 (294)
Power Supply			Ø, V, Hz		1, 220 ~ 240, 50 / 60	
	Step		-		SUPER-HIGH / HIGH / LOW	
	Current	Current SH / H / L		0.70 / 0.60 / 0.42	1.10 / 0.95 / 0.60	1.92 / 1.58 / 0.79
	Power Input	SH/H/L	W	97 / 78 / 52	180 / 163 / 88	240 / 220 / 90
	Air Flow	SH/H/L	CMH (CFM)	250 / 250 / 150 (147 / 147 / 88)	350 / 350 / 210 (206 / 206 / 123)	500 / 500 / 320 (294 / 294 / 124)
ERV Mode	External Static Pressure	SH/H/L	Pa (inWTR)	100 / 70 / 50 (0.40 / 0.28 / 0.20)	150 / 130 / 100 (0.60 / 0.52 / 0.40)	150 / 100 / 50 (0.60 / 0.40 / 0.20)
	Temperature Exchange Efficiency	SH/H/L	%	80 / 80 / 83	75 / 75 / 77	78 / 78 / 79
	Enthalpy Exchange	Heating (SH / H / L	) %	70 / 70 / 72	68 / 68 / 70	73 / 73 / 75
	Efficiency	Cooling (SH / H / L)	) %	66 / 66 / 68	63 / 63 / 65	66 / 66 / 69
	Noise Level (Sound Level, 1.5m)	SH/H/L	dB(A)	29 / 28 / 24	32 / 30 / 27	34 / 32 / 25
	Step		-		SUPER-HIGH / HIGH / LOW	
	Current	SH/H/L	Amps	0.70 / 0.60 / 0.42	1.10 / 0.95 / 0.60	1.92 / 1.58 / 0.79
	Power Input SH / H / L		W	97 / 78 / 52	180 / 163 / 88	240 / 220 / 90
Bypass Mode	Air Flow	SH/H/L	CMH (CFM)	250 / 250 / 150 (147 / 147 / 88)	350 / 350 / 210 (206 / 206 / 123)	500 / 500 / 320 (294 / 294 / 124)
	External Static Pressure	SH / H / L	Pa (inWTR)	100 / 70 / 50 (0.40 / 0.28 / 0.20)	150 / 130 / 100 (0.60 / 0.52 / 0.40)	150 / 100 / 50 (0.60 / 0.40 / 0.20)
	Noise Level (Sound Level, 1.5m)	SH/H/L	dB(A)	29 / 29 / 25	32 / 30 / 27	35 / 33 / 25
Heat Exchange	er	Туре	-	Air to air cross flow heat exchange		
Net Weight			kg	44	44	44
Dimension		$W \times H \times D$	mm	988 x 273 x 1,014	988 x 273 x 1,014	988 x 273 x 1,014
Duct Work*		Qty	EA		4	
Duct Work		Size (Ø)	mm		Ø200	
Supply Air Fan		Qty	EA		1	
Зиррку Ан Тан		Туре	-		Direct-Drive (Sirocco Fan)	
Exhaust Air Fa	nn	Qty	EA		1	
Extraust All 18	111	Туре	-		Direct-Drive (Sirocco Fan)	
		Qty	EA		2	2
Filters (Defaul	Filters (Default)		-		Cleanable fibrous fleeces	
		Size (W x H x D)	mm	855 x	10 x 160	855 x 6 x 230
		Model	-	AHFT	035H0	AHFT050H0
Filtors (Ontion	Filters (Optional)  Qty  Type  Size (W x H		EA		2	2
Titlers (Option			-		F7	F7
			mm	423.5 x	425 x 194 x 25	
Dry Contact					PDRYCB000	

Note: 1. ERV mode: Total Heat Recovery Ventilation mode

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

Premium	Premium Standard III		Stand	CO <sub>2</sub> Sensor	
255) ***********************************	9 ( ) ( )	• 20 • ·			•
PREMTA000 PREMTA000A PREMTA000B	PREMTB100	PREMTBB10	PREMTBB01	PREMTB001	AHCS100H0 (Internal Type)

LZ-H080GBA4 / LZ-H100GBA4 LZ-H150GBA4 / LZ-H200GBA4





Model				LZ-H080GBA4	LZ-H100GBA4	LZ-H150GBA4	LZ-H200GBA4		
Nominal Capac	city		CMH (CFM)	800 (471)	1,000 (589)	1,500 (883)	2,000 (1,177)		
Power Supply			Ø, V, Hz	1, 220 ~ 240, 50 / 60					
	Step		-	SUPER-HIGH / HIGH / LOW					
	Current	SH/H/L	Amps	2.77 / 2.16 / 1.44	3.41 / 2.90 / 1.76	5.60 / 5.40 / 2.90	6.80 / 5.90 / 3.60		
ERV Mode	Power Input	SH/H/L	W	390 / 280 / 187	480 / 385 / 210	780 / 540 / 377	960 / 770 / 420		
	Air Flow	SH/H/L	CMH (CFM)	800 / 800 / 660 (471 / 471 / 388)	1,000 / 1,000 / 800 (589 / 589 / 471)	1,500 / 1,500 / 1,200 (883 / 883 / 706)	2,000 / 2,000 / 1,600 (1,177 / 1,177 / 942)		
	External Static Pressure	SH/H/L	Pa (inWTR)	200 / 110 / 60 (0.80 / 0.44 / 0.24)	160 / 90 / 50 (0.64 / 0.36 / 0.20)	200 / 110 / 60 (0.80 / 0.44 / 0.24)	160 / 90 / 50 (0.64 / 0.36 / 0.20)		
	Temperature Exchange Efficiency	SH/H/L	%	79 / 79 / 82	77 / 77 / 78	79 / 79 / 82	77 / 77 / 78		
	Enthalpy Exchange	Heating (SH / H / L)	%	72 / 72 / 74	70 / 70 / 72	72 / 72 / 74	70 / 70 / 72		
	Efficiency	Cooling (SH / H / L)	%	63 / 63 / 66	59 / 59 / 63	63 / 63 / 66	59 / 59 / 63		
	Noise Level (Sound Level, 1.5m)	SH/H/L	dB(A)	40 / 37 / 31	41 / 38 / 32	43 / 40 / 34	44 / 41 / 35		
	Step		-		SUPER-HIGH	/ HIGH / LOW			
	Current	SH/H/L	Amps	2.77 / 2.16 / 1.44	3.41 / 2.90 / 1.76	5.60 / 5.40 / 2.90	6.80 / 5.90 / 3.60		
	Power Input	SH / H / L	W	390 / 280 / 187	480 / 385 / 210	780 / 540 / 377	960 / 770 / 420		
Bypass Mode	Air Flow	SH / H / L	CMH (CFM)	800 / 800 / 660 (471 / 471 / 388)	1,000 / 1,000 / 800 (589 / 589 / 471)	1,500 / 1,500 / 1,200 (883 / 883 / 706)	2,000 / 2,000 / 1,600 (1,177 / 1,177 / 942		
	External Static Pressure	SH / H / L	Pa (inWTR)	200 / 110 / 60 (0.80 / 0.44 / 0.24)	160 / 90 / 50 (0.64 / 0.36 / 0.20)	200 / 110 / 60 (0.80 / 0.44 / 0.24)	160 / 90 / 50 (0.64 / 0.36 / 0.20)		
	Noise Level (Sound Level, 1.5m)	SH / H / L	dB(A)	41 / 38 / 32	41 / 39 / 33	44 / 41 / 35	44 / 42 / 36		
Heat Exchange	er	Туре	-	Air to air cross flow heat exchange					
Net Weight			kg	6	2	14	40		
Dimension		WxHxD	mm	1,062 x 36	65 x 1,140	1,313 x 738 x 1,140			
Duct Work*		Qty	EA	4	4	4 + 2			
DUCE VVOIK		Size (Ø)	mm	Ø2	250	Ø250 -	+ Ø350		
Supply Air Fan		Qty	EA		1		2		
Supply All Fall		Туре	-		Direct-Drive	(Sirocco Fan)			
Exhaust Air Fa	n	Qty	EA		1		2		
EXIIduSt All Fd	11	Туре	-		Direct-Drive	(Sirocco Fan)			
		Qty	EA		2		4		
Filters (Default)		Туре	-		Cleanable fil	orous fleeces			
		Size (W x H x D)	mm		1,056 x	6 x 212.5			
		Model	-	AHFT100H0					
F:lb (O-4)	-1)	Qty	EA		2	4	4		
Filters (Option	ai)	Туре	-		F	7			
		Size (W x H x D)	mm	520 x 192 x 25					
Dry Contact				PDRYCB000					

- Note: 1. ERV mode: Total Heat Recovery Ventilation mode

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

- 6. Temperature Exchange efficiency is tested at heating condition.
  7. F7 Filter is 2 pieces in 1 filter package.

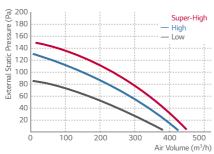
Premium	Standard III		Stand	CO <sub>2</sub> Sensor	
251) === 0 6	DDEMID100	DEFMICE 10	es Company	PREMITOO 1	• III
PREMIA000 PREMTA000A PREMTA000B	PREMTB100	PREMTBB10	PREMTBB01	PREMTB001	AHCS100H0 (Internal Type : Default)

# **ERV**

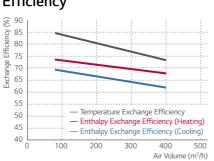
## LZ-H025GBA4



#### Ventilation



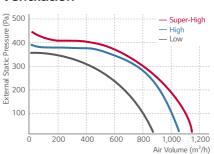
Efficiency



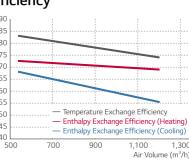
## LZ-H100GBA4



Ventilation



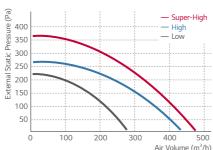
Efficiency



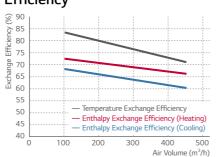
## LZ-H035GBA4



Ventilation



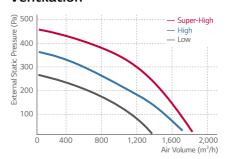
**Efficiency** 



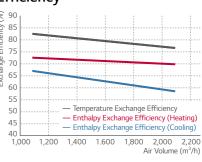
LZ-H150GBA4



Ventilation



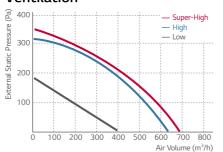
**Efficiency** 



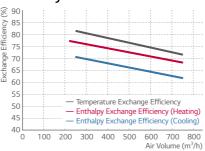
# LZ-H050GBA4



Ventilation



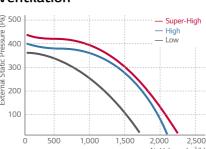
Efficiency

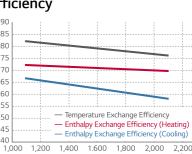


LZ-H200GBA4



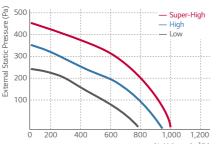
Ventilation

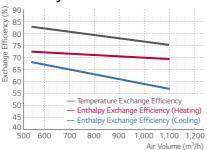


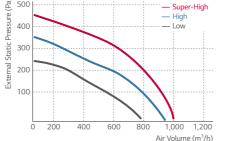




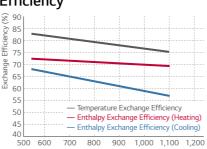
Ventilation







Efficiency

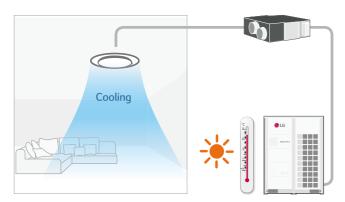


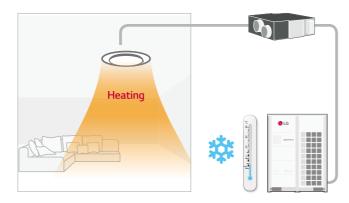
VENTILATION SOLUTIONS FEATURE

# **ERV** WITH DX COIL

## **Providing Cool & Warm Fresh Air**

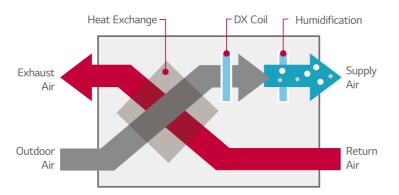
During the summer, ERV DX can transform outdoor warm air into cool air for indoors, and it can prevent cold drafts during the winter by supplying warm air.





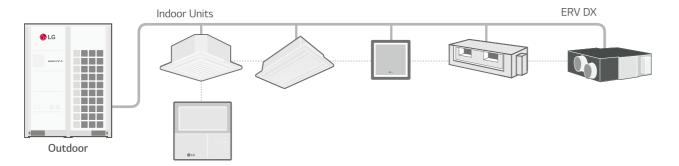
# **Total Air Conditioning Solution**

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



## Interlocking with MULTI V

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



VENTILATION SOLUTIONS SPECIFICATION 240 | 241

# **ERV** WITH DX COIL

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



Model			LZ-H050GXH4	LZ-H080GXH4	LZ-H100GXH4	LZ-H050GXN4	LZ-H080GXN4	LZ-H100GXN4		
Fresh Air	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		
All Flow Rate	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	atural Evaporating Ty	/pe		-			
Humidifier	Amount kg/h		2.70	4.00	5.40		-			
	Pressure Feed Water	Мра		0.02 ~ 0.49		-				
C 1D	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		
Sound Pressure	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					R4	10A				
Power Supply		Ø, V, Hz	1, 220 ~ 240, 50 / 60							
Power Input	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)	А	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)	А	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 syste	em		Air to air cross flow total heat (sensible + latent heat) exchange			Air to air cross flow total heat (sensible + latent heat) exchange				
Heat exchange elem	nent		Specially p	rocessed non-flamn	nable paper	Specially p	rocessed non-flamn	nable paper		
Air Filter			Mult	idirectional fibrous f	leeces	Mult	directional fibrous f	leeces		
Dimensions	WxHxD	mm		1,667 x 365 x 1,140	)		1,667 x 365 x 1,140	)		
Net Weight		kg		105			98			
	Liquid	mm		Ø6.35			Ø6.35			
Dining Connect:	Gas	mm		Ø12.7			Ø12.7			
Piping Connection	Water	mm		Ø6.35			-			
	Drain Pipe (Internal Dia.)	mm (inch)		Ø25 (1)			Ø25 (1)			
Connection Duct Diar	meter	mm	Ø250				Ø250	1,7		

- $Note: 1.\ Cooling\ Capacity\ Test\ condition\ -\ Indoor\ temperature: 27^{\circ}C\ DB, 19^{\circ}C\ WB\ /\ Outdoor\ temperature: 35^{\circ}C\ DB$ 

  - 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

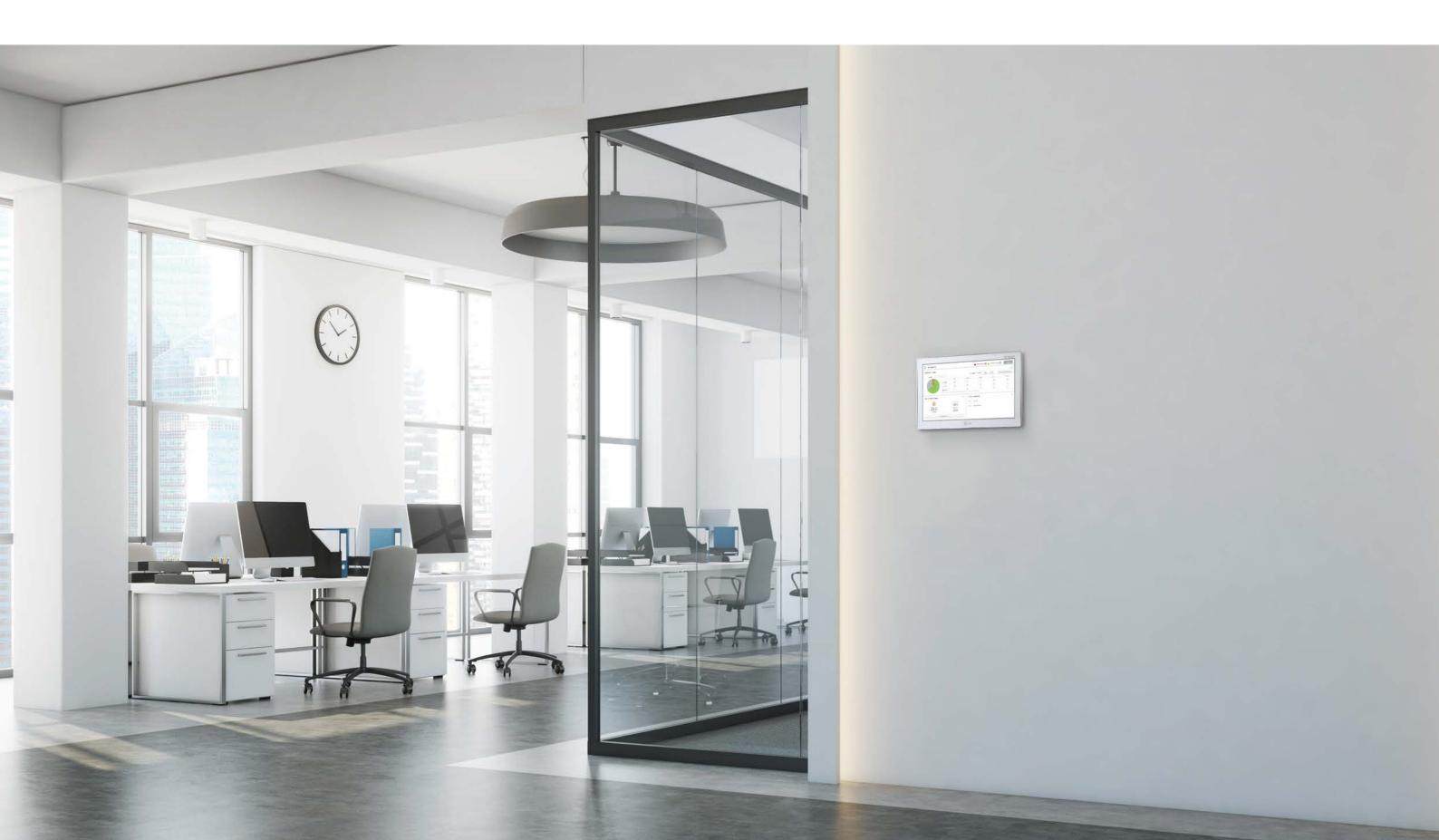
Chassis	LZ-H050GXH4   LZ-H080GXH4   LZ-H100GXH4   LZ-H050GXN4   LZ-H080GXN4   LZ-H100GXN4
Drain Pump	-
Cassette Cover	-
Refrigerant Leakage Detector	PRLDNVS0
EEV Kit	-
Independent Power Module	-
Robot Cleaner	-
Pre Filter (Washable / Anti-fungus)	-
Ion Generator	-
CO <sub>2</sub> Sensor	AHCS100H0
Ventilation Kit	-
IR Receiver	-
Zone Controller	·
Dry Contact (with Additional Accessory)	PDRYCB000 (1 point contact) PDRYCB500 (Modbus)
External Input (1 point)	0
Wi-Fi	-

