

# OUTDOOR UNITS

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



# OCEAN BLACK FIN HEAT EXCHANGER

Strong durability regardless of external environment



## Ocean Black Fin

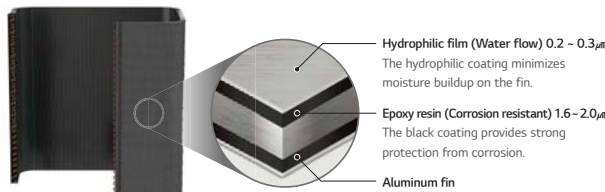
**What benefits do you offer?**

-  Extended Product Life Cycle
-  Minimal Environmental Pollution
-  Efficient Operation
-  Reduced Maintenance Costs







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.

## 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.

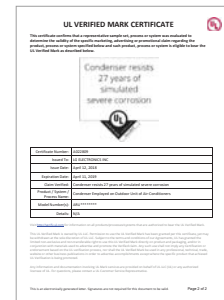


Condition of salt spray test

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

## Corrosion Resistance Proven by Certified Tests

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



\*Certificates can be updated.

\* Based on in-house testing.  
\* 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

Energy savings and optimized cooling through temperature and humidity control

**What benefits do you offer?**

-  Energy Reduction
-  Pleasant Indoor Environment
-  Convenient Monitoring with PREMTB100 / PREMTB10

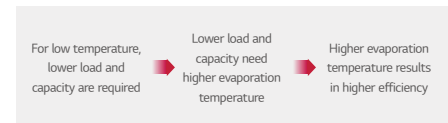
The cooling load is based on the amount of both sensible heat load and latent heat load. Most importantly, the cooling load is keen to, and thus, greatly affected by external humidity, rather than the outdoor temperature. For this reason, MULTI V 5's Dual Sensing Control applied function senses both 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.

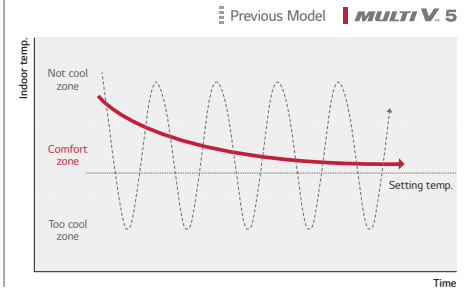
**ESEER Up to 21%** ↑  
(vs. standard mode at 26HP)

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



## 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's previously required to match the set temperature, users can experience more comfortable indoor environment.



OUTDOOR UNIT

INDOOR UNIT

HOT WATER

VENTILATION SOLUTION

CONTROL SOLUTION

ACCESSORIES

# BIOMIMETICS TECHNOLOGY FAN

Maximum capacity and efficiency

**10%** Improved Air Flow Rate

**20%** Reduce Power Consumption

**LARGE CAPACITY**  
(WITH BIOMIMETICS TECHNOLOGY)

What benefits do you offer?

- Large Capacity
- Low Noise
- Energy Saving

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



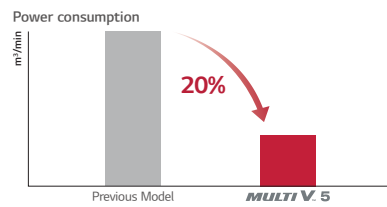
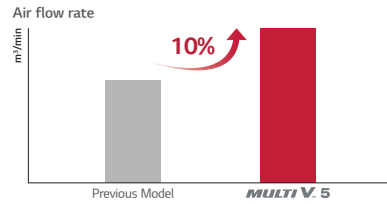
**1 Humpback Whale Design**  
Inspired by the bumps on the humpback whale's flipper, the tubercles on the back side increased wind power by reducing flapping.

**2 Clam Shell Pattern**  
Like the clam shell textures, the range difference created by moire pattern reduced noise level.

**3 Increased Air Flow Rate**  
With extended shroud, discharged air current is stabilized and power consumption is reduced.

## Enhanced Performance with Newly Developed Fan

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



# ULTIMATE INVERTER COMPRESSOR

The best durability and efficiency

**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

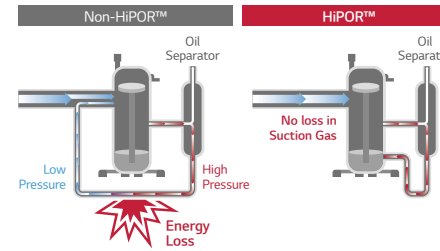
What benefits do you offer?

- High Efficiency
- Low Vibration
- Low Noise
- Excellent Durability

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.

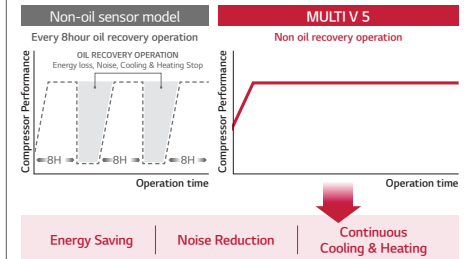
## HiPOR™ (High Pressure Oil Return)

Resolve compressor efficiency loss caused by oil return.



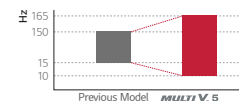
## Smart Oil Management

Compressor reliability and efficiency are improved with an oil sensor that allows oil balancing and oil return.



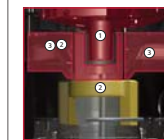
## Wide Operation Range from 10 to 165Hz

Wide operation range allows precise control. So improved part load efficiency at all operation ranges.