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

#### • INDIVIDUAL CONTROL

#### • CENTRALIZED CONTROL





# **LG HVAC CONTROL LINE-UP**

	INDIVIDUAL CONTROL			CENTRALIZED CONTROL	
Wired Remo	te Controller Simple	Wireless Remote Controller	Display	Platform	Gateway
Standard III (White)			AC Ez	ACP 5	ACP LonWorks
276 €			0 ( 9 ) ( 9	•10 Final Control	•• ••
PREMTB100	PQRCVCLOQW	NEW PWLSSB21H (H/P) NEW PWLSSB21C (C/O)	PQCSZ250S0 (Indoor Unit -32)	PACP5A000 (Indoor Unit ~256) BACnet IP/Modbus TCP Gateway	PLNWKB000 (Indoor Unit ~64)
Standard III (Black)  270  PREMTBB10	PQRCVCLOQ	Wi-Fi Controller  LG Wi-Fi Modem  To Indoor Unit PWFMDD200	AC Ez Touch  PACEZA000 (Indoor Unit ~64)	PACM5A000 (Indoor Unit -8,192)	Modbus RTU Gateway  Y 原 中 中  O G  PMBUSBOOA
Standard II (White)	PQRCHCA0QW (Simple for Hotel)		PACS5A000 (Indoor Unit -128) BACnet IP/Modbus TCP Gateway		PI-485  For Indoor Unit (ERV) PHNFP14A0
Standard II (Black)  PREMTBB01	PQRCHCAOQ (Simple for Hotel)		, er outering		
Premium  258   Premium  PREMTA000  PREMTA000A  PREMTA000B					

CENTRALIZED CONTROL		INTEGRATI	ON DEVICE	
Facility Integrator	Indoor Dry Contact	Units Control Accessory	- Outdoor Units	AHU Kit
PDI (Power Distribution Indicator)		Group Control Wire	IO Module (Input / Output Module)	Communication Kit
•• <u> </u>				<b>●</b> LG
Premium (8 port) PQNUD1S40 Standard (2 port) PPWRDB000	Simple Dry Contact PDRYCB000	PZCWRCG3	For MULTI V 5 PVDSMN000	Return / Room Air control PAHCMR000
ACS IO Module (Input / Output Module)		Remote Temperature Sensor	Variable Water Flow Control kit	
5000 0000 EB		<b>•</b> 16		•LG
PEXPMB000	Dry Contact for Thermostat PDRYCB300	PQRSTA0	For MULTI V WATER IV PWFCKN000	Discharge / Supply Air contro PAHCMS000
Chiller Option Kit		Low Profile Remote Temperature Button Sensor	Low Ambient Kit	Controller Module
		0		
PCHLLN000	Dry contact for Thermostat (For using universal input)	ZRTBS01	For MULTI V IV, 5 PRVC2	Main Module  NEW PAHCMM000
ACU IO Module	T B KI CB320	Zone Controller	Cool / Heat Selector	
VINDERSE			(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	
UIO PEXPMB300	2 Points Dry Contact (For Setback) PDRYCB400	4 Zones by thermostat ABZCA	PRDSBM	Communication Module  NEW PAHCMC000
			Water Communication Module	Control kit
WIGHT HE	•		File copie se	± 6
UO PEXPMB200	For Modbus PDRYCB500		NEW PAHCMW000	NEW PAHCNM000 (Max. 3 Outdoor Units)
				EEV Kit
WINDLESS				<b>⊕</b> LG
UI PEXPMB100				PRLK048A0 (~ 28 kW) PRLK096A0 (~ 56 kW)
				<b>⊕</b> LG
				NEW PRLK396A0 (~112 kV
				• LG
				NEW PRLK594A0 (~168 kV

# CONTROL SOLUT

# **LG CONTROL SOLUTIONS**

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



# **INDIVIDUAL CONTROL**



# **Feature Functions**

c	N.		Wir	ed Remote Contro	oller		Wireless	MC F. C II
Controlle	r Ivame	Premium	Standard III	Standard II	Simple	Simple(Hotel)	Remote Controller	Wi-Fi Controller
Model Na	ıme	258] (25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	• -					€ LG
		PREMTA000 PREMTA000A PREMTA000B	PREMTB100 PREMTBB10	PREMTB001 PREMTBB01	PQRCVCL0Q PQRCVCL0QW	PQRCHCA0Q PQRCHCA0QW	PWLSSB21H (H/P) PWLSSB21C (C/O)	PWFMDD200
	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	
Basic	Vane Control (Louver Angle)	0	0	0	0	0	0	0
	E.S.P (External Static Pressure)	0	0	0	0	0	-	-
	Electric Failure Compensation	0	0	0	0	0	-	0
	Indoor Temperature Display	0	0	0	0	0	0	
	ALL Button Lock (Child Lock)	0	0	0	0	0	-	-
	Schedule / Timer	Weekly~Yearly	Weekly~Yearly	Weekly	-	-	Sleep / On / Off	Weekly
	Additional Mode Setting 1)	0	0	0	-	-	-	-
	Time Display	0	0	0	-	-	0	-
	Humid. Display	0	0	-	-	-	-	-
	Advanced Lock (Mode, Set point, Set point range, On / Off Lock)	Advanced Lock	Advanced Lock	-	-	-	-	-
Advanced	Filter Sign	0	0	0	-	-	-	-
	Energy Management 2)	0	0	0	-	-	-	-
	Dual Set Point	0	0	-	-	-	-	-
	Human Detection	-	0	-	-	-	-	-
	Temp, Humidity Compensation	0	0	-	-	-	-	-
	Wi-Fi AP Mode Setting	0	0	0	0	0	0	-
	Operation Status LED	0	0	0	0	0	-	-
	Wireless Remote Controller Receiver	○3)	-	○3)	○3)	O <sup>3)</sup>	-	-
ETC	Display	5 inch Color	4.3 inch Color	4.3 inch mono	2.6 inch mono	2.6 inch mono	2 inch mono	-
	Size (W x H x D, mm)	137 x 121 x 16.5	120 x 120 x 16	120 x 120 x 16	64 x 120 x 15	64 x 120 x 15	51 x 153 x 26	-
	Black Light Control for Screen Saver	0	0	-	-	-	-	-

 <sup>※ ○:</sup> Applied, -: Not Applied
 1) It might not be indicated or operated at the partial product.
 2) Centralized control (PACEZA000 / PACS5A000 / PACP5A000 / PLNWKB000) and PDI (PQNUD1S40 / PPWRDB000) should be installed for this function.
 3) 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)

# **INDIVIDUAL CONTROL**

#### Standard III Wired Remote Controller

#### Features & Benefit

4.3 inch Color screen with a modern design.





#### PREMTB100 (White)

PREMTBB10 (Black)

- The optimized controller for MULTI V 5
- Humidity sensor embedded
- Comfort cooling setting
- Smart Load Control setting
- Outdoor unit low noise setting
- Defrost mode setting
- New modern design & easy interface
- Seamless design / Touch button
- 4.3 inch color LCD / Intuitive GUI
- Energy saving functions
- Instantaneous power monitor
- Energy consumption check (Power consumption, Operation time)
- Temp. Setback timer, time limit control
- Target setting (ODU capacity, Instantaneous power--etc)
- · Group control
- Up to 16 Indoor units can be controlled with one remote control
- External device On / Off (1 point)
- Customized interlocking control with indoor unit is possible without dry contact
- 2 set points control
- Increase convenience and comfort
- Auto changeover, Setback (Home leave)

Model Name	PREMTB100 / PREMTBB10
On / Off	0
Fan Speed Control	0
Temperature Setting	0
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
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
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
- 1) It might not be indicated or operated at the partial product.
- 2) This function is available for duct type.
- 3) This function requires PDI (PQNUD1S40 / PPWRDB000) to be installed. Note: 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.





Touch Button













06,19 21:15 06:19 14:08 06:19 14:04

**Energy Contents** 

Error History

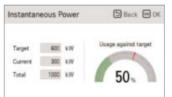
#### **Energy Saving Function**

#### **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.

#### Time Limit Control

- The time-limit operation controls product by amount of time. By setting the device operation time in advance, you can control for how long a device works and have it stop automatically.





Instantaneous Power Check

Energy Usage Target Setting





#### 2 Set Points Control

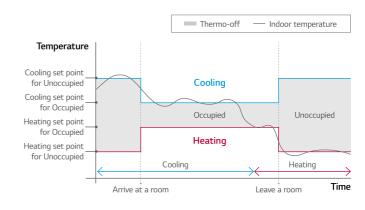
#### Auto Changeover (Convenience)

- The indoor unit automatically manages room temperature with heating and cooling with extended setting temperature ranges. With setting heating and cooling set temp. just one time, comfortable condition will continue at all times.

#### Setback (Home Leave) (Energy saving & Comfort)

- In the absence, room temperature can be kept in the range of 2 set points instead of power off. It provides comfortable indoor environment quickly when the mode is changed to occupied.

\* This function is for Heat Recovery system or Single heat pump. Otherwise it is not guaranteed.



#### External Device On / Off



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



Customized Interlocking Control User can make control scenario. For example when temperature is under 10 degree, turn on the external heater.

#### Schedule Function



Easy Checking Schedule Standard III remote controller provides clock type daily schedule.

Exception Day	⑤ Back ⊙k Ok
+Add exce	ption day
2016,05,21	
2017,05,21	
2018,05,21	
2019,05,21	

**Exception Day settings** Possible to set up exceptional date on regular schedule.

# **INDIVIDUAL CONTROL**

#### **Premium Wired Remote Controller**

#### Features & Benefit

5 inch full touch screen with a premium design.



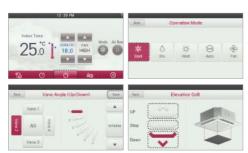
#### PREMTA000<sup>1)</sup> / PREMTA000A<sup>2)</sup> / PREMTA000B<sup>3)</sup>

- 1) English / Portuguese / Spanish / French 3) English / German / Polish / Czech
- Full Touch screen
- The Optimized Controller in MULTI V 5
- Comfort cooling setting
- Smart Load Control setting
- Outdoor unit low noise setting
- Defrost mode setting
- Design with User's Convenience
- Intuitive GUI
- Main display simple mode
- 5 inch color LCD
- Energy Saving Functions
- Instantaneous power monitor
- Energy consumption check (Power consumption, Operation time)
- Temp. Setback Timer, Time Limit Control
- Target setting (ODU Capacity, Instantaneous power---etc)
- Group Control
- Up to 16 Indoor units can be controlled with one remote control
- 2 Set Points Control
- Increase convenience and comfort
- Auto changeover, Setback (Home leave)

Model Name	PREMTA000 / PREMTA000A / PREMTA000B		
On / Off	0		
Fan Speed Control	0		
Temperature Setting	0		
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan		
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 <sup>4)</sup>		
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		

- 1) It might not be indicated or operated at the partial product.
   2) This function is available for duct type.
- 3) This function requires PDI (PQNUD1S40 / PPWRDB000) to be installed.
- 4) For ceiling 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.

# A A Full Touch 25.0° 1 18.0 FAN HIGH



#### Easy Energy Management

- Check the operation hour or electricity usage
- Comparison of usage compared to last year
- Set the target usage and time

#### Easy Scheduling

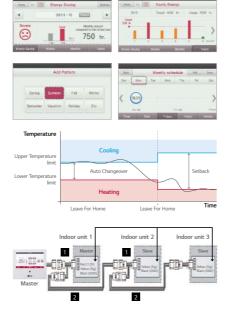
- Daily, Weekly, Yearly schedule function
- Schedule pattern setting
- Schedule copy

#### 2 Set points Control

- Auto changeover switching the operation mode automatically
- Setback (Home Leave) Changing status by occupied / unoccupied
- X This function is only for Heat Recovery system

#### **Group Control**

Max. 16 Indoor units by one remote controller.



#### Standard II Wired Remote Controller

#### Features & Benefit

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





PREMTB001 (White)

PREMTBB01 (Black)

• Wired remote controller that can implement various functions such as schedule, filter sign.

Model Name	PREMTB001 / PREMTBB01		
On / Off	0		
Fan Speed Control	0		
Temperature Setting	0		
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan		
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 <sup>1)</sup>		
Size (W x H x D, mm)	120 x 120 x 16		
Blacklight	0		
Power Consumption Monitoring	O <sup>2)</sup>		
Check Model Information	0		

 $\ensuremath{\,\times\,}$  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.

# Simple Wired Remote Controller

#### Features & Benefit

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







PQRCVCL0QW (White) / PQRCVCL0Q (Black)

PQRCHCA0QW (White) / PQRCHCA0Q (Black)

· Small remote control with minimal functionality.

PQRCVCL0QW / PQRCVCL0Q	PQRCHCA0QW / PQRCHCA0Q		
0	0		
0	0		
0	0		
Cooling / Heating / Auto / Dehumidification / Fan	-		
Auto Swing O			
0	0		
0	0		
0	0		
0	0		
0	0		
O <sup>1)</sup>	O <sup>1)</sup>		
70 x 121 x 16	70 x 121 x 16		
0	0		
	PQRCVCLÓQ  O O O Cooling / Heating / Auto / Dehumidification / Fan O O O O O O O O O O O O O O O O O O O		

1) For ceiling type ducted unit.

Note: Indoor unit needs to have functions requested by the controller.

#### Wireless Remote Controller

#### Features & Benefit





• Easy to use while moving. • Main functions are available.

PWLSSB21H (H/P) / PWLSSB21C (C/O)
0
O <sup>1)</sup>
0
Cooling / Heating / Auto / Dehumidification / Fan
Plasma Purification / Energy-Saving Cooling / Robot Cleaning / Auto Dry
0
0
Sleep / On / Off
0
0
Max. 7 hours
51.4 x 153 x 26

- ※ : Applied. : Not Applied
- 1) For some products, you can use "slow" fan speed function.

# CONTROL SOLUTIONS

# **INDIVIDUAL CONTROL**

#### LG Wi-Fi Modem

#### Features & Benefit

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

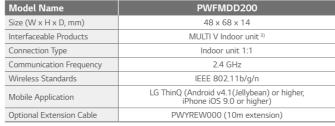


#### PWFMDD200

· Access LG air conditioner anytime and from anywhere with Wi-Fi equipped device.

It is possible to check whether the air conditioner is turned off when the user goes out (energy saving), and can be operated in advance before entering the house (comfort improvement).

- LG's exclusive Home Appliances control app (LG 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 2)
- Filter Management
- Error Check



1) Vane Control may not be possible according to the type of Indoor unit.

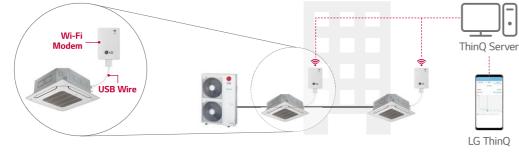
- 2) LG Centralized controller and PDI installation is required for this function. 3) For the compatibility with Indoor unit, please contact regional LG office.
- Note: 1. Functionality may be different according to each IDU model.
  - 2. User interface of application shall be revised for its design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







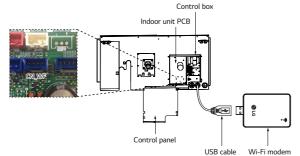
#### Overview



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

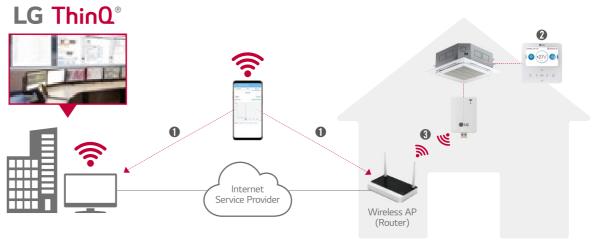
% Internet service with Wi-Fi connection has to be available.

#### Installation Scene



#### \*\* Each indoor unit has a Wi-Fi modem installation location inside the product, and it can be installed by exposure if necessary.

#### Connected Diagram



#### Connection (Pairing) Order

- 1 Make LG account on LG ThinQ and select the Router that will use.
- 2 Insert passwords of selected router and do set AP by LG remote controller.
- 3 Confirm the pairing between Wi-Fi Modem and Router.

#### LG ThinQ

Simple operation for various functions

On / Off, Current Temp.