## Enhanced Bearing with PEEK Material

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



- ① Material : PEEK (Polyetheretherketone)  
Strong material used in airplanes
- ①-② Structure : New Outer Bearing
- ③ Supporter : High speed operation with reduction of bearing load and vibration

## Vapor Injection

Maximize heating capacity via two-stage compression



# CONTINUOUS HEATING

Efficient even in low-temperature, high-humidity environments

**CONTINUOUS HEATING**

**Dual Sensing Control** | **Partial Defrost** | **Smart Oil Management**

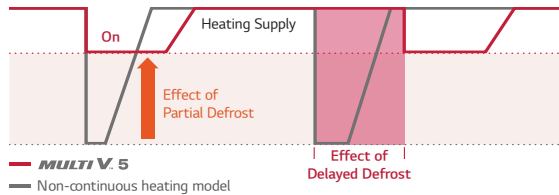
What benefits do you offer?

- Operational Efficiency
- Energy Reduction
- Effective in Various Environments

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.

## 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.



Heating Operation Time Per Day **Up to 11%**  
 Power Input **Down to 7%**

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

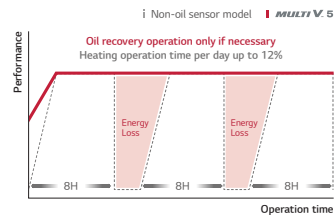
## Delayed Defrost via Humidity Sensor of Dual Sensing Control

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



## 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.



# AUTO DUST REMOVAL

Enhanced stability from environmental constraints

TROPICAL REGION

**Auto Dust Removal**

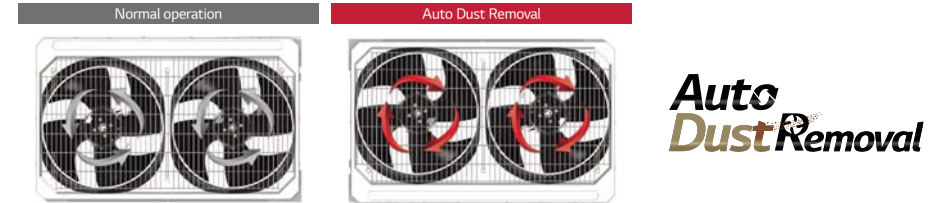
What benefits do you offer?

- Stable Operation
- Response to Certain Natural Environments
- Enhanced Durability
- Reduced Maintenance Costs

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

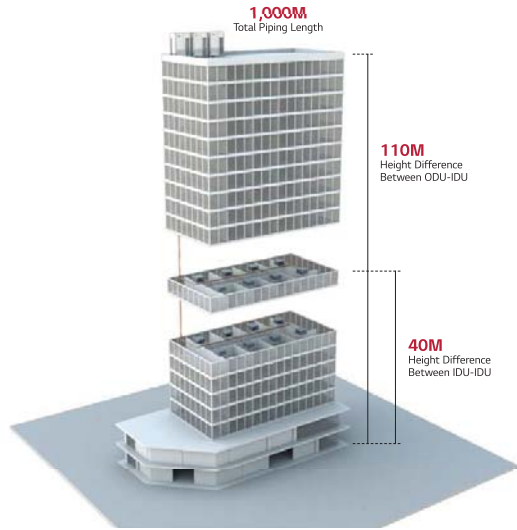


## Performance comparison



# MULTI V 5

## Piping Length



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

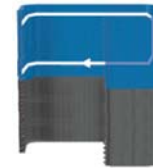
## Variable Path Heat Exchanger

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

## Active Refrigerant Control

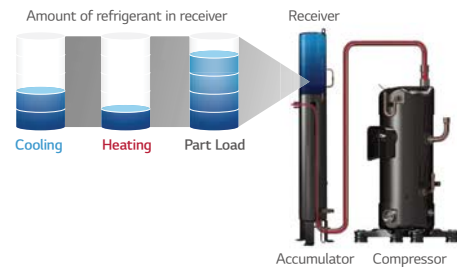
Stable operation & Sustaining most efficient operation

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.

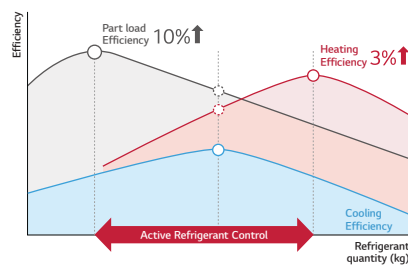
### What are the benefits?

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.

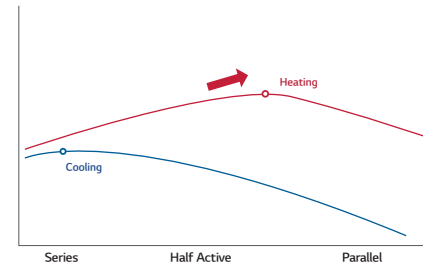
### Technology mechanism



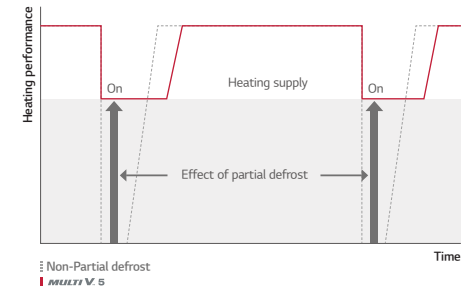
### Efficiency performance



### Efficiency



### Continuous Heating



# MULTI V 5

## Low-Noise Operation

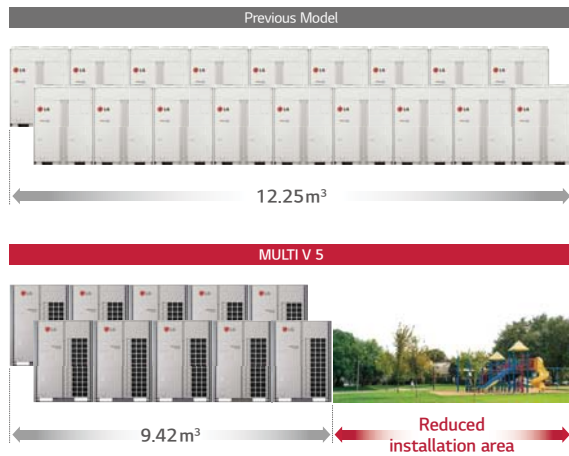
Unlike the previous model which enables Low-Noise Operation only during night after judgment time, the Low-Noise Operation of MULTI V 5 can function regardless of the time at the noise sensitive areas.



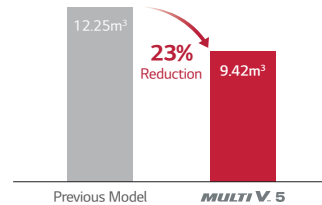
## Flexible Installation Space with Large Capacity Outdoor Units

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.

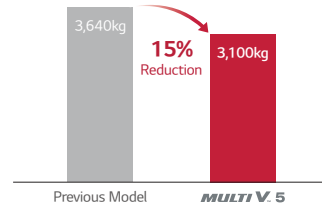
### Comparison on installation space



### Installation space area comparison



### Product weight comparison



## Dual Sensing SLC (Smart Load Control)

Enhanced energy saving & Increased indoor comfort

Even with same temperature, cooling load varies according to humidity. Because cooling load consists of two parts, temperature and humidity. In low humidity conditions, we will have less cooling load than in high humidity conditions. So, less work is needed to remove it. 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) Outdoor ambient relative humidity (when enabled)

### Cooling Indoor Units - adjusts target low pressure

Raises the target low pressure value as cooling load falls and/or ambient temperature falls.  
Lowers the target low pressure value as cooling load rises and/or ambient temperature rises.

### Heating Indoor Units - adjusts target high pressure

Lowers the target head pressure as heating load falls and/or ambient temperature rises.  
Raises the target head pressure as heating load rises and/or ambient temperature falls.

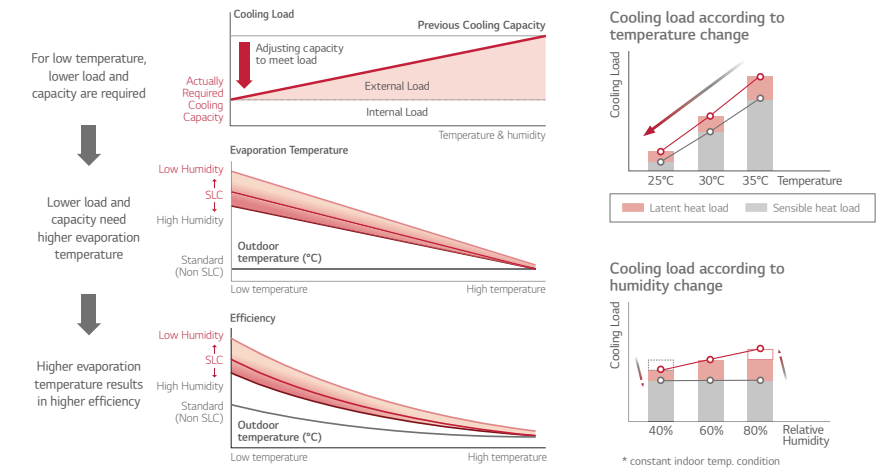
### What are the benefits?

#### Enhanced energy savings

- Cooling Mode : Raises the system target low pressure during off-peak operation. Raising the operating low pressure reduces compressor lift, slows compressor speed, and reduces compressor power consumption.
- Heating Mode : Lowers the system target high pressure during off-peak heating operation. Lowering the operating high pressure target reduces compressor lift, slows compressor speed, and reduces compressor power consumption.

#### Increased indoor comfort

Smart Load Control uses one (or two) sensors to measure changing outdoor weather conditions and prepares the VRF system for operation under the revised weather conditions before the changed conditions have a chance to impact indoor comfort.



# 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.

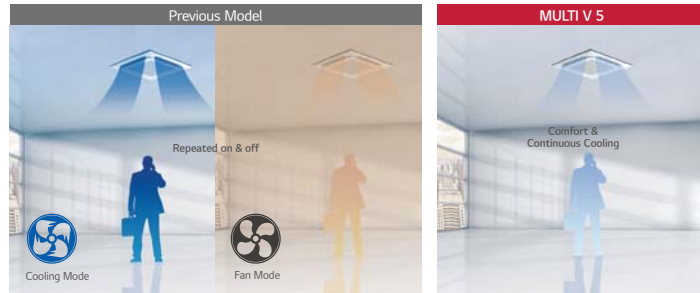
### What are the benefits?