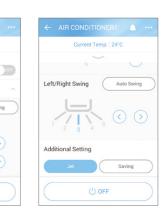




Save

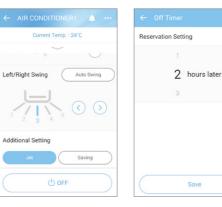


Vane Control



#### Straight forward Management

Reservation







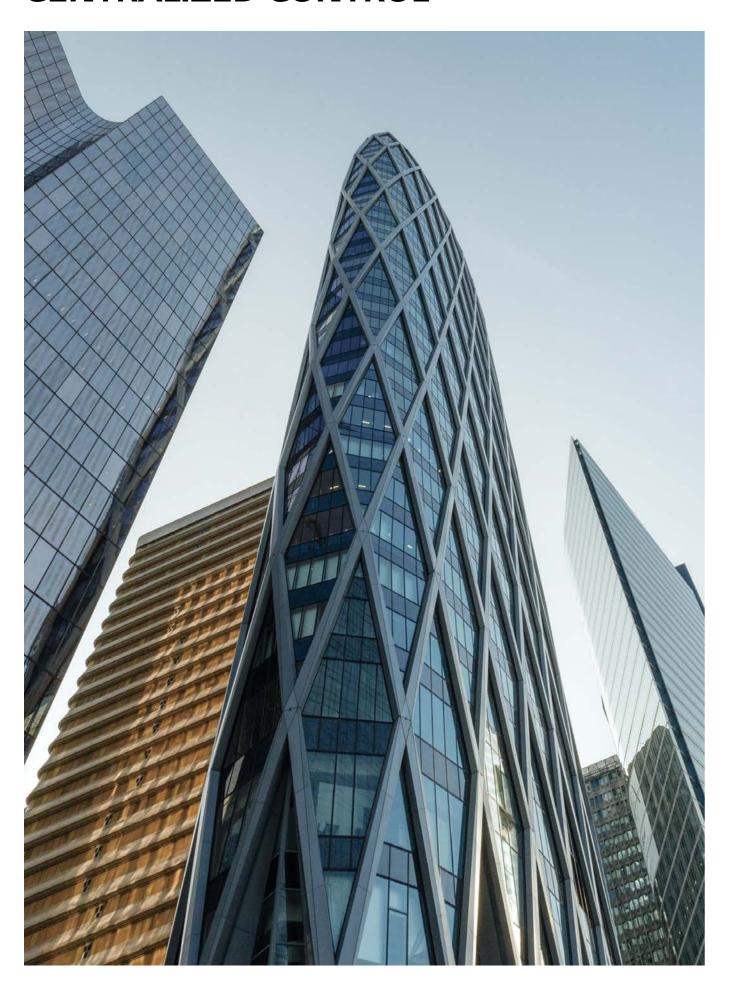
#### Smart Diagnosis



Filter Management



# **CENTRALIZED CONTROL**



## **Centralized Controller Feature List**

Controller Na	ame		AC Ez	AC Ez Touch	AC Smart 5 <sup>5)</sup>	ACP 5 5)	ACP Lonworks	AC Manager 5 3)
Model Name			○ <sub>₹</sub> °, 5	10 to		• 10 September 1991	0. 53	<b>■</b> ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
			PQCSZ250S0	PACEZA000	PACS5A000	PACP5A000	PLNWKB000	PACM5A000
	D0		-	-	2	4	2	-
	DI		-	1	2	10	2	-
		IDUs	32	64	128	256	64	8,192
Product	Max.	ERV	32	64	128	256	64	8,192
	Connectable No.		32	64	128	256	64	8,192
		AHU	-	-	16	16	164)	16 x 32
		Chiller	-	-	5 Optional 2)	10 Optional 2)	-	10 x 32
	Air Condition		O 1)	0	0	0	0	0
	Ventilation (E	RV / ERV DX)	O 2)	0	0	0	0	0
Compatibility	Heating		-	0	0	0	0	0
	AHU		-	-	0	0	0	0
	Chiller		-	-	O 4)	O 4)	-	0
	ACS IO		-	-	O 4)	O 4)	O 4)	0
	Add Drawing		-	-	O 4)	O 4)	O 4)	0
	Group Manag	gement	-	-	O 4)	O 4)	O 4)	0
	Auto Changer	Over	-	0	O 4)	O 4)	O 4)	0
Additional	Set Back		-	0	O 4)	O 4)	O 4)	0
Function	2 Set		-	0	0	0	O 4)	0
	Change Aları	m	-	Filter	Filter	Filter	Filter	Filter
	Indoor Unit L	.ock	-	0	0	0	O 4)	-
	Cycle		-	-	0	0	O 4)	0
Schedule			0	0	O 4)	O 4)	O 4)	0
		Priority Control	-	0	0	0	O 4)	0
Auto Control	Peak Control	Outdoor Unit Capacity Control	-	-	O 4)	O 4)	O 4)	0
	Time limit co	ntrol	-	-	O 4)	O 4)	O 4)	0
	InterLocking		-	-	O 4)	O 4)	O 4)	0
Energy Naviga	tion		-	-	O 4)	O 4)	-	0
	Power		-	0	0	0	O 4)	0
	Gas		-	-	0	0	O 4)	0
Energy Report			-	-	O 4)	O 4)	O 4)	0
37	Email		-	-	-	-	O 4)	-
	PC / USB		_	_	O 4)	PC	PC	PC
Trend Reportin			_	_	-	-	-	0
cna neportin	Report (Cont	trol / Frror)	_	Error	O 4)	O <sup>4)</sup>	O 4)	0
Lictor.	Send Email	iot/ Lifot)	-		O 4)	O 4)	O 4)	0
History		LICD 6)		-				
	Save to PC /		-	-	-	- 0.4)	O 4)	-
	Summer Tim		-	0	O 4)	O 4)	O 4)	0
etc		t Oil-Return Operation	-	-	O 4)	O 4)	O 4)	-
	User Authori	ty	-	Password	O 4)	O 4)	O 4)	0
	PC Access		-	0	O 4)	O 4)	O 4)	0

<sup>※ ○ :</sup> Applied, - : Not Applied
1) Except for some feature (Individual lock, Limit, Temp., etc.)
2) Except for some feature (User mode, Additional function, etc.)
3) ACP 5 or AC Smart 5 is required.
4) This function is possible to use in Web Only. (BMS Point is not applied)
5) Without additional device, ACP 5 and AC Smart 5 provide BACnet IP and Modbus TCP interface for BMS.
6) ACS, ACP, ACM 5 Expected to 4Q, 2020

# CONTROL SOLUT

# **CENTRALIZED CONTROL**

#### **AC EZ Touch**

#### Features & Benefit

Smart management with 5 inch touch screen for small site.



#### PACEZA000

- Remote Access with Graphical User Access Control
- Total 200 Schedule Events
- Energy saving mode
- Energy Monitoring (with PDI)
- 2 Set point function (Upper / Lower Temperature setting)
- Temperature Set points Range Limit
- Remote Controller Lock (All, Temp, Mode, Fan Speed)
- Operation History
- Change alarm (Filter change)
- Emergency stop

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		
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		

※ ○ : Applied, - : Not Applied1) It is only available in some products.

#### Overview



#### **Feature**

#### PC Access

Users can control each space efficiently through PC access.



#### Energy Statistics (with PDI)

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



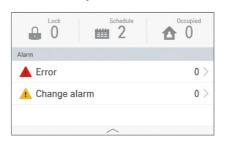
#### **Energy Mode**

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



#### Alarm Indicator

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



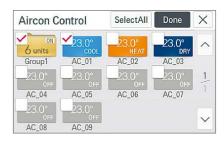
#### Schedule

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

Add	<b>(</b>				Month	edule_N	Sch
	Sat	Fri	Thu	Wed	Tue	Mon	Sun
^	5	4	3	2	1	29	28
2016	12	11	10	9	8	7	6
	19	18	17	16	15	14	13
03	26	25	24	23	22	21	20
~	2	1	31	30	29	28	27
	9	8	7	6	5	4	

#### Group / Individual Control

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



## **AC EZ**

#### Features & Benefit

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



#### PQCSZ250S0

- 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 / ERV DX
Display	LED / LCD Display
Power	DC 12V
Maximum number of units	32
Individual / Group Control	On & Off / Mode / Temperature / Fan speed
Individual Controller Lock	All
Error Check	0
Slave Mode (Interlocking with higher level controller)	0
Schedule	Weekly

%  $\bigcirc$  : Applied, - : Not Applied



# SOLUTIONS

# **CENTRALIZED CONTROL**

## **AC SMART 5**

#### Features & Benefit

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



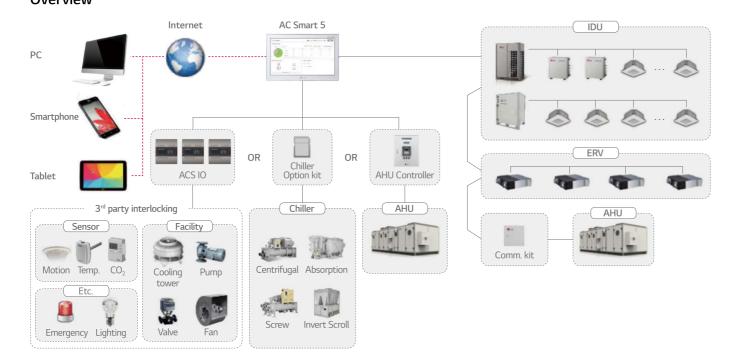
#### PACS5A000

- The central controller allows control of the LG HVAC system to various platforms. (Touch screen, PC, Smartphone, Tablet)
- DI: 2 / DO: 2
- Max. 128 IDU control
- BACnet IP / Modbus TCP
- Schedule
- Map View (Visual Navigation)
- Time limit control / Auto change over
- Energy monitoring
- History / Operation Trend
- Interlock with 3rd party equipment (ACS IO, ACU IO Module is needed)
- Multi level grouping
- Emergency stop & alarm
- Error alarm by E-mail

Size (W x H x D, mm)  10	Model Name	PACS5A000
Interfaceable Products  Maximum number of units Individual / Group Control Individual / Group Control On & Off / Mode / Temperature / Fan speed Individual Controller Lock Advanced Function Setting and Display 20 Error Check Slave Mode (Interlocking with higher level controller) Schedule Weekly / Monthly / Yearly / Exception day Web Access Emergency Stop & Alarm Display Power Consumption Monitoring (with PDI) Auto Changeover / Setback Temperature Limit Operation Time Limit Visual Navigation Operation Trend Interlock Control ODU Capacity Control Energy Navigation (with PDI) Daylight Saving Time External IO Port  BMS Integration 30  On & Off / Mode / Temperature / Fan speed All  Momitoring (with / Fan speed / All  Temperature / Fan speed All  Momerature / Fan speed All  Memperature / Fan speed All  Temperature / Fan speed All  Comfort Cooling / ODU Low Noise / ODU DAy / Fan speed All  Comfort Cooling / ODU And Noise / ODU DAy / Fan speed All  Comfort Cooling / ODU Capacity Control ODU Capacity Control DI 2 / DO 2  BMS Integration 30  Molt Time Free Cooling / ODU DAy / Fan speed All  Temperature / Fan speed All  Comfort Level display / Co.  Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co. Level display / Co.		
Maximum number of units  Individual / Group Control Individual Controller Lock  Advanced Function Setting and Display 2)  Error Check Slave Mode (Interlocking with higher level controller)  Schedule  Weekly / Monthly / Yearly / Exception day  Web Access  Emergency Stop & Alarm Display  Power Consumption Monitoring (with PDI)  Auto Changeover / Setback  Temperature Limit  Operation Time Limit  Operation Trend  Interlock Control  Operation Trend  Operation Trend  Interlock Control  Opalight Saving Time  External IO Port  BMS Integration 3)  Daylight Saving Time  On & Off / Mode / Temperature / Fan speed  Individual Control  On & Off / Mode / Temperature / Fan speed  Individual Control  On & Off / Mode / Temperature / Fan speed  Individual Control  On & Off / Mode / Temperature / Fan speed  Individual Control  On & Off / Mode / Temperature / Fan speed  Individual Control  Operation Time Limit  Operation Trend  Operation Trend  Operation Trend  Opu Capacity Control  Opu Capacity Control  Opu Capacity Control  Opu Capacity Control  Daylight Saving Time  External IO Port  BMS Integration 3)  BACnet IP / Modbus TCP	Size (W x H x D, mm)	
Individual / Group Control Individual Controller Lock  Advanced Function Setting and Display 2)  Error Check Slave Mode (Interlocking with higher level controller)  Schedule Weekly / Monthly / Yearly / Exception day  Weekly / Monthly / Yearly / Exception day  Weekly / Monthly / Yearly / Exception day  Weekly / Monthly / Yearly / Exception for Environment of the properties of the properti	Interfaceable Products	
Individual Controller Lock  Advanced Function Setting and Display 2)  Error Check  Slave Mode (Interlocking with higher level controller)  Schedule  Weekly / Monthly / Yearly / Exception day  Web Access  Emergency Stop & Alarm Display  Power Consumption Monitoring (with PDI)  Auto Changeover / Setback  Temperature / Mode / Fan speed / All  O  Wish Time Free 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) / Night Time Free Cooling / ODU Capacity / Exception day  Weekly / Monthly / Yearly / Exception day  Weekly / Monthly / Yearly / Exception day  O  O  O  O  O  O  O  O  O  O  O  O  O	Maximum number of units	128
Advanced Function Setting and Display 2)  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	Individual / Group Control	On & Off / Mode / Temperature / Fan speed
Comfort Level display / CO <sub>2</sub> Level display (for ERV / ERV DX) / Night Time Free Cooling (for ERV / ERV DX) / N	Individual Controller Lock	Temperature / Mode / Fan speed / All
Slave Mode (Interlocking with higher level controller)  Schedule  Weekly / Monthly / Yearly / Exception day  Web Access  Emergency Stop & Alarm Display  Power Consumption Monitoring (with PDI)  Auto Changeover / Setback  Temperature Limit  Operation Time Limit  Oyeration Time Limit  Oyeration Trend  Operation Group Control  ODU Capacity Control  Energy Navigation (with PDI)  Daylight Saving Time  External IO Port  BMS Integration 3)  BACnet IP / Modbus TCP		Comfort Level display / CO2 Level display (for ERV / ERV DX) /
higher level controller)  Schedule  Weekly / Monthly / Yearly / Exception day  Web Access  Emergency Stop & Alarm Display  Power Consumption Monitoring (with PDI)  Auto Changeover / Setback  Temperature Limit  Operation Time Limit  Oyeration Trend  Operation Trend  Other Control  Opu Capacity Control  ODU Capacity Control  Energy Navigation (with PDI)  Daylight Saving Time  External IO Port  BMS Integration 3)  BACnet IP / Modbus TCP	Error Check	0
Web Access  Emergency Stop & Alarm Display  Power Consumption Monitoring (with PDI)  Auto Changeover / Setback  Temperature Limit  Operation Time Limit  Visual Navigation  Operation Trend Interlock Control  Virtual Group Control  ODU Capacity Control  Energy Navigation (with PDI)  Daylight Saving Time  External IO Port  BMS Integration 3)  OO  OO  OO  OO  OO  OO  OO  OO  OO		0
Emergency Stop & Alarm Display  Power Consumption Monitoring (with PDI) Auto Changeover / Setback  Temperature Limit Operation Time Limit Operation Trend Interlock Control Virtual Group Control ODU Capacity Control Energy Navigation (with PDI) Daylight Saving Time External IO Port  BMS Integration 3)  OO O	Schedule	Weekly / Monthly / Yearly / Exception day
Display  Power Consumption Monitoring (with PDI) Auto Changeover / Setback  Temperature Limit  Operation Time Limit  Visual Navigation  Operation Trend Interlock Control  Virtual Group Control  ODU Capacity Control  Energy Navigation (with PDI)  Daylight Saving Time  External IO Port  BMS Integration 3)  OODU Capacity Control  DI 2 / DO 2  BMS Integration 3)  BACnet IP / Modbus TCP	Web Access	0
Monitoring (with PDI)  Auto Changeover / Setback  Temperature Limit  Operation Time Limit  Osual Navigation  Operation Trend  Operation Trend  Oil Interlock Control  ODU Capacity Control  ODU Capacity Control  Energy Navigation (with PDI)  Daylight Saving Time  External IO Port  BMS Integration 3)  BACnet IP / Modbus TCP		0
Temperature Limit Operation Time Limit Oisual Navigation Operation Trend Operation Trend Operation Trend Ointerlock Control Oittual Group Control ODU Capacity Control Energy Navigation (with PDI) Oaylight Saving Time External IO Port DI 2 / DO 2 BMS Integration 3) BACnet IP / Modbus TCP		0
Operation Time Limit  Visual Navigation  Operation Trend  OInterlock Control  Virtual Group Control  ODU Capacity Control  Energy Navigation (with PDI)  Daylight Saving Time  External IO Port  BMS Integration 3)  OOUTION OF TOP	Auto Changeover / Setback	0
Visual Navigation Operation Trend Olinterlock Control Opu Capacity Control ODU Capacity Control Energy Navigation (with PDI) Opaylight Saving Time External IO Port DI 2 / DO 2 BMS Integration 3) BACnet IP / Modbus TCP	Temperature Limit	0
Operation Trend O Interlock Control O Virtual Group Control O ODU Capacity Control O Energy Navigation (with PDI) O Daylight Saving Time O External IO Port DI 2 / DO 2 BMS Integration 3) BACnet IP / Modbus TCP	Operation Time Limit	0
Interlock Control  Virtual Group Control  ODU Capacity Control  Energy Navigation (with PDI)  Daylight Saving Time  External IO Port  BMS Integration 3)  BACnet IP / Modbus TCP	Visual Navigation	0
Virtual Group Control  ODU Capacity Control  Energy Navigation (with PDI)  Daylight Saving Time  External IO Port  BMS Integration 3)  BACnet IP / Modbus TCP	Operation Trend	0
ODU Capacity Control  Energy Navigation (with PDI)  Daylight Saving Time  External IO Port  BMS Integration 3)  DU 2 / DO 2  BMCnet IP / Modbus TCP	Interlock Control	0
Energy Navigation (with PDI)  Daylight Saving Time  External IO Port  BMS Integration 3)  BACnet IP / Modbus TCP	Virtual Group Control	0
Daylight Saving Time         O           External IO Port         DI 2 / DO 2           BMS Integration 3)         BACnet IP / Modbus TCP	ODU Capacity Control	0
External IO Port DI 2 / DO 2 BMS Integration 3) BACnet IP / Modbus TCP	Energy Navigation (with PDI)	0
BMS Integration 3) BACnet IP / Modbus TCP	Daylight Saving Time	0
	External IO Port	DI 2 / DO 2
IPv6 Support	BMS Integration 3)	BACnet IP / Modbus TCP
	IPv6 Support	0

- It is only available in some products.
- 3) For the detail point list, please refer to the installation manual.

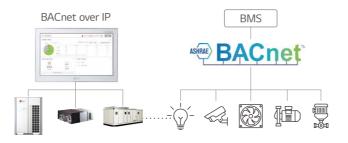
#### Overview



#### **Feature**

#### **BMS** Integration

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



#### Energy Management / Operation Trend

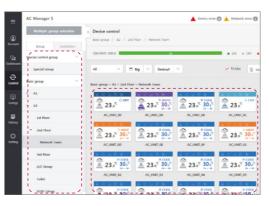
Energy navigation function allows air conditioners operation to be managed under the monthly (Weekly / Yearly) plan of energy usage. By analyzing present energy consumption and comparing with the plan, overuse of system operational costs can be prevented.



#### Multi Level Group Composition

You can freely apply layer structure such as building, floor, zone, etc. and set the group as the same as the site composition to control and monitor the devices.

Special control group You can additionally compose frequently used groups such as VIP Room, executive room, etc. regardless of the building structure.



#### 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 system on a variety of platforms (PC, Mobile, Tablet), at any time and from any location, not just on the touch screen.