#### Increased indoor comfort

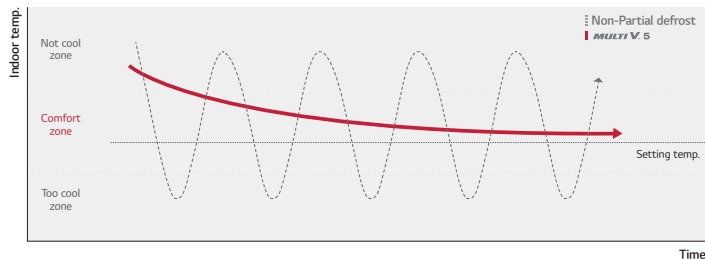
If comfort cooling is turned off, and the temperature of the leaving air is not raised, when the fan speed is reduced to low speed, there is a potential that occupants located directly under a cassette IDU or supply air registers could feel cold air falling on them resulting in a lower overall comfort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



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



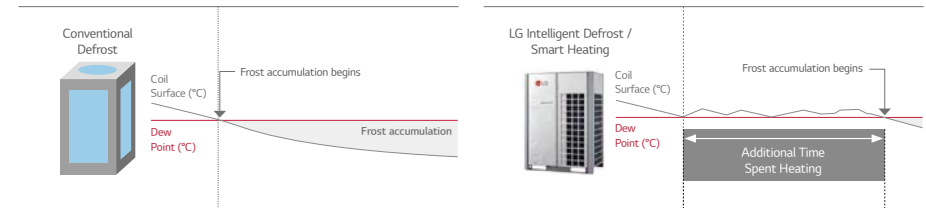
## Intelligent Defrost - Smart Heating

*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 Smart Heating 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

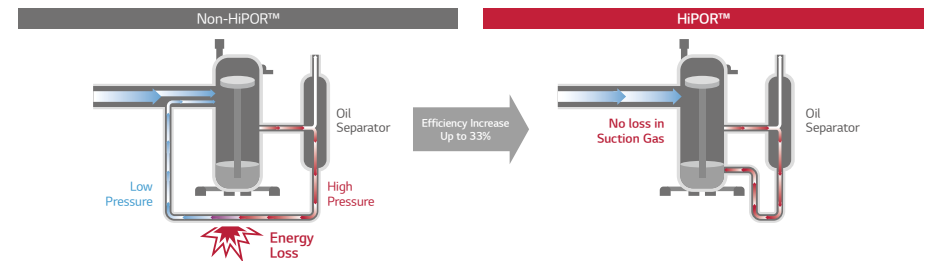
## HiPOR™

*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 waste 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

# MULTI V 5

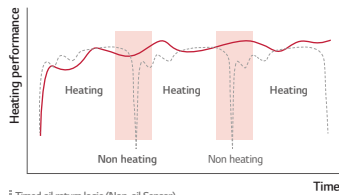
## Smart Oil Management

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.



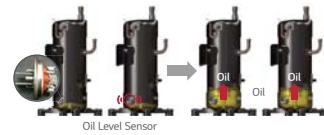
Timed oil return logic (Non\_oil Sensor)

**MULTI V 5**

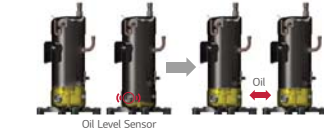
Increased heating operation time per day : Up to 12%

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

### Smart Oil Return



### Auto Oil Balancing



## Sub-cooling & Vapor Injection

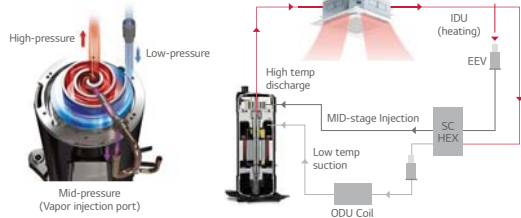
Increased heating performance

Multi V 5 is equipped with advanced sub-cooler and vapor injection control system. The sub-cooler algorithm sub-cools liquid refrigerant just enough so that it can travel to the farthest IDU in the system operating in cooling mode without changing state. During low ambient operation down to  $-25^{\circ}\text{C}$ , 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.

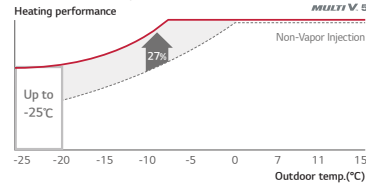
### What are the benefits?

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.

### Technology Mechanism



### Performance Comparison



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

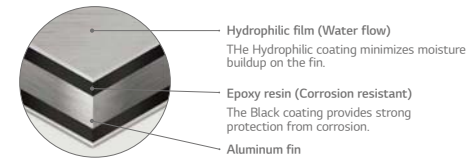
## Ocean Black Fin

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?

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.



### Condition of salt spray test

Temperature	35°C
Mist of 5% NaCl (mass fraction) solution	

### Condition of gas exposure test

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

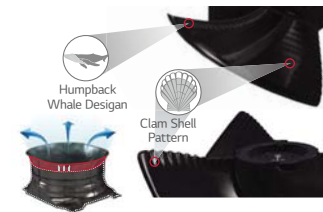
## Biomimetic Fan

Maximized performance

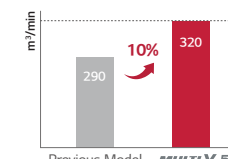
Multi V 5 outdoor units fans have been upgraded. The moire pattern from external texture of clam shells has been applied on fans to create the range difference that results in reduction of noise level. At the same time, unlike the fans installed in previous products that generate separation of flow due 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 flapping. 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 guide, 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.

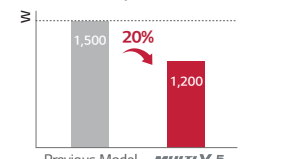


### Air flow rate



\* Comparison based on 20HP model

### Power consumption



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

# MULTI V 5

## One Unified Model

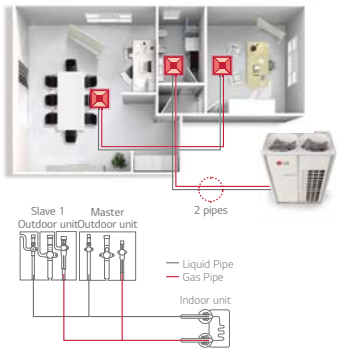
Heat pump / Heat recovery with one platform

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.