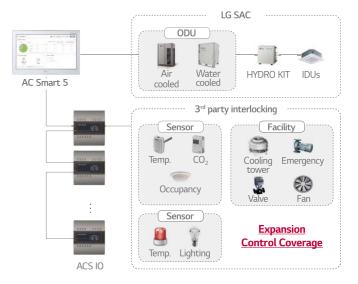
#### Visualized Control

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



#### Interlocking with 3rd party equipment

AC Smart 5 can make operation scenario with 3<sup>rd</sup> party equipment by ACS IO Module. Control coverage is expanded. (Air conditioner only → Sensors, Fans, Pumps, Switches…)



# **CONTROL SOLUTIONS**

# **CENTRALIZED CONTROL**

#### ACP 5

#### Features & Benefit

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



#### PACP5A000

- The central controller allows control of the LG HVAC system to various platforms. (PC, Smartphone, Tablet)
- DI:10 / DO:4
- Max. 256 IDU control
- BACnet IP / Modbus TCP
- Schedule
- Map View (Visual Navigation)
- Time limit control / Auto change over
- Energy monitoring
- History / Operation Trend
- Interlock with 3<sup>rd</sup> party equipment (ACS IO, ACU IO Module is needed)
- Multi level grouping
- Emergency stop & alarm
- Error alarm by E-mail

Model Name	PACP5A000
Size (W x H x D, mm)	270 x 155 x 65
Interfaceable Products	MULTI V / ERV / ERV DX / HYDRO KIT / THERMA V / AHU kit / LG Chiller 1)
Maximum number of units	256
Individual / Group Control	On & Off / Mode / Temperature / Fan speed
Individual Controller Lock	Temperature / Mode / Fan speed / All
Advanced Function Setting and Display 2)	Comfort Cooling / ODU Low Noise / ODU Defrost Mode / Comfort Level display / CO <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
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 3)	BACnet IP / Modbus TCP
IPv6 Support	0

- $\mathcal{X} \circ \mathcal{A}$  Applied, : Not Applied
- 1) Chiller Option Kit (PCHLLN000) is required.
- 2) It is only available in some products.
- 3) For the detail point list, please refer to the installation manual.

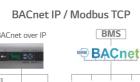
# PC Smartphone ACP 5 Smartphone ACS IO OR Chiller AHU Centrifugal Absorption Sensor Facility Centrifugal Absorption Screw Invert Scroll Screw Invert Scroll















# **ACP LonWorks Gateway**

#### Features & Benefit

LonWorks easily link LG air conditioners and other existing building systems. By including ACP control function, the controlling continues even when error occurs with BMS.



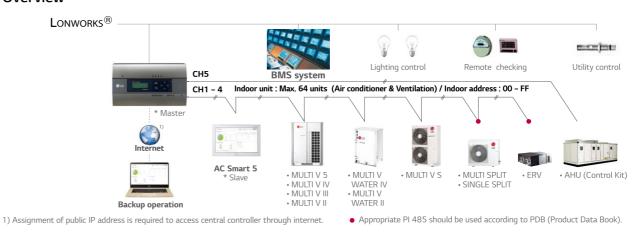
#### PLNWKB000

- Connect to use LonWorks® protocol and LG air conditioner protocol.
- Process Ability (Max. connection): Indoor unit 64EA, AHU Control Kit: Max. 16EA
- Self installation verification using interne. (Web Server Included)
   Diagnosis of communication status on LG Air-conditioner network.
- It offers a variety of functions as ACP which allows the customer to efficiently control various types of equipment from the customer's own Integration.

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

#### Overview



#### PI 485

#### Features & Benefit

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



- Power : Connected with the Indoor Units
- 1 for Each Indoor Unit - Indoor Unit (ERV)

PHNFP14A0

# **CENTRALIZED CONTROL**

## **AC Manager 5**

#### Features & Benefit

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



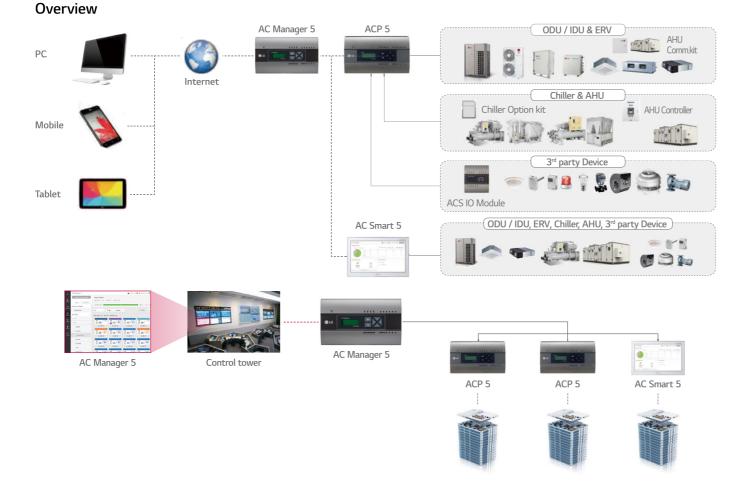


#### PACM5A000

- · Consol Type: No needs software installation and lock-key
- Max. 8,192 IDU Control
- Schedule
- Map View (Visual Navigation)
- Time limit control / Auto change over
- Energy Monitoring / Navigation
- History / Operation Trend
- Emergency stop & alarm
- Error alarm by E-mail
- Multi Language
- (Eng, Ita, Spa, Por, Rus, Fra, Ger, Tur, Pol, Chi, Kor)

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 <sup>1)</sup>
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
Interlock Control	0
Virtual Group Control	0
ODU Capacity Control	0
Energy Navigation (with PDI)	0

- ※ : Applied, : Not Applied1) Chiller Option Kit (PCHLLN000) is required. Note : AC Manager 5 requires ACP 5 or AC Smart 5.



#### **Feature**

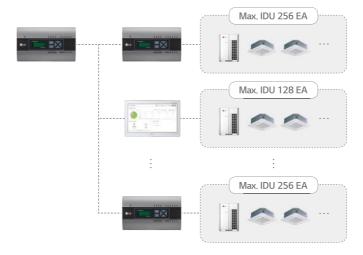
#### Stand-alone

Integrated with S/W program and H/W platform, it is convenient to install since users no longer need to install program with lock-key on PC.



#### 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.



#### Peak Control

This function can reduce electricity use. There are two kinds of control logic. Energy saving effect by indoor unit operation rate control. Load management effect by outdoor unit capacity control.





#### ODU Capacity Control



#### Advanced Network Accessibility & User Friendly GUI (Reddot award)

As an advanced central controller, AC Manager 5 offers flexible interface for each user by assessing the device screen and automatically customizing the layout to provide the most optimized interface.









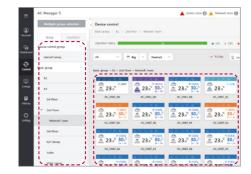
#### Energy Navigation & Energy Usage Trend

Energy navigation is the function to set the target usage amount to limit the monthly power consumption and to control so that the total accumulated power consumption does not exceed the target usage amount. It performs total of 7 control levels with the estimated/actual usage amount exceeding ratio compared to the monthly target usage amount. For the control method, there are indoor unit operation ratio, outdoor unit capacity control, and indoor unit operation control.



#### Multi Level Group Composition

You can freely apply layer structure such as building, floor, zone, etc. and set the group as the same as the site composition to control and monitor the devices. Special control group You can additionally compose frequently used groups such as VIP Room, executive room, etc. regardless of the building structure.



# **CENTRALIZED CONTROL**

# **Modbus RTU Gateway**

#### Features & Benefit

Providing Modbus RTU connection between LG Air conditioners and BMS.



PMBUSB00A

- Function
- MODBUS RTU communication with MODBUS master controller
- MODBUS RTU slave (RS485) / 9,600 bps
- Applicable for MULTI V 5, MULTI V S, ERV, THERMA V
- Size (W x H x D) : 53.6 x 89.7 x 60.7
- Max.16 IDUs with single module / Max. 64 IDUs with 4 modules
- Power : DC 12V

#### Modbus Gateway Memory Map

Baud Rate: 9,600 bps, Stop Bit: 1 stop bit, Parity: None Parity

Coil Register (0 x 01)

Ø N-		Data Bit		Formation	Desistan
① No.	Air Conditioner	ERV / DX ERV	HYDRO KIT & THERMA V	Function	Register
1	Operate (On / Off)	Operate (On / Off)	Operate (On / Off)	0: Stop / 1: Run	
2	Auto Swing	Air conditioner 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	
8	Lock IDU Address	Lock IDU Address 1)	Reserved	0: UnLock / 1: Lock	_
9	Reserved	Quick Ventilate	Reserved	0: Disable / 1: Enable	_
10	Reserved	EnergySave	Reserved	0: Disable / 1: Enable	-

<sup>1):</sup> This register value is applied 'DX Ventilator' ONLY.

#### Discrete Register (0 x 02)

O No		Data Bit		Formation	Desisten
① No. Air Conditioner	Air Conditioner	ERV / DX ERV	HYDRO KIT & THERMA V	Function	Register
10001	Connected IDU	Connected IDU	Connected IDU	0 : Disconnected / 1: Connected	
10002	Alarm	Alarm	Alarm	0: Normal / 1: Alarm	
10003	Filter Alarm	Filter Alarm 1)	Hot Water Only 2)	0 : Normal / 1: Alarm HYDRO KIT - 0 : Normal / 1: Hot Water Only	Register = N x 16 + ① (N = Indoor Unit Central Address
10004	Reserved	Reserved	Target Temp. Select	0: Air / 1: Water	
10005	Reserved	Reserved	Error Division 2)	0 : CH type error / 1: BC type error	

This register value is applied 'DX Ventilator' ONLY.
 This register value is applied 'HYDRO KIT' ONLY.

#### Holding Register (0 x 03)

-	, , ,				
① No.		Data Bit			Doniston
U NO.	Air Conditioner	ERV / DX ERV	HYDRO KIT & THERMA V	- Function	Register
40001	Operate Mode	Operate Mode	Connected IDU	0 : Cooling, 1 : Dehumidifying, 2 : Fan, 3 : Auto, 4 : Heating HYDRO KIT (Middle Temp. DHW)/AWHP – 0 : Cooling, 3 : Auto, 4:Heating HYDRO KIT (High Temp. DHW) – 3 : Auto, 4 : Heating	Register = N x 20 + ①
40002	Fan Speed	Fan Speed	Target Temp. DHW 2)	1 : Low, 2 : Mid, 3 : High, 4 : Auto	(N = Indoor Unit Central Address)
40003	Target Temp.	Target Temp. 1)	Target Temp. 2)	16.0 ~ 30.0 [°C] x 10	
40004	Target Temp. Limit (Upper)	Target Temp. Limit 1) (Upper)	Reserved	16.0 ~ 30.0 [°C] x 10	-
40005	Target Temp. Limit (Lower)	Target Temp. Limit 1) (Lower)	Reserved	16.0 ~ 30.0 [°C] x 10	-
40006	Reserved	Vent. Operate Mode	Reserved	0 : HEX, 1 : Auto, 2 : Normal	-

- 1): 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.

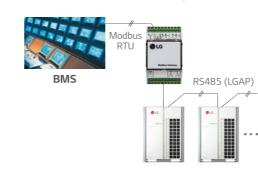
#### Input Register (0 x 04)

Ø N-		Data Bit		Function Desired	
① No.	Air Conditioner ERV / DX ERV HYDRO KIT & THERMA V	Function	Register		
30001	Error Code	Error Code	Error Code	0 ~ 255 % Please refer to the product error table.	
30002	Room Temp.	RA Temp.	Room Temp.	-99.0 ~ 99.0 [°C] x 10	
30003	Pipe In Temp.	OA Temp. 1)	Water Inlet Temp.	-99.0 ~ 99.0 [°C] x 10	Register = N x 20 + ① (N = Indoor Unit Central Address)
30004	Pipe Out Temp.	SA Temp. 1)	Water Outlet Temp.	-99.0 ~ 99.0 [°C] x 10	(N = Indoor Offic Certifal Address)
30005	Reserved	Pipe In Temp. 1)	Sanitary Tank Temp.	-99.0 ~ 99.0 [°C] x 10	
30006	Reserved	Pipe Out Temp. 1)	Solar Temp. <sup>2)</sup>	-99.0 ~ 99.0 [°C] x 10	

- 1): This register value is applied 'DX Ventilator' ONLY. 2): This register value is applied 'AWHP' ONLY.

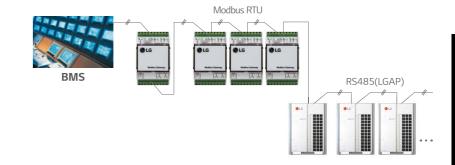
#### Installation Scene

• Single module Max. 16 indoor units with a single module.

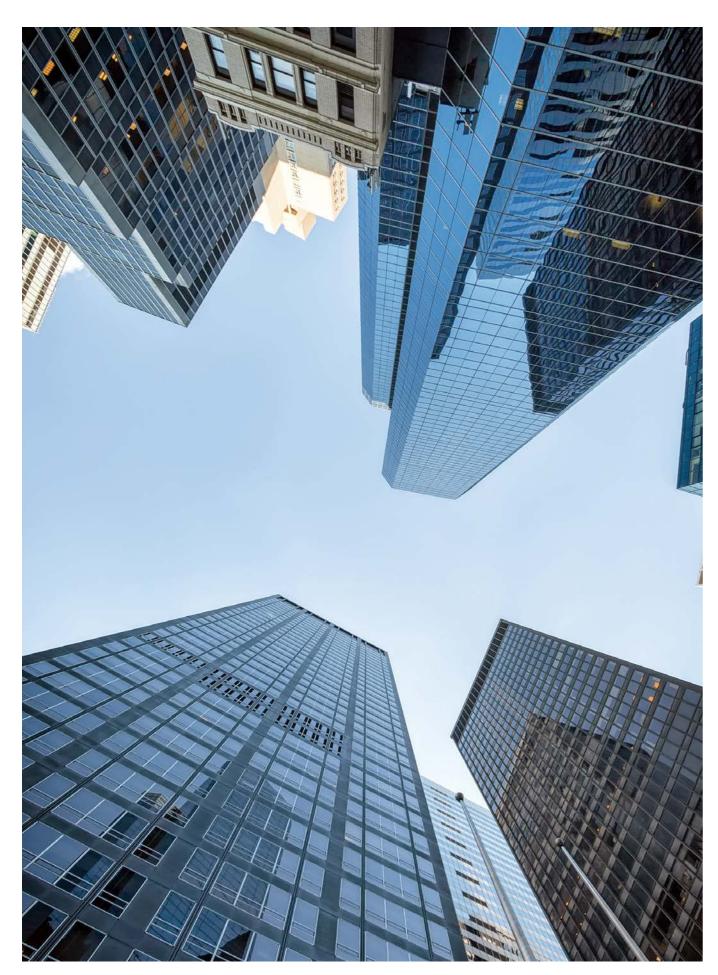


Multiple module

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



# **INTEGRATION DEVICE**



# **PDI (Power Distribution Indicator)**

#### Features & Benefit

PDI shows distributed power consumption of up to 128 indoor units.



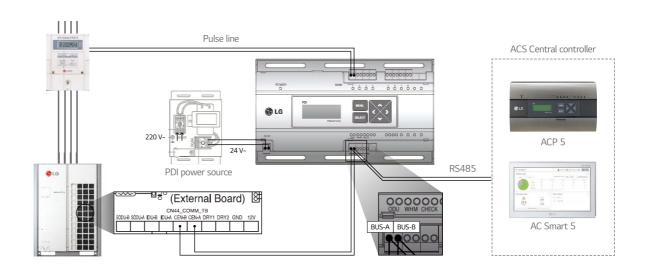
PQNUD1S40 (Premium, 8 port) PPWRDB000 (Standard, 2 port)

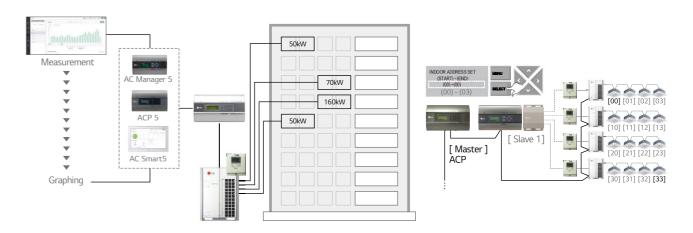
Model Name	PQNUD1S40	PPWRDB000
Size (W x H x D, mm)	270 x 1	55 x 65
Interfaceable Products	Air conditio	ner, ERV DX
Maximum Number of Power Meters	EHP : 8 Watt meter GHP : 4 Watt meter / 4 Gas meter	EHP : 2 Watt meter GHP : 1 Watt meter / 1 Gas meter
Maximum Number of Indoor Units	MULTI	V : 128
Data Backup When Power Outage	0	
Power Input	PDI : AC 24V, Transformer : AC 220V	

268 | 269

※ ○ : Applied, - : Not Applied

- Total and indoor power consumption monitoring is possible.
- When connected to the LG central controller, it is possible to expand functions such as energy monitoring, energy saving operation and target usage setting.
- It is also possible to distribute gas consumption in addition to electricity.





- Note: 1. Power cable and type could be different from this scene depending on the Outdoor unit's specification.
  - Measured power consumption could be different between PDI and Watt meter.
     Applicable Central Controller: ACP 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 values.)

# **INTEGRATION DEVICE**

#### **ACS IO Module**

#### Features & Benefit

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.



#### PEXPMB000

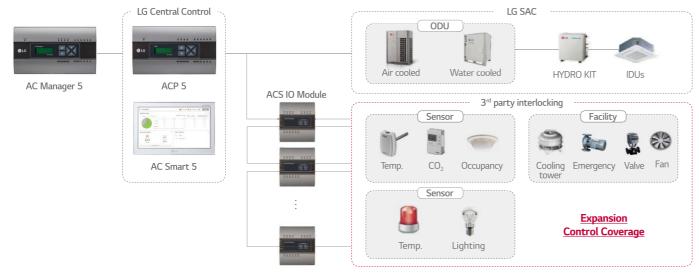
- Interlocking with 3<sup>rd</sup> party equipment LG Central controller can make operation scenario with 3rd party equipment by ACS IO Module.
- Control coverage is expanded. (Air conditioner only → Sensors, Fans, Pumps, Switches ···)

Model Name		PEXPMB000
Linkable Products		PACS4B000 PACP4B000 PACS5A000 PACP5A000
Communication	RS-485	1 ch.
	Digital Input	3 port
1/0	Digital Output	3 port
	Universal Input 1)	4 port
	Analog Output	4 port

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

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

#### **Key Application**



<sup>\*</sup> DI: Digital Input, DO: Digital Output, UI: Universal Input, AO: Analog Output / Please contact our regional office to have connectable relay specification for analog output.

#### **ACU IO Module**

#### Features & Benefit

This module can be connected with ACP 5 or AC Smart 5 controller if additional I/O points such as UIO / UI / UO for 3rd party devices control and monitoring are needed.