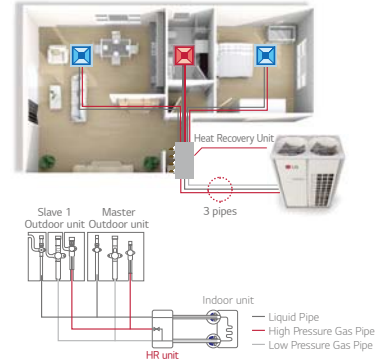
### What are the benefits?

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.

#### Heat Pump System



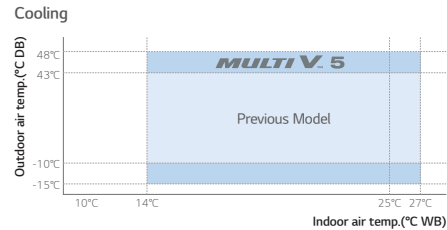
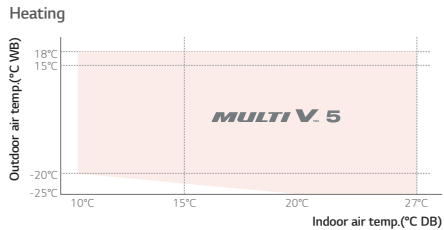
#### Heat Recovery System



## 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.



## Simple Test Run via LGMV

Increased overall efficiency in installation

In order to bring out performance to the 100% level, proper product test run is necessary. For previous product, professional engineer who is well-aware of more than 40 different functional settings and 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.

Previous



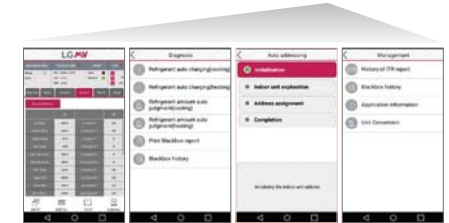
MULTI V 5



Wi-Fi MV Module



LGMV



Cycle Monitoring

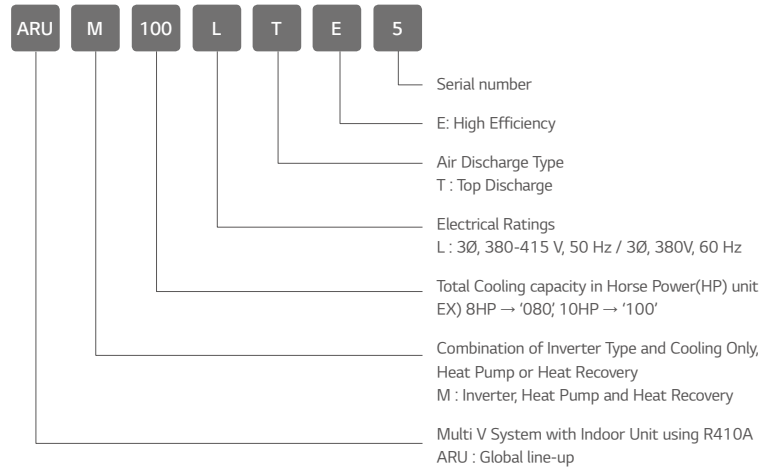
Diagnosis

Installation

Smart Management

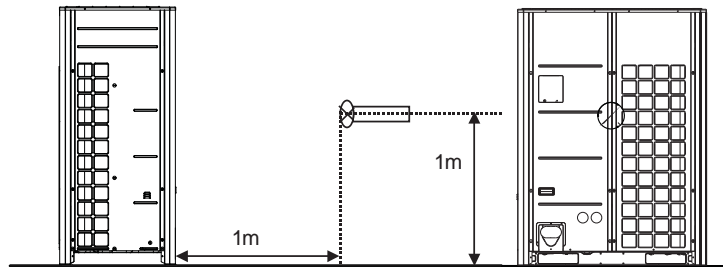
# MULTI V 5

## Nomenclature



## Position of Sound Pressure Level

- Data is valid at free field condition
- Data is valid at nominal operating condition
- 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
- Sound level can be increased in static pressure mode or used air guide.



## Outside Unit Function

Category	Functions	Multi V 5	
Key Refrigerant components	Variable Path of Outdoor unit HEX	o	
	HIPOR (High Pressure Oil Return)	o	
	Humidity sensor	o	
	Anti corrosion Black Fin	o	
Useful Function	Oil sensor	o	
	Dual sensing	o	
	Low noise operation	O	
	High static mode of outdoor unit fan	o	
	Partial defrosting	o	
	Auto dust cleaning of outdoor unit (Fan reverse rotation)	o	
	Indoor cooling comfort mode based outdoor temperature	o	
	Smart load control (SLC) (Changing indoor discharge air temperature according to load)	o	
	Outdoor unit control refer to humidity	o	
	Reliability	Defrost / Deicing	o
High pressure switch		o	
Phase protection		o	
Restart delay (3-minutes)		o	
Self diagnosis		o	
Soft start		o	
Central Controller	Test Run function	o	
	AC Ez (Simple Controller)	PQCSZ25050	
	AC Ez Touch	PACEZA000	
	AC Smart IV	PACS48000	
	AC Smart 5	PACSSA000	
	ACP(Advanced Control Platform) IV	PACP48000	
	ACP(Advanced Control Platform) 5	PACP5A000	
	AC Manager 5	PACMSA000	
	BNU (Building Network Unit)	ACP Lonworks	PLNMKB000
		ACP BACnet	PQNF17C0
Installation	Refrigerant Charging Kit	PRAC1	
	Variable Water Flow Valve Control Kit	x	
PDI (Power Distribution Indicator)	Standard	PPWRDB000	
	Premium	PQNUD1S40	
Cool / Heat Selector		PRDSBM	
Low Ambient Kit		PRVC2	
IO Module (ODU Dry Contact)		PVDSMN000	
Cycle Monitoring Device	LG MV	PRCTILO	
	Mobile LGMV	PLGMVV100	