PEXPMB300

PEXPMB200

PEXPMB100

- 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.
- · Control coverage is expanded. (Air conditioner only → Sensors, Fans, Pumps, Switches ···)

Module Name	PEXPMB300 PEXPMB200		PEXPMB100	
Linkable Products	P.A	00		
Communication RS-485	2 ch. 1)	1 ch.	1 ch.	
Digital Input	-	-	3port	
Digital Output	2port	6port	-	
Universal Input 2)	4port	-	6port	
Analog Output	2nort	4nort		

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

- 1) 1ch. is reserved for internal communication.
- 2) The type of UI (Universal Input) is selectable among Digital Input and Analog Input.

# **Chiller Option kit**

#### Features & Benefit

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



PCHLLN000

Model Name	PCHLLN000
Monitoring Points	Evaporator status / Compressor status (Scroll, Screw, Centrifugal chiller only) / Condenser status / Generator status (Abs. chiller only)
On / Off	0
Target Temp. setting	0
Mode Change	Scroll chiller only
Schedule	0
Interfaceable Products	Scroll, Screw, Centrifugal, Absorption (LG Only)

 $\divideontimes$   $\bigcirc$  : Applied, - : Not Applied

#### Cycle Display Example



#### Installation Scene

- Chiller Option Kit installation of LG HVAC Solution product should be conducted by a specialized installation service engineer.
- Chiller Option Kit installation can be proceeded with a SD Card.
- The SD Card can install Chiller Option Kit in one LG HVAC Solution product.

Insert the SD Card in the LG HVAC Solution product. If a backup SD Card is inserted, replace it with a Chiller Option Kit SD Card.



<sup>1)</sup> The type of UI (Universal Input) is selectable among Digital Input and Analog Input.

# **INTEGRATION DEVICE**

# **Dry Contact**

#### Feature List

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

Model Name		PDRYCB000	PDRYCB400	PDRYCB300	NEW PDRYCB320*	PDRYCB500	
Case			0	0	0	0	0
Input Port	:		1	2	8	8	-
Universal I	Input port		-	-	-	1	-
Comm. Pro	otocol		-	-	-	-	Modbus RTU
Power			AC 220V		Connect to Indoor	unit PCB (CN_CC)	
		On / Off	0	0	0	0	0
		Oper Mode	-	0	0	0	0
		Set Temp.	-	(Select & Fix)	(Select & Fix)	(Select & Fix)	0
	Air conditioner	Fan Speed	-	-	0	0	0
	Conditioner	Thermo-Off	-	(Select & Fix)	0	0	-
		Energy Saving	-	(Select & Fix)	-	-	-
		Lock/Unlock	-	(Select & Fix)	-	-	-
		On / Off	0	-	0	0	-
		DHW On / Off	-	-	0	0	-
Control		Thermo-Off	-	-	0	0	-
	AWHP	Oper Mode	-	-	0	0	-
		Silent Mode	-	-	0	0	-
		Emergency Mode	-	-	0	0	-
		On / Off	0	-	-	-	0
		Oper Mode	-	-	-	-	0
	Vent	Air conditioner Mode	-	-	-	-	0
		Additional Mode	-	-	-	-	0
		Fan Speed	-	-	-	-	0
		Operation Status	0	0	0	0	0
Output		Error	0	0	0	0	0
		Room Temp.	-	-	-	-	0

※ ○ : Applied, - : Not Applied

Note: 1. Compatibility of PDRYCB300, PDRYCB320

- Can use with all types of air conditioner indoor units after 2010 (Cassette, Ducted, Convertible, Applied PAC, Wall mounted, Console)
   Can out use with single package models
- AWHP: 3 series split and monobloc models
  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 not use with single package models
   Can not use with AWHP, HYDRO KIT models
- 3. (Select & Fix): This function is preset by rotary switch.

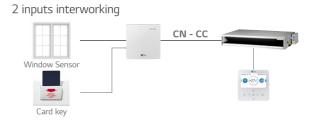
#### PDRYCB000



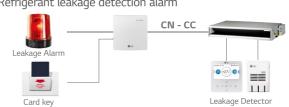


#### PDRYCB400





#### Refrigerant leakage detection alarm



#### PDRYCB300 / PDRYCB320

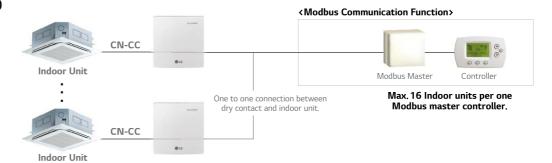


 $\frak{\%}$  Can use a universal input port with PDRYCB320 model.



 $\ensuremath{\ensuremath{\%}}$  Please contact our regional office to have full compatible room controller list

#### PDRYCB500



% Please contact our regional office to check the compatibility with 3rd party room controller.

# **INTEGRATION DEVICE**

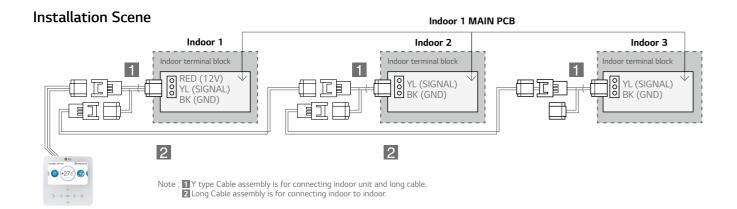
# **Group Control Wire**

#### Features & Benefit

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



Model Na	me	PZCWRCG3
Y-type Cable	:	0.25m Length
Long Cable		9.6m Length



# **Remote Temperature Sensor**

#### Features & Benefit

Sensor for detecting the room temperature.



#### **PQRSTA0**

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

#### **Installation Scene**

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



# Low Profile Remote Temperature Button Sensor

#### Features & Benefit

This installs easily and discreetly into a wall and then connects to indoor unit.

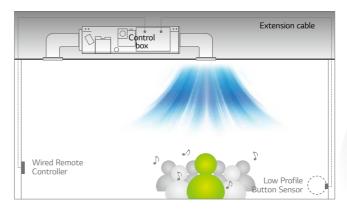


Model Name		ZRTBS01
Operation Ra	nge	-40°C to 85°C (0 to 100%RH, Non-condensing)
Sensing Elem	ent	Thermistor
Sensing Element Accuracy		0.2°C (0 to 70°C)
	Material	Etched Teflon
Wire Leads	Length	15m
	Thickness	0.33mm <sup>2</sup>
Mounting		10mm hole, push in plastic sheath with peel off tape strip
Enclosure Ma	terial Ratings	Plastic, NEMA 1, UL94

#### ZRTBS01

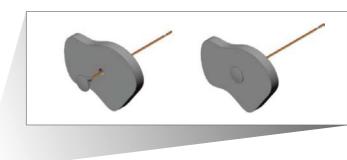
- Ideal for locations where aesthetics are as important as the temperature measurement.
- Inconspicuous wall sensor that mounts easily by pushing through a 10mm hole and secured with a peel off tape strip.
- Small flush sensor mounting.
- · Accurate direct air measurement.
- Paintable with latex or oil base.

#### **Key Application**

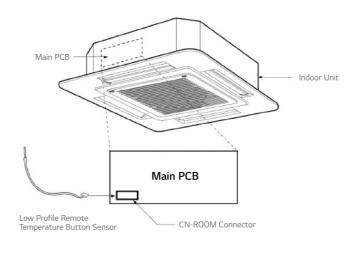


#### Models Applied

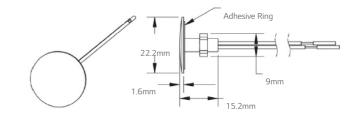
• LG indoor units excluding Wall-Mounted Type.



#### Installation Scene



#### Drawing



# CONTROL SOLU

# **INTEGRATION DEVICE**

#### **Zone Controller**

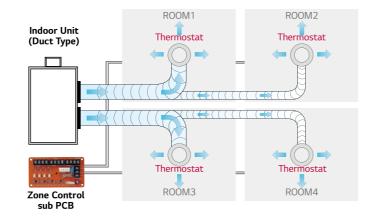
#### Features & Benefit

Controls air conditioning up to 4 zones by external thermostat.



#### **ABZCA**

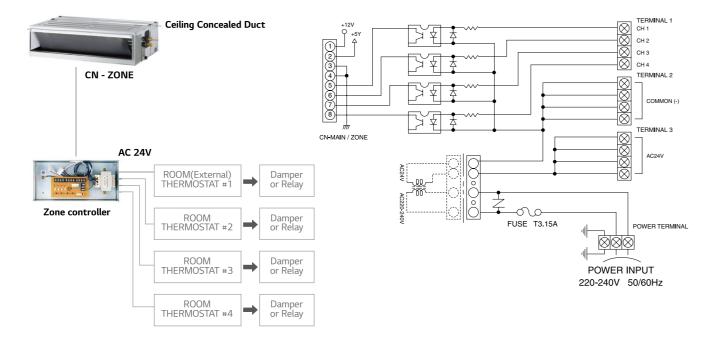
- Controls different zones (up to 4 zones) by external thermostat (AC 24V).
- Maintain proper air volume of each zone.
- · Auto variation of dampers.
- Auto control of fan speed and On / Off operation.



#### **Models Applied**

• Ceiling Concealed Duct (refer to Product Data Book for applicable models).

#### Wiring Diagram



#### **IO Module**

#### Features & Benefit

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



#### PVDSMN000

#### **Function**

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

#### Description

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

Note : IO Module is not compatible for MULTI V III.

#### Models Applied

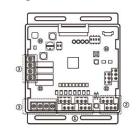
• MULTI V 5

• MULTI V WATER IV

• MULTI V S

#### Part Description

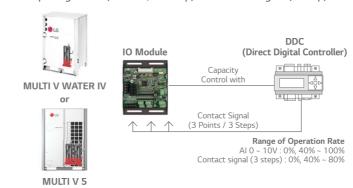
- 1) Digital Input Part (DI: Dry Contact Input)
- Demand control by contact input (3 Step)
- Low Noise Operation input
- Priority Setting input: Setting the priority of demand control command (Capacity control for external signal from DDC vs Peak control by LG Central controller)
- Open: External signal has priority to central controller (Default)
- Close: Central controller has priority to external signal
- 2) Analog Input Part (AI: DC 0 ~ 10V)
- Demand control by analog input (10 Step)
- 3) Digital Output Part (DO : AC 250V, Max. 1A)
- Error status relay output
- Operation status relay output
- Valve control



#### **Key Application**

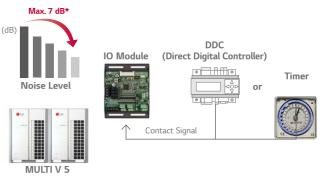
#### **Demand Control**

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



#### Low Noise Operation

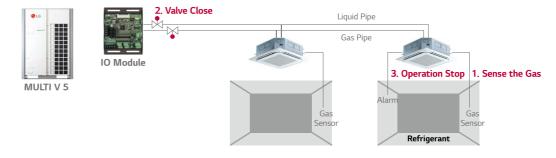
To reduce noise level, control outdoor unit's fan speed by dry contact input.



\* 8 HP (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 close refrigerant valve when pump-down operation.



# **INTEGRATION DEVICE**

#### **Water Communication Module**

#### Features & Benefit

This module is intended to connect 3<sup>rd</sup> party plate heat exchanger to LG outdoor unit with the ability to control water temperature from  $3^{rd}$  party DDC or LG remote controller.

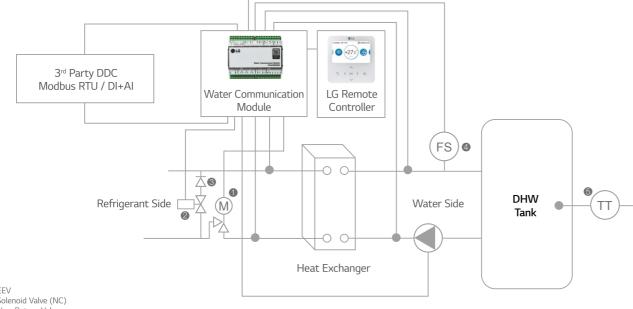


#### **NEW PAHCMW000**

• Interlocking with 3rd parties can make various solution with LG MULTI V outdoor unit.

Contents	ntents Connection Port		Function
	CH1 (A+ / B-)	Module Comm. Port	Communication Port Modbus
RS485	CH2 (A+ / B-)	IDU Comm. Port	Communication with MULTI V Outdoor
	UI1	Flow Switch	Flow Switch Input by 3 <sup>rd</sup> party
Universal Input (Cooling /	UI2	0 ~ 10V Set Temp	Target Temp. Setting
Heating Setting)	UI3	Cooling Thermostat Signal	Thermostat Cooling Signal
	UI4	Heating Thermostat Signal	Thermostat Heating Signal
	UI1	Flow Switch	Flow Switch Input by 3 <sup>rd</sup> party
Universal Input	UI2	0-10V Set Temp	Target Temp. Setting
(DHW Only)	UI3	DHW Temperature Transmitter 0 ~ 10V	Measured Water Temp Input by 3 <sup>rd</sup> 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	-
Slingle	Reserved	-	-
	DO1	Defrost / Mode	Output for defrost signal and/or cool mode
Digital Output	D02	Pump	Output signal for pump On / Off
	DO3	Bypass	Output signal for PHEX Bypass Valve
NTC	RI3	Thermistor Pipe In	PHEX Ref. Inlet Pipe Sensor
IVIC	RI4	Thermistor Pipe Out	PHEX Ref. Outlet Pipe Sensor
EEV	+12V / 1 / 2 / 3 / 4	Expansion Valve	EEV Control

#### Overview



- EEV
- Solenoid Valve (NC)
- Non-Return ValveFS : Flow Switch
- \*\* 3" party solenoid, non-return valve, heat exchanger, flow switch and DHW temperature transmitter(optional) must be purchased separately (field supplied items)

#### Compatibility & Accessory

EEV (LG MODEL)

Model	Capaci	PAHCMW000	
	Min	Мах	PARCIVIVVOO
PAEEVC000	3.6	28	HP/HR
PRLK048A0	3.6	28	HP/HR
PRLK096A0	28.1	56	HP

#### LG Controllers

	Individual Controller	Centralized	Dry Contact	
Controller	Standard III	AC EZ touch	AC smart 5	Dry Contact
	PREMTW101	PACEZA000	PACS5A000	PDRYCB000

#### LG Controllers

• The 3<sup>rd</sup> party can select the for best usable version.

#### Solenoid valve for Bypass

Capaci	ity (kW)	EEV turns	System	Kv Value of solenoid and	Dina Sina	
Min.	Max.	EEV type	System	Non-Return Valve	Pipe Size	
3.6	28	PAEEVC000	HP/HR	0.95	3/8" / 9.52mm	
3.0	20	PRLK048A0	nP/nR	0.95	3/6 / 9.3211111	
>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
1 /min*k\\\/	3.70	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

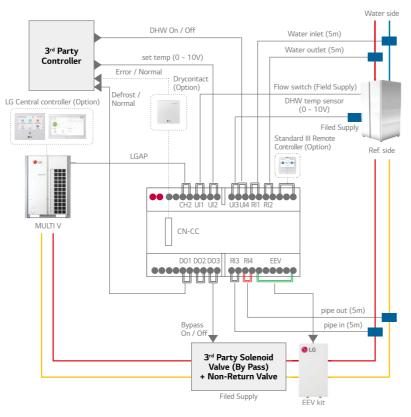
# CONTROL SOLUTIO

# **INTEGRATION DEVICE**

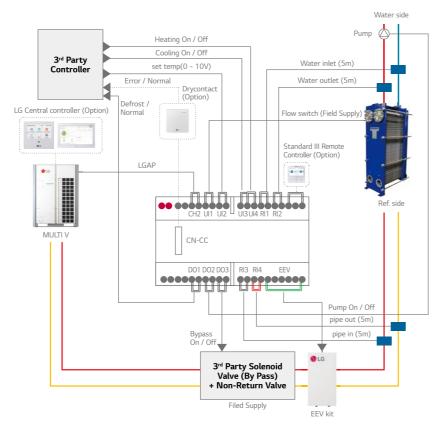
# **Water Communication Module Application**

Installation scene with Contact connection

Contact signal + DHW Only Setting

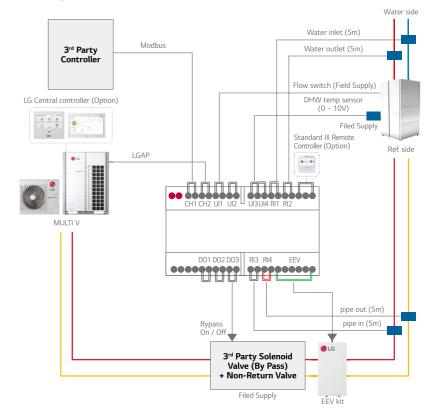


Contact signal + Heating / Cooling Setting

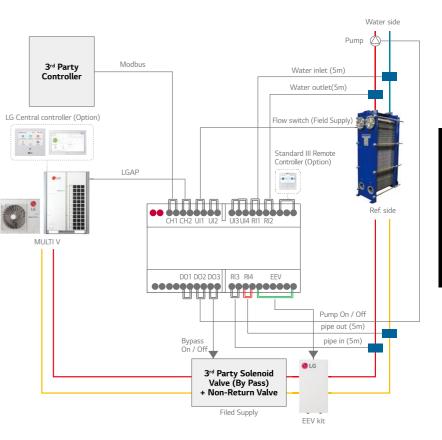


Installation scene with Modbus / LG Control (Optional) connection

Modbus + DHW Only Setting



Modbus + Heating / Cooling Setting



<sup>\*</sup> In case of Contact control, LG controllers can only support monitoring functions

# **INTEGRATION DEVICE**

#### Variable Water Flow Control Kit

#### Features & Benefit

Accessory developed for controlling the water flow.



#### PWFCKN000 (MULTI V WATER IV)

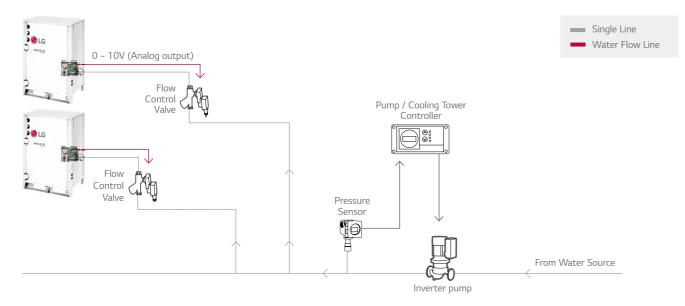
#### **Function**

- 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).

#### Advantage

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

#### Wiring Diagram



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

#### Low Ambient kit

#### Features & Benefit

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





#### PRVC2

#### **Function**

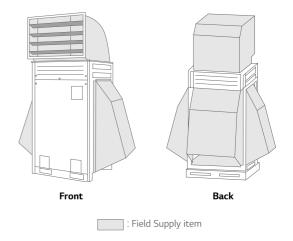
- -25°C Low ambient cooling operation by Low ambient kit and hood with damper (Analog output 0 ~ 10V).
- Demand control
- · Low noise operation
- Output outdoor or indoor unit operation status (AC 250V, Max. 1A)
- Output error status (AC 250V, Max. 1A)

#### Description

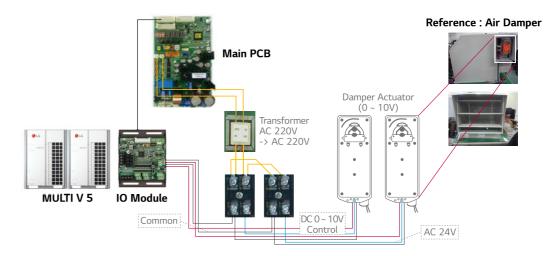
- Low ambient kit supports -25° C cooling operation by making stable condensing pressure with reducing air flow rate from hood and damper control given 0 ~ 10V proportional to condensing pressure.
- Low ambient kit provides IO Module function.
- External snow hood and air damper are required for this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

#### Models Applied

- MULTI V 5
- MULTI V IV



#### Installation Scene



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

# CONTROL SOLUTIONS

# **INTEGRATION DEVICE**

#### **Cool / Heat Selector**

#### Features & Benefit

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

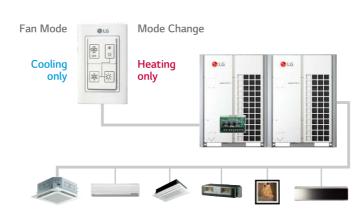


#### **PRDSBM**

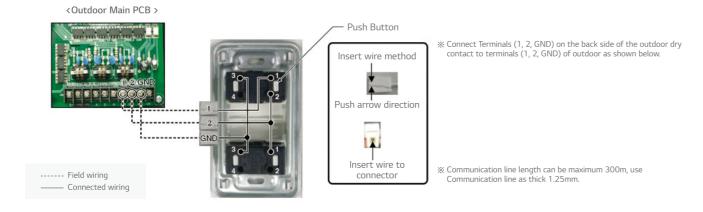
- · Indoor unit mode control without central controller.
- Select operation mode : Cooling, Heating, Fan mode
- Mode lock for cooling & heating mixing error-proof during the change of season.

#### **Models Applied**

- MULTI V 5
- MULTI V IV
- MULTI V WATER II
- MULTI V S
- MULTI V PLUS II, MULTI V PLUS
- MULTI V WATER IV



#### Wiring Diagram



#### **AHU Kits**

#### Features & Benefit

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





**CONTROL KIT** 



LG



NEW PRLK594A0

**NEW PAHCMC000** 

#### Control Application Kit

Specifications

#### IP Rating Description Туре 1Ø, 220 ~ 240 V, 50/60 Hz Return / Room air temperature control by DDC or LG individual / centralized controller 300 300 155 IP66 PAHCMR000 Communication Kit 1Ø, 220 ~ 240 V, 50/60 Hz Discharge air / Supply air temperature control by DDC or LG individual / centralized controller PAHCMS000 380 300 155 IP66 PAHCMM000 162 90 61 DC 12V IP20 Main Controller module Controller Module PAHCMC000 108 90 61 IP20 1Ø, 220 ~ 240 V, 50/60 Hz Various AHU control functions with multiple DX coils (Maximum connectable ODU is 3 units) 210 PAHCNM000 500 500

NEW PRLK396A0

#### **Expansion Application Kit**

Type	Type Model	Dimensions (mm)		mm)	Dina Diameter (mm)	Canasity Inday Banca	
Туре	Model	w	Н	D	Pipe Diameter (mm)	Capacity Index Range	
	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	

%  $\bigcirc$  : Applied, - : Not Applied

# **INTEGRATION DEVICE**

#### **AHU Kits**

#### Communication Kit

#### HIGH ENERGY EFFICIENCY

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

Solution benefits offer the following advantages:

- High energy efficiency inverter system
- · Large range of expansion application kit
- : Max. 168 kW EEV Kit 1)
- 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.

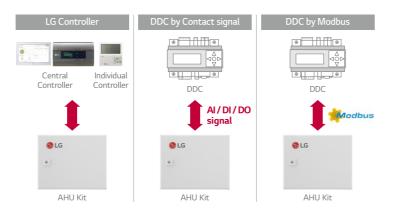


AHU communication kit can be connected to various control system such as LG individual / central controller and DDC <sup>1)</sup>. It can be directly connected to DDC without separated controller, so DDC can receive product control and monitor information through contact signal or Modbus protocol.

- 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

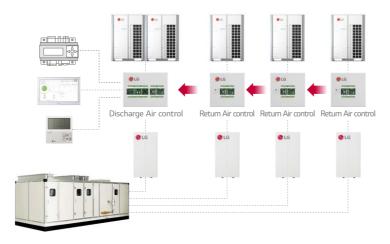




#### EXPANDABLE SYSTEM DESIGN

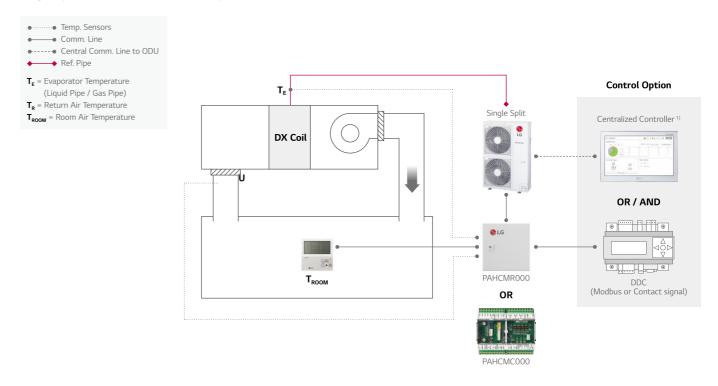
LG AHU system can be a suitable solution for various sites due to its application flexibility and wide range of line up with large capacity models. According to the required capacity, a single or multiple module combination is possible thanks to AHU communication kit's modular design.

• Multiple module combination for large capacity AHU.

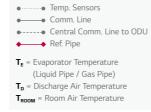


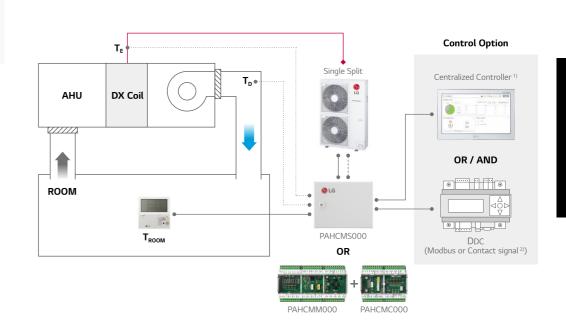
#### Single Split Application (Communication Kit & Controller Module)

Single Split + Return / Room Air Temperature Control



Single Split + Discharge Air Temperature Control





<sup>1)</sup> PI485 (PMNFP14A1) is required for centralized controller.

<sup>2)</sup> 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.

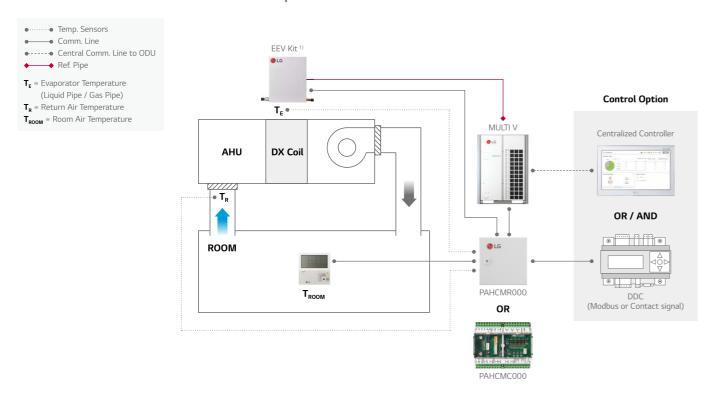
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# **INTEGRATION DEVICE**

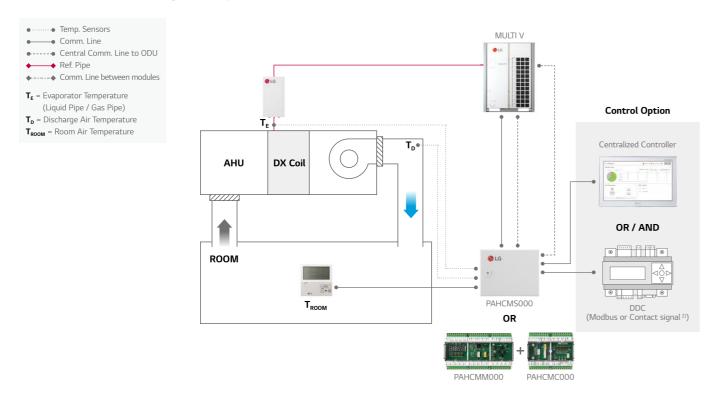
# **AHU Kits**

### MULTI V Application (Communication Kit & Controller Module)

MULTI V + EEV Kit + IDU + Return / Room Air Temperature Control



#### MULTI V + EEV Kit + Discharge Air Temperature Control



# **AHU Kits**

#### **Communication Kit Function**

Communication with DDC via Contact Signal

Function l	List	PAHCMR000 (PAHCMC000)	PAHCMS000 (PAHCMM000 + PAHCMC000)	Туре	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 2)	-	-	-	Discharge air temperature should be controller directly by DDC using 'ODU Capacity Control'
Control "	Fan Speed <sup>3)</sup>	-	High / Middle / Low	Digital Input (Non Voltage)	-
	Forced Thermal On / Off	On / Off	-	Digital Input (Non Voltage)	-
	ODU Capacity Control	-	40 ~ 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 monitored by DO ports
	Operation Mode	-	-		It needs to be checked through control signal
	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 monitored by DO ports
Monitor	Defrost Operation	Defrost / Normal	Defrost / Normal	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 monitored by DO ports
	Error Alarm	Error / Normal	Error / Normal	Digital Output, Relay C contact (Max DC 30V / 1 A, AC 250V / 1 A)	For PACHMR000, dip sw1-3 DO Type should be set 'Off' (Status), In this case, 'fan speed' cannot 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 1)	-	12 ~ 50 °C	Dip SW1-2 Discharge Temp. Control Type should be set 'On'
Control 1) -	Fan Speed <sup>2)</sup>	High/Middle/Low	-	
	Forced Thermal On / Off	-	-	
	ODU Capacity Control 1)	-	40 ~ 100%	Dip SW1-2 Discharge Temp. Control Type should be set 'Off
	Emergency Stop	-	-	
	Operation	On / Off	On / Off	
	Operation Mode	Cooling / Heating / Fan	Cooling / Heating / Fan	
	Return (Room) Air Temperature	0	-	Corresponding air temperature sensor
	Discharge Air Temperature	-	0	connected to AHU Comm. Kit is required
Vionitor	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	

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.

<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> In case of PAHCMS000, control type between "Discharge Air Temperature" and "ODU Capacity Control" is selectable.

<sup>2)</sup> To control fan speeds, DO port of the fan speed status should be connected to the fan control panel.

Note: For the Modbus memory map and more detail information, please refer to the product data book.

# CONTROL SOLUTIONS

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# **INTEGRATION DEVICE**

# **AHU Kits**

#### **Communication Kit Function**

With LG Control system (Individual & Centralized Controller)

Function L	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	
Control 1)	Return (Room) Air Temperature 2)	0	-	-	
001101	Discharge Air Temperature 2)	-	0	Standard II : 16 ~ 30 °C / Standard III : 12 ~ 50 °C (Available in April, 2020) / Central Controllers : 12~50°C	
	Fan Speed 3)	High / Middle / Low	High / Middle / 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	0	-	
Monitor	Discharge Air Temperature	-	0		
IVIOTILOI	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
   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.

  Note: For more detail information, please refer to the product data book.

#### Compatibility with LG HVAC Controllers

	Ind	lividual Contro	ller		Cen	BMS Gateway	PDI			
Controller	Premium	Standard III	Standard II	AC Ez	AC Ez Touch	AC Smart 5	ACP 5	AC Manager 5 1)	ACP LonWorks	Premium Standard
Controller	250}	9.15 Same   9.15			## O		010-10000 0000 000000	• [ ]		• <u> </u>
Model no.	PREMTA000 PREMTA000A PREMTA000B	PREMTB100 PREMTBB10	PREMTB001	PQCSZ250S0	PACEZA000	PACS5A000	PACP5A000	PACM5A000	PLNWKB000	PQNUD1S40 PPWRDB000
PAHCMR000	0	0	0	0	0	0	0	0	0	0
PAHCMS000	-	O <sup>2)</sup>	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.
   Set temperature range of this model shall be extended April, 2020.
- Note: 1. Dry contact for indoor unit (PDRYCB000 / 400 / 300 / 500) is not applied. 2. For more details, please refer to the product data book.

#### **Outdoor Unit Compatibility**

For Small Size Application (~ 15 kW) - Single Split

Туре	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	-	-	-	-

#### For Medium-Large Size Application (~ 672 kW) - MULTI V

Tuna	Model		MUI	MULTI V WATER			
Туре	Model	5	IV	III	S	IV	II
Communication Kit	PAHCMR000 (PAHCMC000)	0	0	0	0	0	0
(Controller Module)	PAHCMS000 (PAHCMM000 + PAHCMC000)	0	0	0	0	0	0
Control Kit	PAHCNM000	0	0	0	0	0	0

#### **Expansion Application Kit Compatibility**

	Capacity i	ndex (kW)	Control Applicatio	n Kit (Maximum con	nectable EEV Kits)	Connection by ODU system			
EEV Kit Model	Model Min. Max.		Min. Max. PAHCMR000 PAHCMM000 + PAHCNM000		PAHCNM000	MU	Cinala Calib		
	iviin.	IVIAX.	(PAHCMC000)	PAHCMC000)	PARCIVIVIOU	Heat Pump	Heat Recovery	Single Split	
PRLK048A0	3.6	28	0 (1)	0 (1)	0 (6)	0	0	-	
PRLK096A0	28.1	56	0 (1)	0 (1)	O (6)	0	O (Max. 33.7 kW)	-	
PRLK396A0	56.1	112	0 (1)	0 (1)	○ (6)	0	-	-	
PRLK594A0	112.1	168	-	0 (1)	0 (3)	0	-	-	

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.

#### Control Kit

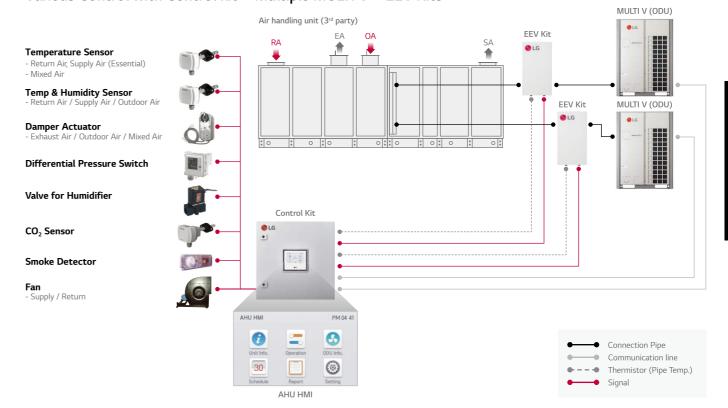
List	Required Item			
Heating / Cooling	SA / RA temperature sensor (or SA / RA temperature & humidity sensor)			
Automatic Ventilation	SA / RA temperature, CO <sub>2</sub> sensor, Damper actuator (OA, EA, MA)			
Energy Saving (Cooling Mode Only)	SA temperature, OA / RA temp&humidity sensor, Damper actuator (OA, EA, MA)			
Humidification	SA temperature, RA temperature & humidity sensor, Humidifier			
Inverter Fan Control	SA / RA temperature, Static pressure sensor, Inverter driver for fan control			
Filter Alarm	Difference pressure sensor			
Smoke Detecting	Smoke detection sensor			

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

### Field Supplied Item

List	Required Specification	Apply Location
Temperature Sensor	- Power : AC 24V, Output signal : DC 0 ~ 10V - Temperature boundary : -50 ~ 50°C	- Apply to MA, SA, RA
Temperature & Humidity Sensor	- Power : AC 24V, Output signal : DC 0 ~ 10V - Temperature boundary : -40 ~ 70°C - Humidity boundary : 0 ~ 95% RH	- Apply to SA, RA, OA - Can not be applied to MA
Damper Actuator	- Power : AC 24V, In/Output signal : DC 0 ~ 10V - Rotation angle : 90°	- Apply to OA, EA, MA damper
Difference Pressure Sensor (for Filter)	- Power : AC 24V, Output signal : DC 0 ~ 10V - Boundary : 0 ~ 1,000Pa - Switch type : Relay Open / Close	- Apply to filter
Static Pressure Sensor	- Power : AC 24V, Output signal : DC 0 ~ 10V - Boundary : 0 ~ 1,000pa	- Apply to SA (for inverter control)
CO <sub>2</sub> Sensor	- Power : AC 24V, Output signal : DC 0 ~ 10V - Boundary : 0 ~ 2,000ppm	- Apply to RA duct
Smoke Detection Sensor	- Power : AC 24V, From : Contact point type	- Apply to RA duct

### Various Control with Control kit - Multiple MULTI V + EEV Kits



<sup>3.</sup> Expansion application kit compatibility is based on capacity index of the system, it may changed according to system design condition.