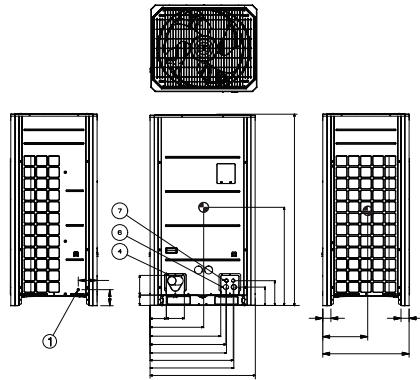
Notes  
 O: Product internal function, X: Not applied  
 Option: Refer to model name in table

# MULTI V 5

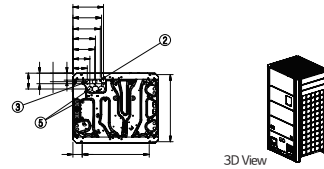
## Demension

ARUM080LTE5 / ARUM100LTE5 / ARUM120LTE5

[Unit : mm]

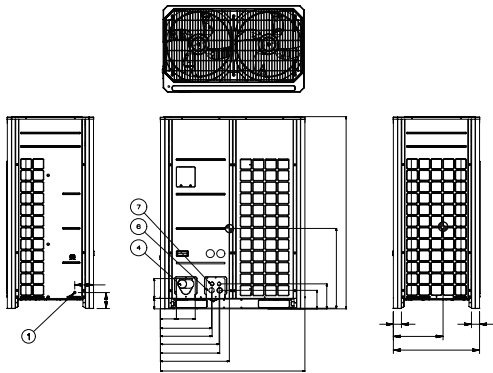


No.	Part Name	Description
1	Leakage test hole (side)	Ø 22.2
2	Wire routing hole (bottom)	2-Ø 22.2
3	Power cord routing hole (bottom)	2-Ø 50
4	Pipe routing hole (front)	-
5	Pipe routing hole (bottom)	2-Ø 66, Ø 53.88
6	Power cord routing hole (front)	2-Ø 45
7	Wire routing hole (front)	2-Ø 30

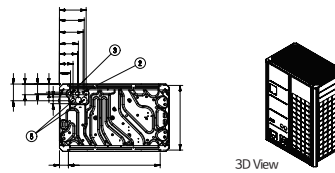


ARUM140LTE5 / ARUM160LTE5 / ARUM180LTE5 / ARUM200LTE5 / ARUM220LTE5 / ARUM240LTE5 / ARUM260LTE5

[Unit : mm]

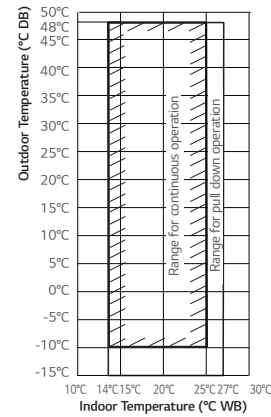


No.	Part Name	Description
1	Leakage test hole (side)	Ø 22.2
2	Wire routing hole (bottom)	2-Ø 22.2
3	Power cord routing hole (bottom)	2-Ø 50
4	Pipe routing hole (front)	-
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6	Power cord routing hole (front)	2-Ø 45
7	Wire routing hole (front)	2-Ø 30

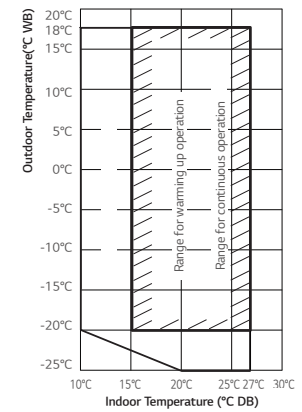


## Cooling / Heating Operation

### Cooling



### Heating

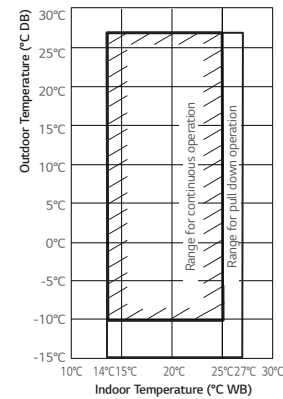


Note

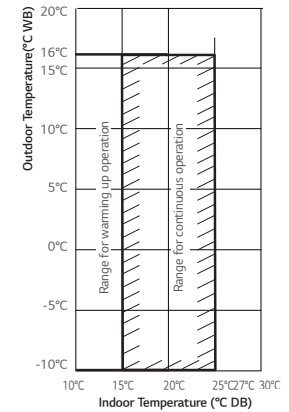
- These figures assume the following operating conditions : Equivalent piping length : 7.5m  
Level difference : 0m
- Range of pull down operation : If the relative humidity is too high, cooling capacity can be decreased by the sensible heat reduction.

## Simultaneous Cooling / Heating Operation

### Cooling



### Heating



Note

- These figures assume the following operating conditions : Equivalent piping length : 7.5m  
Level difference : 0m
- Range of pull down operation : If the relative humidity is too high, cooling capacity can be decreased by the sensible heat reduction.