# **HOTEL APPLICATION**

# **Hotel Control Solution**



#### Hotel Proposal / Design





#### 2 contact point Input

• Operation On / Off

- Output
- Operation On / Off status

- Error alarm
- Set fan speed

# Modbus RTU(9,600bps) Input

#### Function

- Operation • Universal Input\*
- Indoor temperature • Error alarm
- · Set run mode Operation mode
- Set temperature (Fan / Heat / Cool) • Fan speed
  - (Low / Middle / High)

#### Output

- Operation On / Off status
- Error alarm
- \* Available from April 2020

#### 8 contact point Refrigerant leakage detector

#### • 6,000ppm

• Operation On / Off • Thermo On / Off



# PREMTB100

# Wired remote controller

• 4.3 inch color LCD

Air conditioner control

in conjunction with

check-in or check out

PACS5A000

AC Smart 5

PACP5A000

ACP 5

(BACnet IP, Modbus TCP)

(BACnet IP, Modbus TCP)

• BMS Integration

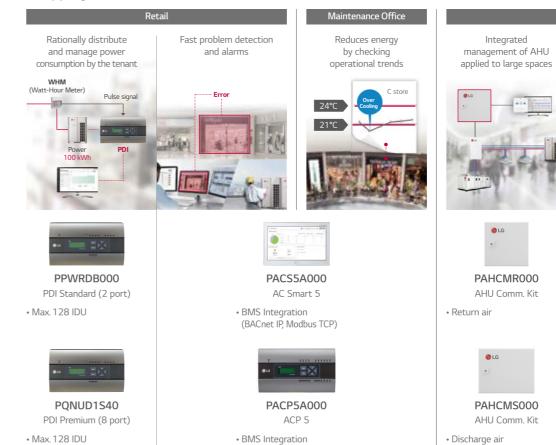
• BMS Integration

# **Shopping Mall Control Solution**



**SHOPPING MALL APPLICATION** 

#### **Shopping Mall Reference**



(BACnet IP, Modbus TCP)

Chiller and VRF

integrated control

PCHLLN000

Chiller option kit

PACP5A000

PACS5A000

AC Smart 5

Integrated

PAHCMR000

AHU Comm. Kit

PAHCMS000

AHU Comm. Kit

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# **HOSPITAL APPLICATION**

# **Hospital Control Solution**



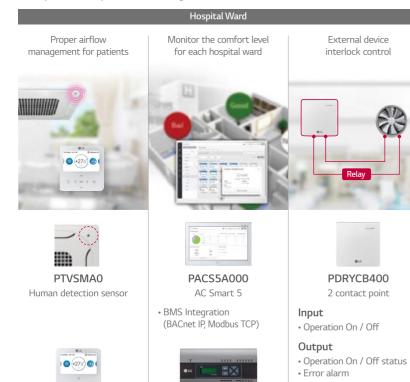
#### Hospital Proposal / Design

PREMTB100

Wired remote controller

• 4.3 inch color LCD

• Touch button



PACP5A000

ACP 5

(BACnet IP, Modbus TCP)

BMS Integration



# **EDUCATION APPLICATION**

# **Education Control Solution**



#### **Class Room**

Automatically save energy in the absence of students.



Central controls prevent students from arbitrary control.



#### **Lecture Room**

Schedule management according to academic plan.



#### **Maintenance Office**

Integrated management of distributed buildings.



Centralized management with multiple interfaces.



#### Education Proposal / Design









Human detection sensor



PREMTB100 Wired remote controller

- 4.3 inch color LCD



PACS5A000 AC Smart 5

 BMS Integration (BACnet IP, Modbus TCP)



PACP5A000 ACP 5

• BMS Integration (BACnet IP, Modbus TCP)







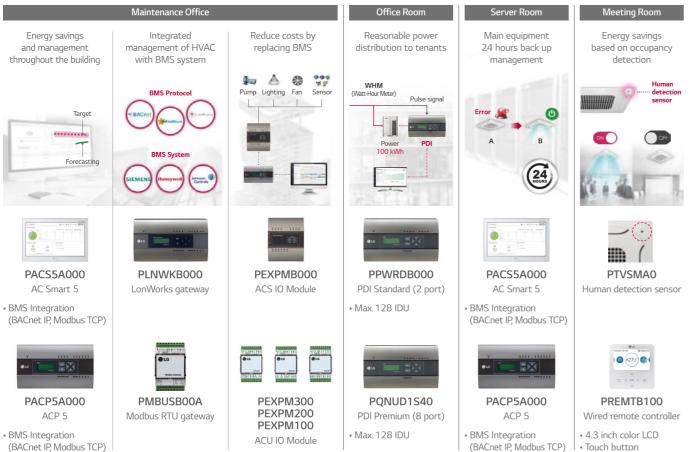
PACM5A000 AC Manager 5

# **OFFICE APPLICATION**

# Office Control Solution



#### Office Proposal / Design



# **RESIDENTIAL APPLICATION**

# **Residential Control Solution**



#### Residential Proposal / Design



Function

Operation

• Error alarm

• Indoor temperature

Set operation mode

· Set temperature

• Set fan speed

PDRYCB500

#### PWFMDD200 LG Wi-Fi modem Modbus RTU (9,600bps)

#### Function

- On / Off
- Fan speed
- Operation mode
- Vane control
- Reservation
- (Sleep, Weekly On / Off)

• Error check





thermostat

# 8 contact point

#### Input

- Universal Input\*
- Operation On / Off
- Thermo On / Off
- Operation mode
- (Fan / Heat / Cool)
- Fan speed
- (Low / Middle / High)

#### Output

- Operation On / Off status
- Error alarm
- \* Available from April 2020



operation when indoor unit power is lost





Independent power module

• EEV full close function





Simple interlocking

control by remote control

270

PREMTB100

Wired remote controller

• 4.3 inch color LCD

Touch button



ACCESSORIES 300 | 301

# **MECHANICAL ACCESSORIES**

# **Cassette Panel**

#### **Key Features**

Stylish designed panels make more unique space by various applications.

#### **Dual Vain Panel**



PT-AAGW0, PT-AFGW0 (Air Purify)

4 Way Cassette Panel



PT-QCHW0, PT-MCHW0 PT-MCGW0, PT-MPGW0 (Air Purify)

2 Way Cassette Panel



PT-USC

#### 1 Way Cassette Panel



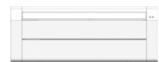
PT-TAHW0 / PT-UAHW0



PT-TPHG0 / PT-UPHG0 (Air Purify)



PT-UTC / PT-UUC / PT-UUC1



PT-UTD / PT-UUD

- Independent vane operation uses separate motors, making it Possible to control all 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.

#### Specification

							ension (	mm)		Applied r	nodel capaci	ity (kW)*	
Model		Suction Type	Color (RAL)	Gloss	Weight (kg)	w	н		MULTI V	Single	Split .	Multi	i Split
		.,,,,,	(/		(9)	VV	ı,	D	R410A	R32	R410A	R32	R410A
	PT-AAGW0	Grill	Noble White (RAL 9003)	-	7.1	950	35	950	1.6 ~ 14.5	-	-	-	-
Dual Vain	PT-AFGW0 (Air Purify)	Grill	Noble White (RAL 9003)	-	7.5	950	35	950	1.6 ~ 14.5	-	-	-	-
	PT-QCHW0	Grill	Morning Fog (RAL 9001)	-	3.0	620	35	620	1.6 ~ 6.2	2.5 ~ 5.0	2.5 ~ 5.0	1.5 ~ 5.3	1.5 ~ 5.3
	PT-MCHW0	Grill	Morning Fog (RAL 9001)	-	6.3	950	35	950	7.1 ~ 15.8	6.8 ~ 14.6	6.8 ~ 14.6	6.7	-
4 Way	PT-MCGW0	Grill	Morning Fog (RAL 9001)	-	5.0	950	35	950	7.1 ~ 15.8	6.8 ~ 14.6	6.8 ~ 14.6	6.7	6.7
	PT-MPGW0 (Air Purify)	Grill	Morning Fog (RAL 9001)	-	5.0	950	35	950	7.1 ~ 15.8	6.8 ~ 14.6	6.8 ~ 14.6	6.7	6.7
2 Way	PT-USC	Grill	Morning Fog (RAL 9001)	-	4.7	1,100	28	690	2.8 ~ 7.1	-	-	-	-
	PT-TAHW0	Grill	Ivory White	-	3.3	1,100	34	500	1.2 ~ 4.0			2.3 ~ 4.0	2.3 ~ 4.0
	PT-UAHW0	Grill	Ivory White	-	3.3	1,100	34	500	1.2 ~ 4.0			2.3 ~ 4.0	2.3 ~ 4.0
	PT-TPHG0	Grill	White	0	3.9	1,160	34	500	1.2 ~ 4.0			2.3 ~ 4.0	2.3 ~ 4.0
	PT-UPHG0	Grill	White	0	3.9	1,160	34	500	1.2 ~ 4.0			2.3 ~ 4.0	2.3 ~ 4.0
1 Way	PT-UTC	Grill	Noble White (RAL 9003)	0	5.5	1,420	34	500	5.6 ~ 7.1			-	-
	PT-UUC	Grill	Noble White (RAL 9003)	0	4.6	1,100	34	500	2.2 ~ 3.6			-	-
	PT-UUC1	Grill	Noble White (RAL 9003)	-	4.4	1,100	34	500	-			2.6 ~ 3.5	2.6 ~ 3.5
	PT-UTD	Panel	Noble White (RAL 9003)	0	5.5	1,420	34	500	5.6 ~ 7.1			-	-
	PT-UUD	Panel	Noble White (RAL 9003)	0	4.6	1,100	34	500	2.2 ~ 3.6			-	-

<sup>\*</sup> Based on cooling capacity. \* O : Applied, - : Not applied

# **Cassette Cover**

# **Key Features**

Cover in case of exposed cassette installation.





#### **Model Name**

PTDCM / PTDCQ

### **Applied Products**

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

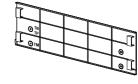
- Specially designed for indoor unit
- Covers the side area of cassette
- Gives elegant looks
- Light weight

### **Included Parts**

- Cover A, Cover B
- Cover C, Cover D
- Screws
- Installation Manual



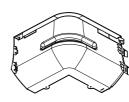
Cover A (4 units)



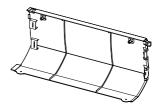
Cover B (4 units)



Screw (32 units)







Cover D (4 units)



Installation Manual

### Specification

Model	Front	Panel	Weigh	ıt (kg)	Dimensions (mm)			
wodet	Front	ranet	NET	Gross	w	Н	D	
PTROLL	PT-UMC /	TP / TN	5.9	8.8	1,157	1,157	268	
PTDCM	PT-UMC1	TM	5.9	8.8	1,157	1,157	310	
PTDCQ	DT LIOC	TR	5.0	7.2	907	907	268	
	PT-UQC	TQ	5.0	7.2	907	907	310	

# **MECHANICAL ACCESSORIES**

# CO<sub>2</sub> Sensor

### **Key Features**

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



#### Specification

• Applied Model: ERV (Embeded), ERV DX (Option)

• Supply voltage : DV12V ± 5%

• Output : 0.6 ~ 4.4V (Linear output, 240 ~ 1,760 ppm CO<sub>2</sub>)

• Accuracy : ± 10% (2 days after installation)

#### Description

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

#### Model Name

AHCS100H0

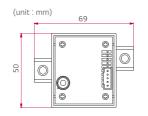
#### Applied products

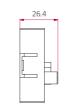
LZ-H025GBA4 LZ-H035GBA5 / LZ-H050GBA5 / LZ-H080GBA5 LZ-H100GBA5 / LZ-H150GBA5 / LZ-H200GBA5

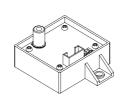
#### Applicable products

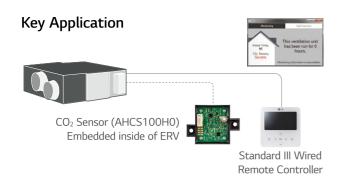
LZ-H050GXN0 / LZ-H080GXN0 / LZ-H100GXN0 LZ-H050GXH0 / LZ-H080GXH0 / LZ-H100GXH0

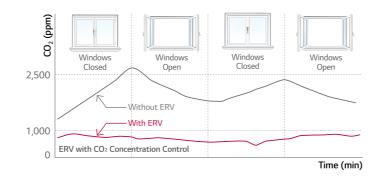
#### Dimensions











#### How to Intstall

- 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 filters (4).
- 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 CN-CO<sub>2</sub> port of PCB.

\* Airflow can be controlled by concentration of CO2, after setting automatic operation mode at remote controller. We use the screwdriver whose total length is less than 250mm

million.

We use the screwdriver whose total length is less than 250mm.

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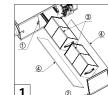
We use the screwdriver whose total length is less than 250mm.

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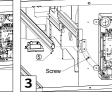
We use the screwdriver whose total length is less than 250mm.

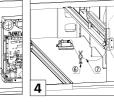
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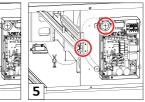
We use the screwdriver who is the

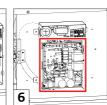












# **Refrigerant Leakage Detector**

# **Key Features**

R410A refrigerant leakage detector makes our space safer.



- This detector senses refrigerant leakage when the refrigerant concentration exceeds 6,000ppm.
- (The green and red LED lights blink simultaneously)
- · Alarm is "ON" over 6,000ppm has been maintained 5 seconds, and Alarm is "OFF" under 6,000ppm has been maintained 5 seconds.
- When the alarm of the refrigerant leak detector is switched on the user must ventilate 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.

#### **Model Name**

PRLDNVS0

#### **Applied Products**

MULTI V 5

MULTI V IV Heat Pump & Heat Recovery

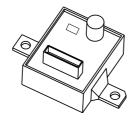
MULTI V Water IV

# Specification

Parts	Specifications	
	Rated voltage (V)	DC 5.0 ±5%
	Dimensions (W x H x D, mm)	31 x 44 x 20
	Weight (g)	22
Sensor	Detectable refrigerant	R410A
Selisur	Detected concentration (ppm)	0 / 6,000 Alarm Off / On
	Operating temperature range (°C)	-10 ~ 50
	Preserved temperature range (°C)	-40 ~ 60
	Average power consumption (mA)	35
Connecting Cable	Cable length (m)	10
Sensor Protective	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 5, MULTI V IV H/P, H/R model)

#### **Included Parts**



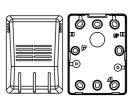
Sensor





Connecting Cable

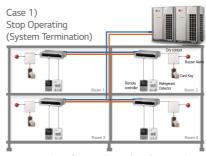
Case 2)



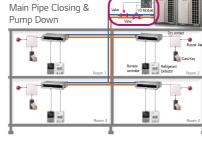
Sensor Protective Cover

#### **Key Application**

Refrigerant Leakage Detector has three application methods.



Accessory Specification (To realize the case 2 application)





(Refrigerant leak detector)

I/O Module

PVDSMN000

PRLDNVS0



[Optional / Field Supply] Automatic Ball Valve1



PDRYCB400 (Dry contact)



Buzzer alarm

for central control room (Direct connection ~ DC 30V, ~ 1A)



Case 3)

Branch Pipe Closing &

Continuous Operating



[Field Supply] Buzzer alarm for room



Central Control Devices

# **MECHANICAL ACCESSORIES**

# **EEV Kit**

### **Key Features**

MULTI V EEV KIT is specially designed to reduce noise and make comfort environment.



• Decreasing noise level of MULTI V Indoor units and easy installation.

#### Model Name

PRGK024A0

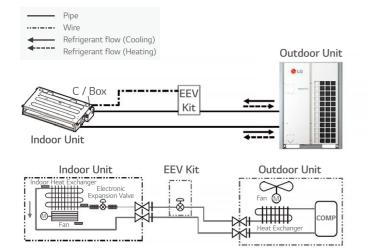
#### **Applied Products**

Indoor Unt	Model	Chassis	Applicable
	1 Way Cassette	TU	0
	2 Way	TT	N/A
	Cassette	TS	O(~5.6kW)
Cassette		TR	0
	4 10/01/	TQ	O(~4.5kW)
	4 Way Cassette	TP	N/A
	Cussette	TN	N/A
		TM	-
		BG	-
	High Sensible	BR	-
		B8	-
	High Static	B8	-
Duct		M1	O(~5.6kW)
Duct	Middle Static	M2	-
		M3	-
		L1	0
	Low Static	L2	-
		L3	-

Indoor Unt	Model	Chassis	Applicable	
	Floor	CE	0	
	Standing	CF	-	
	Convertible	VE	0	
	Ceiling	V1	-	
	Suspended	V2	-	
Et.	Wall Mounted	SJ	0	
Etc		SK	0	
		SV	-	
	Art Cool	SF	0	
	Console	QA	0	
	LIVDDO I/IT	K2	-	
	HTDRU KII	К3	-	
HYDRO KIT K3 -				

※ ○: Applied, -: Not applied, N/A: Not Applicable

#### **Key Application**



EEV Kit can be applied for the space which requires qutie and nosie-sensitive.

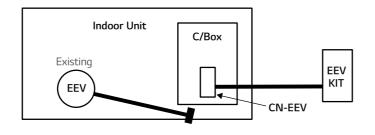


Note: If you don't use EEV of same specification, Cooling (Heating) capacity could be decreased.

#### 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.



# **IR Receiver**

# **Key Features**

IR RECEIVER can be connected to ceiling concealed duct and floor standing unit which the customer wants to control by wireless remote controller.



- · Designed for wireless control.
- Indication lamps (3 colors) and Self-diagnosis function.

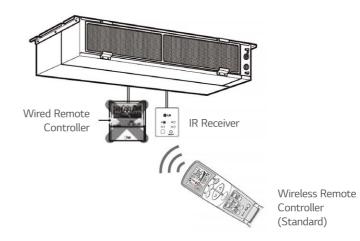
#### **Model Name**

PWLRVN000

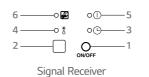
#### **Applied Products**

MULTI V Indoors (Ceiling Concealed Duct, Floor Standing Units)

# **Key Application**

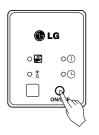






#### Operation of Indication Lamps

- 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 controller.
- 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.
- ⑤ Filter Sign lamp (Green): Lights up after 2,400 hours from the time of first power on operation.



#### Test Run Mode

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.

Note: Do not install both the IR Receiver and Wired Remote Controller This may cause malfunctions.

# **MECHANICAL ACCESSORIES**

# **Independent Power Module**

### **Key Features**

EEV fully close function in case of power cut.



- Independent Power Module is specially designed to close the Indoor EEV when power cut-off.
- Supply Voltage : DC 12V  $\pm$  50%

#### **Model Name**

PRIP0

#### **Applied Products**

MULTI V Indoor Units

# **Included Parts**

Model		PRIP0	
Item	Independent Power Kit	Screw	Clamp (Tie Wrap)
Q,ty	1	2	4
Figure		M4 x10	>

#### (Others)

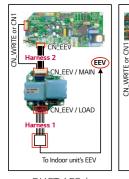
- Harness 1 (1m)
- Harness 2 (1m)
- Harness 3 (1m)
- Installation Manual
- Insulation (PE)

# **Key Application**

If the EEV is opened due to power cut off, liquid refrigerant flow into compressor which could damage the compressor in cooling mode. Also condensing might happened for unclosed EEV's Indoor unit due to flow of refrigerant.