# MULTI V 5

## Q1 What is the differences between Multi V 5 Function by region?

**A1** The portion of cooling operation hours at low humidity condition (below 50% RH) is big. The cooling load of this condition is less than the load at standard(50-70% RH) or high(over 70% RH) humidity condition even in the same outdoor air temperature. Multi V 5 raises the evaporating Temp. up at low load(low humidity) condition to enable energy saving and prevent over-cooling which can happen when the system is controlled only by using outdoor air Temp.

Category	Multi V IV H/P (ARUN***LTE4)	Multi V 5 H/P & H/R (ARUM***LTE5)	
Vapor Injection	○	○	
HiPOR™	○	○	
Smart Oil Control (Oil Level Sensor)	○	○	
Active Refrigerant Control	○	○	
Variable Heat Exchanger Circuit	○	○	
Continuous Heating	○	○	
Smart Load Control	○	○	
Dual sensing (humidity sensor)	X	○	
Comfort Cooling	○	○	
Ocean Black Fin	X	○	
Maximum Capacity (1 Unit / 4 Unit)	20 HP / 80 HP	26 HP / 96 HP	
Height Difference (ODU-IDU / IDU-IDU)	110m / 40m	110m / 40m	
Cooling Operating range(OAT, °CDB)	-10 - 43	-15 - 48	
Heating Operating range(OAT, °CWB)	-25 - 18	-25 - 18	
Combination ratio of IDU	1 Unit	50-200%	50-200%
	2 Unit	50-160%	50-160%
	3 or 4 Units	50-130%	50-130%

## Q2 Can MULTI V 5 ODU be connected with the 2 series indoor unit?

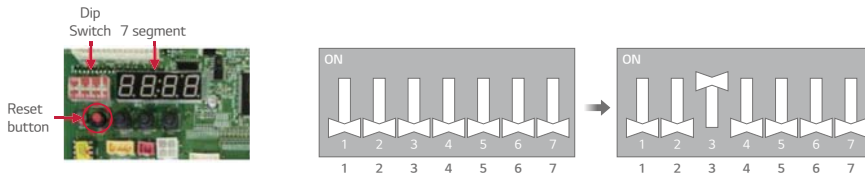
**A2** Yes, Multi V 5 ODU can be connected with the 2 series indoor unit. In this case, the ODU DIP Switch No.3 should be "OFF" which is default setting. Refer to the below table.

ODU	IDU	Compatibility	ODU DIP Switch No. 3	If dip switch setting is not correct	Ref.
Multi V IV Multi V 5	Gen. 2 (ARNU*2)	○	Must be OFF (factory default)	Can not communicate between Indoor & Outdoor unit (System will not be operated)	
	Gen. 4 (ARNU*4)	○	Must be ON to enable gen. 4 functions	When Dip Switch No. 3 is OFF, System can be operated, but some function of Gen. 4 is not available	
	Gen. 2 + Gen. 4	○	Must be OFF (factory default)	When Dip Switch No. 3 is ON, Can not communicate between Gen. 2 Indoor & Outdoor unit (Gen 2 units are not operated), only Gen 4 Units are operated.	Some function of Gen. 4 is not available

### ODU dip switch setting procedure (No.3)

ODU main PCB dip switch is all "OFF" at default state

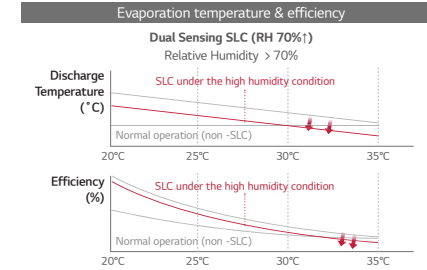
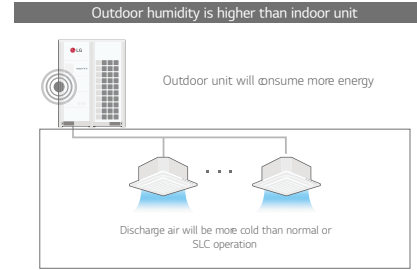
- (1) Check and make sure that all connected indoor units are 4 series. (ARNU\*\*\*\*\*4.)
- (2) Change Dip switch No. 3 from OFF → ON
- (3) Push the reset button.



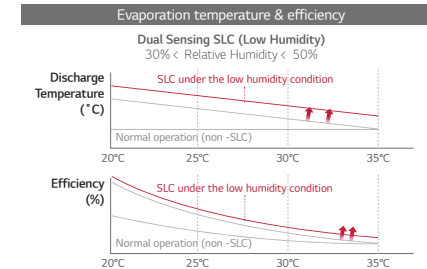
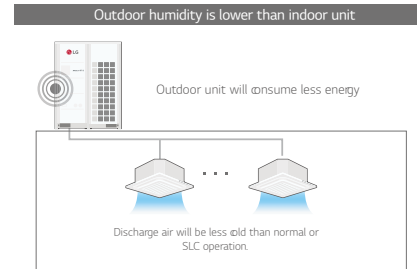
## Q3 What will be the issue during dual sensing SLC operation with outdoor humidity sensing?

**A3** As you know, during dual sensing SLC, outdoor unit changes target pressure of system referring to temperature and humidity in cooling mode.