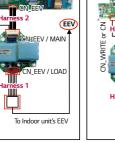


#### How to Install

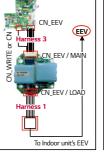


DUCT / FS / CVT / FAU

CST / Console / HYDRO KIT



onsole / Gen2 Wall Mounted / O KIT ARTCOOL



CN\_EEV / LOA

Harness 1

To Indoor unit's E

Gen4 Wall Mounted

- ① Turn the power off using circuit breaker. ② Disconnect the EEV cable of the indoor
- unit's PCB (CN-EEV)

  ③ Connect the independent power module (CN-EEV/LOAD) to the indoor unit's EEV,
- using harness 1.

  ④ Connect the independent power module
  (CN-EEV / MAIN) to the indoor unit's PCB

(CN-EEV / CN-WRITE), using harness 2 or 3.

- ⑤ Supply the power.
- \* FS : Floor Standing
- \* FAU : Fresh Air Intake Unit
- \* CST : Cass

# **Auxiliary Heater Relay Kit**

# **Key Features**

Providing an efficient way to add auxiliary heat.



- 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.

# Model Name

PRARS1

#### **Applied Products**

Wall Mounted, Art Cool Mirror, Art Cool Gallery

#### Model Name

PRARH1

### **Applied Products**

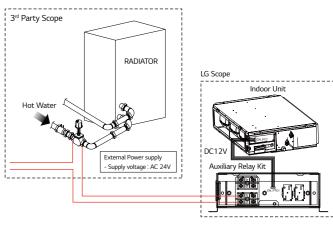
1,2,4 Way Ceiling Cassette, High Static Ducted, Low Static Ducted, Ceiling Suspended

#### **Included Parts**

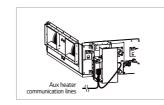
Model		PRARH	l1	
ltem	Auxiliary Heater Relay Kit	Screw	Insulation	Installation Manual
Q'ty	1	2	2	1
Figure		<b>(</b>		$\Diamond$

Model		PRARS1			
Item	Auxiliary Heater Relay Kit	Screw	Insulation	Installation Manual	
Q'ty	1	2	2	1	
Figure		₹0	<b>⋄</b>	$\Diamond$	

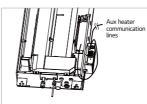
# **Key Application**



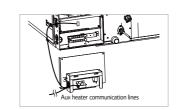
#### How to Install



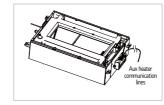
High Static Ducted



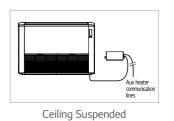
1 Way Cassette



Low Static Ducted



2 Way Cassette



ceiling Suspende



4 Way Cassette

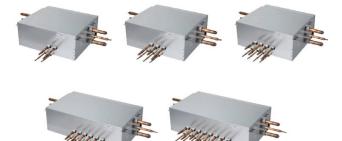
Wall mounted

ACCESSORIES 308 | 309

# **PIPING ACCESSORIES**

# **Heat Recovery Unit**

# **Key Features**



#### **Model Name**

PRHR023 (2 Branch Unit) PRHR033 (3 Branch Unit) PRHR043 (4 Branch Unit) PRHR063 (6 Branch Unit) PRHR083 (8 Branch Unit)

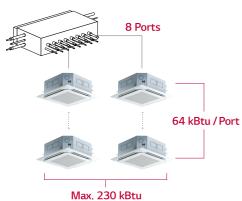
#### **Applied Products**

MULTI V 5 MULTI V IV MULTI V Water IV

- Max. 64 indoor units can be connected. (Max. 8 indoor units per branch)
- It is easy to install due to the automatic search algorithm for piping detection.
- Subcooling cycle in HR unit makes the system efficiency maximum.

#### **Connection Capacity**

Maximum number of connectable indoor units: 64 IDUs / HR unit (in case of 8 ports model)

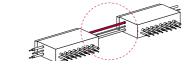


### Flexible Connection

Series connection can be installed without pipes crossing.

New



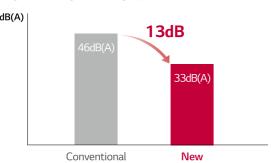


Considering the direction for Indoor units and SVC port, connection for reverse direction makes much easier.



#### Reduce Noise

Heating → Cooling switching operation



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

#### **Included Parts**

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

### Specification

Model				PRHR023	PRHR033	PRHR043	PRHR063	PRHR083
Number of Branch	h		EA	2	3	4	6	8
Maximum Connec (Per branch / unit	ctable Capacity of Indo	oor Units	kW	17.5/35	17.5/52.5	17.5/69.5	17.5/69.5	17.5/69.5
Maximum Numbe	r of Connectable Indo	or units per Branch	EA	8	8	8	8	8
N II	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 Unit	Liquid	mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
	indoor Unit	Gas	mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Piping Connections		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 (11/8)	28.58 (11/8)	28.58 (11/8)	28.58 (11/8)
		High Pressure	mm (inch)	19.05 (3/4)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)	22.2 (7/8)
Power supply			Ø, V, Hz	1, 220-240, 50 1, 220, 60				

#### Reducers for Indoor Unit and HR Unit

(Unit:mm)

Model		Liquid	High Pressure	Low Pressure
Indoor Unit Reducer		00952 Ø635		OD15.88 Ø12.7
UD beit De de co	PRHR023	OD9.52 Ø6.35	OD19.05 Ø15.88 Ø12.7	OD22.2 Ø19.05 Ø15.88  OD15.88 Ø12.7
HR Unit Reducer	PRHR033 PRHR043 PRHR063 PRHR083	OD15.88 Ø127 Ø952	00222 Ø1905 Ø1588	OD28.58 0222 019.05  OD19.05 015.88

ACCESSORIES 310 | 311

# **PIPING ACCESSORIES**

# Y Branch and Headerbranch

# **Key Features**

For refrigerant distribution of indoor units



- 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.

#### Model Name

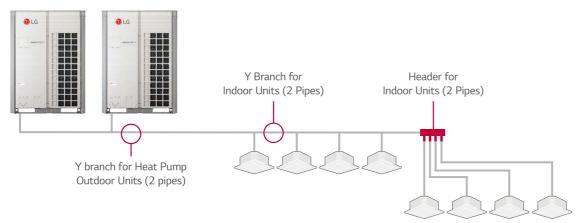
Refer to specifications

### **Applied Products**

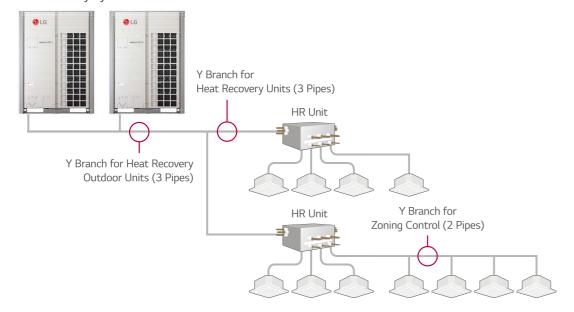
MULTI V 5 MULTI V IV MULTI V III, MULTI V Plus II, MULTI V Plus MULTI V S MULTI V Water IV MULTI V Water II

# **Key Application**

#### Heat Pump System



#### Heat Recovery System



#### Specification

Header Branch

R410A

(Unit:mm) ARBL054 Ø9.52 ARBL057 (7 Branch) ARBL104 OD28.58 22.2 ARBL107 (7 Branch) ARBL1010 ARBL2010 (10 Branch)

# Y Branch and Header Branch

# Specification

Heat Pump

R410A MULTI V 5, MULTI V IV, MULTI V III, MULTI V WATER IV, MULTI V WATER II

2 Outdoor Units

Model High Pressure Gas Pipe Liquid Pipe

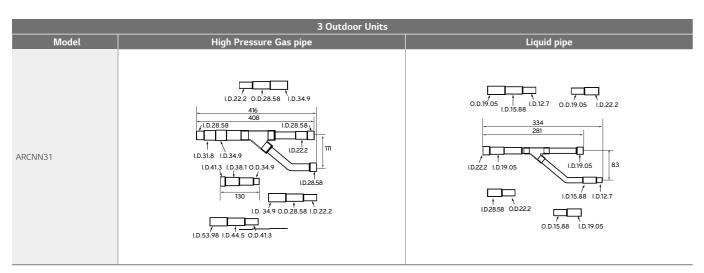
O.D. 222 I.D. 19.05

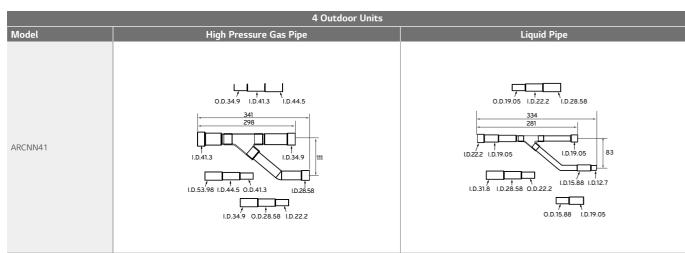
O.D. 28.8 I.D. 19.05

O.D. 28.58 I.D. 19.05

O.D. 28.58 I.D. 19.05

O.D. 22.2 I.D. 19.05





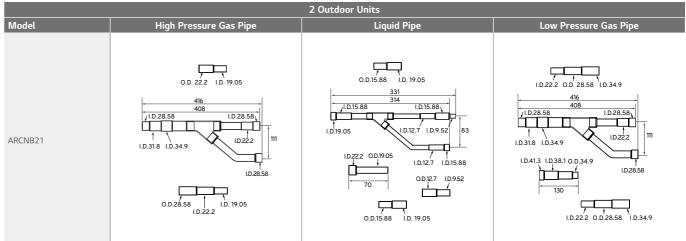
# Specification

Heat Recovery

R410A MULTI V 5, MULTI V IV HEAT RECOVERY, MULTI V III HEAT RECOVERY, MULTI V WATER IV HEAT RECOVERY,

MULTI V WATER II HEAT RECOVERY

(Unit:mm)



		3 Outdoor Units	
Model	High Pressure Gas Pipe	Liquid Pipe	Low Pressure Gas Pipe
ARCNB31	ID.222 OD.28.58 ID.34.9  416 408 ID.28.58	O.D.19.05 I.D.15.88 I.D.12.7 O.D.19.05 I.D.22.2  334 281 I.D.22.2 I.D.19.05 I.D.12.7 I.D.28.58 O.D.22.2 O.D.15.88 I.D.19.05	OD349 ID2858 I.D.41.3 O.D.34.9  OD349 ID2858 I.D.41.3 O.D.34.9  ID2858 I.D.41.3 O.D.34.9  ID2858 I.D.41.3 O.D.34.9

		4 Outdoor Units	
Model	High Pressure Gas Pipe	Liquid Pipe	Low Pressure Gas Pipe
ARCNB41	0.D.34.9 I.D.41.3 I.D.44.5  341 298 I.D.34.9 I.D.34.9 I.D.28.58 I.D.22.2	O.D.19.05 I.D.22.2 I.D.28.58  334 281 I.D.22.2 I.D.19.05 I.D.31.8 I.D.28.58 O.D.22.2 O.D.15.88 I.D.19.05	O.D.41.3 I.D.44.5 I.D.53.98  415 375 I.D.44.48 I.D.53.98 I.D.22.2 O.D.28.58 I.D.34.9

# Y Branch and Header Branch

# Specification

Heat Pump, Heat Recovery Zone Control

Treat ramp, rieut necovery zone contr

MULTI V 5, MULTI V IV, MULTI V III, MULTI V PLUS II, MULTI V PLUS, MULTI V S, MULTI V MINI, MULTI V SPACE II, MULTI V WATER IV, MULTI V WATER S, MULTI V WATER II

(Unit:mm)

Model	Gas Pipe	Liquid Pipe
ARBLN01621	ID15.88 ID15.88  ID15.88  ID15.88  ID15.88	D952 D635 D635 D635 D635
ARBLN03321	D1905 D1905 D1588 D1905 D127 D127 D127 D127 D127 D127 D127 D127	D952 D635  D952 D635

Model	Gas Pipe	Liquid Pipe
ARBLN07121	D12858	LD127 LD15.88 LD15.88 LD12.7 LD12.7 LD19.05 LD12.7 LD19.05 LD1
ARBLN14521	ID349 ID41.3 ID38.1 ID2858 ID349 ID222 ID15.88 ID15.88 ID15.88 ID15.88 ID22.2 ID15.88 ID15.88 ID22.2	LD15.88 LD19.05 LD22.2 LD15.88 LD22.2 LD15.88 OD19.05 LD15.88 OD19.05 LD15.88 LD15.88 LD9.52 CD12.7 LD6.35 LD12.7 LD9.52 LD9.52

Model	Gas Pipe	Liquid Pipe
ARBLN23220	D53 98	1D222 1D254  1D254 1D254  1D254 3  1D254  2 3 1D254  2 0D1905 1D127 0D127 1D6.35  1D5586

# Specification

Heat Recovery

R410A MULTI V 5, MULTI V IV HEAT RECOVERY, MULTI V III HEAT RECOVERY, MULTI V WATER IV HEAT RECOVERY,

MULTI V WATER II HEAT RECOVERY

			(Unit:mm)
Model	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. 9.52 ID. 6.35	10952 10952 10635 10635 10635	D1588  D1588  D1588  D1588
ARBLB03321	ID. 12.7 ID. 19.05	10952 10952 10635 10127 10635	102222 101905 101588 101905 10254 101905 10127
ARBLB07121	ID. 19.05 ID. 28.58 ID. 28.58 ID. 19.05 ID. 15.88 ID. 19.05 ID. 19.05 ID. 12.7 ID. 15.88 ID. 19.05 ID. 12.7	D127 D1588 D1588 D1588 D15905 D127 D127 D1588 D1588 D1588 D1588 D15905 D127 D15905 D15	1D18 1D18 1D122 1D1588 1D1905 1D1588 1D318 1D222 1D318 1D2258 1D222 1D258
ARBLB14521	ID. 28.58 ID. 28.58 ID. 28.58 ID. 28.58 ID. 28.58 ID. 25.54 ID. 28.58 ID. 25.24 ID. 12.7	1D19.05 1D1	10349 10413 10349 102458 10349 102458 10349 102458 10349 102458 10349 102458 10349 1
Model	High Pressure Gas Pipe	Liquid Pipe	Low Pressure Gas Pipe
ARBLB23220	1D349 1D413 1D3858 1D381 1D222 125 125 125 125 125 125 125 125 125	1D25.4 1D222 1D222 1D35.4 1D19.05 96 325 1D15.88 1D12.7 0D12.7 1D19.52 1D6.35 1D10.7 1D19.05 1	1D.53.98

# **Refrigerant Charging Kit**

### **Key Features**

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



#### 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.
- 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.

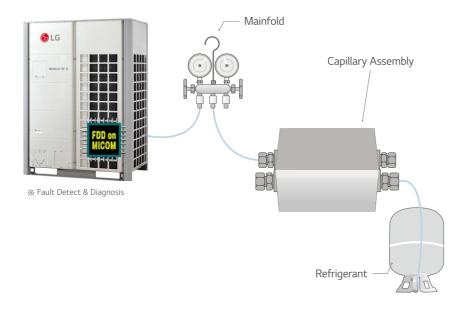
#### **Model Name**

PRAC1

#### **Applied Products**

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

# **Key Application**



# **Drain Hose**

### **Key Features**

Easy drain installation.



#### **Model Name**

PHDHA05T PHDHA05T PHDHA05B PHDHA07B

# **Applied Products**

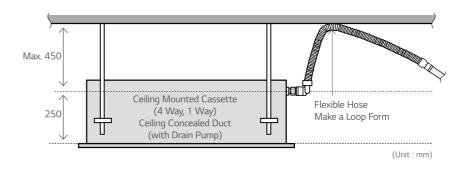
MULTI V Indoor units

#### **Key Features**

- 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

# **Stopper Valves**

# **Key Features**



#### **Model Name**

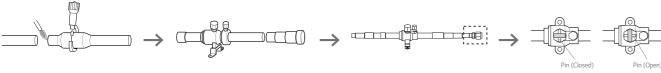
PRVT120 (Under 12.7mm) PMVT780 (Under 22.2mm) PMVT980 (Under 28.58mm)

- 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	Specification		
PRVT120	Input → Output(Indoor unit)  ID6.25 OD8.52 ID12.7 ID6.35		
PRVT780	Input → Output(Indoor unit)  ID15,88 ID19,05 ID22,2 ID19,05 ID15,88		
PRVT980	Input  Output(Indoor unit) ID28.58 ID28.58		

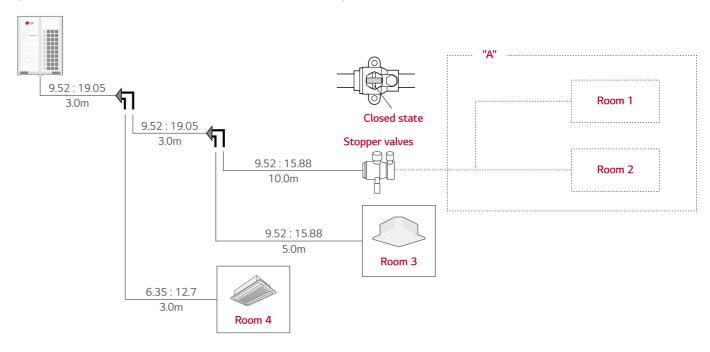
### How to Install



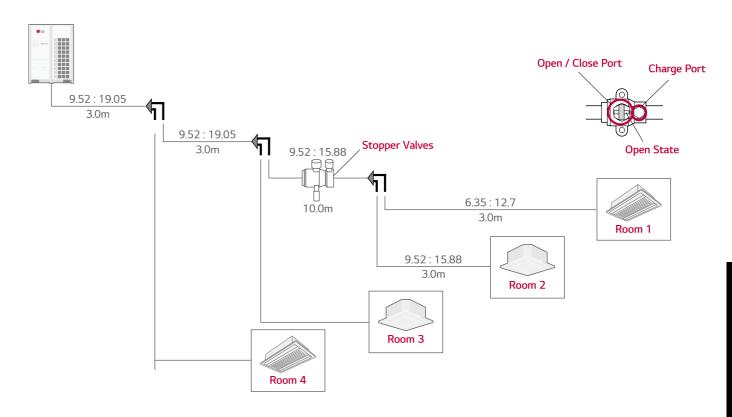
- 1. Cut the inlet side of the connector, and weld the pipe.
- If installing additional indoor units, the outlet side connector should be cut according to installation pipe.
- 3. When installing a stopper valve, the flare part should be facing towards additional indoor unit.
- When installing an additional indoor unit, the SVC valve should be in closed state.

### Application

(Room 3 & 4: in use / Room 1 & 2: need to install indoor units)



- 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.



 $<sup>\</sup>ensuremath{\mathbb{X}}$  When welding, service valve should be wrapped by wet cloth