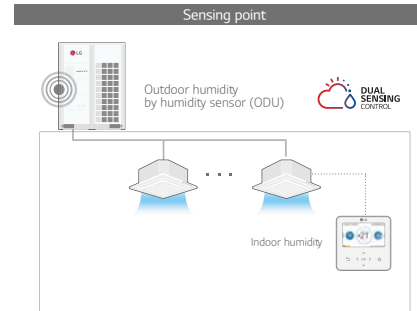
- When humidity of outdoor is higher than indoor unit, outdoor unit will lower target pressure to remove humidity, thus outdoor unit will consume more energy and indoor will be more cooled compared to SLC operation but more efficiency than normal operation



- When humidity of outdoor is lower than indoor unit, outdoor unit will rise target pressure to save energy and keep comfort, but indoor humidity will be less removed compared to normal operation.



To keep comfort and save energy you may turn off outdoor unit humidity sensing or propose to purchase new standard remote controller in order to sensing indoor humidity.



### SLC Setting

**CASE 1. Dual Sensing SLC with Outdoor humidity sensor in ODU Setting**

**Setting summary**  
DIP-SW01 #5 On  
Func > Fn14 > Off, op1-op3

**CASE 2. Dual Sensing SLC with Indoor humidity sensor in New Standard R/C setting (PREMTB100)**

**Setting summary**  
Function:  
Smart Load Control > Off, op1-op3

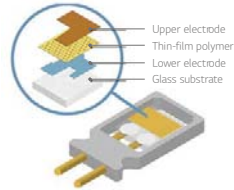
NOTE : User can turn off humidity control in ODU Setting (humidity reference)  
<Setting summary> ODU DIP-SW01 #5 On > Func > Fn16 > Off

# MULTI V 5

## Q4 What is the principle and accuracy of humidity sensor?

A4 Total Tolerance(%) = Sensor measurement tolerance(%) + Location of sensor tolerance(%)

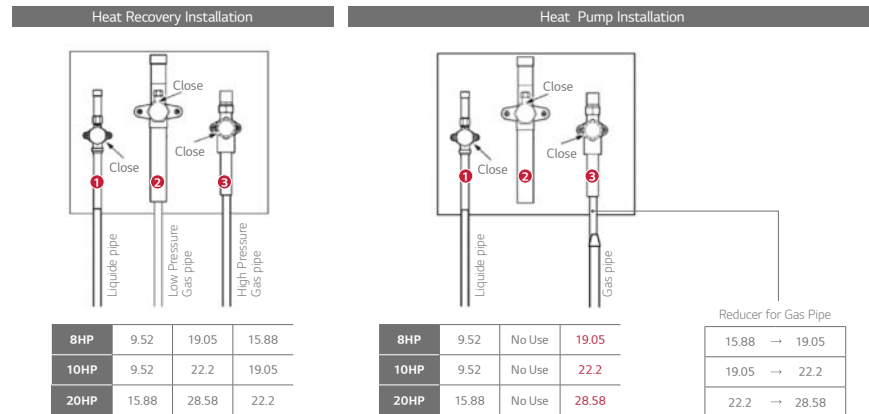
The capacitive measurement principle established and proved itself as a standard in the past. For this principle, the sensor element is built out of a capacitor. The dielectric is a polymer which absorbs or releases water proportional to the relative environmental humidity, and thus changes the capacitance of the capacitor. This change in capacitance can be measured by an electronic circuit. For humidity sensors with CMOSens® technology, a "micro-machined" finger electrode system with different protective and polymer cover layers forms the capacitance for the sensor chip, and, in addition to providing the sensor property, simultaneously protects the sensor from interference in ways previously not achieved.



Model	Humidity Sensor of Outdoor	Humidity Sensor of R/Controller
Size (mm)	3 x 3 x 1.1	2.5 x 2.5 x 0.9
Supply voltage range	2.1 to 3.6 V	2.4 to 5.5 V
RH operating range	0 - 100% RH	0 - 100% RH
T operating range	-40 to +125°C (-40 to +257°F)	-40 to +125°C (-40 to +257°F)
RH response time	8 sec (tau 63%)	8 sec (tau 63%)

## Q5 What is difference in refrigerant piping connection between MULTI V IV and MULTI V 5

A5 From MV 5, Low pressure gas pipe in heat pump operation changes to high pressure gas pipe in heat recovery operation due to internal cycle. So for heat pump cycle, no. 1, 3 pipe should be connected and for heat recovery operation, No. 1, 2, 3 pipe is connected. (For the heat pump operation, DO NOT connect No.2 pipe)



※ For using as Heat Pump, Reducer for Gas pipe should be used. Reducer is included in outdoor unit.

## Other Questions

Item	Question	Answer
Fan	The static pressure of Multi V 5 is Max. 8 mmAq as Multi V IV??	Yes, the static pressure of Multi V 5 is the same with Multi V IV.
Compressor	Is the limitation of Compressor max. Hz applied by the capacity of outdoor unit?	No, the limitation of comp Hz is not applied for default. But, it can be set by option for limitation of max Hz (or current).
4Way V/V	The usage of main & sub 4 way valve for Multi V 5 ?	Multi V 5 has the function of both H/P and H/R by one unit. Main valve has a function to change the operation mode. (cooling ↔ heating) Sub. Valve has a functions to change the product type (H/P ↔ H/R)
VI	In case of vapor injection, how much is the middle pressure?	The optimal middle pressure for vapor injection is 1.2 PS. PS : Suction pressure of compressor
VI	By how much is heating capacity increased by vapor injection?	Generally, the heating capacity is increased up to 15~20%.
Humidity Sensor	Where is Indoor Humidity sensor?	It is placed inside of the RS3 remote controller.
Remote Controller	Does remote controller show the humidity information (status) as well?	Yes. It shows the current humidity information on screen. (for RS3 Only) But has no function to control the humidity
Remote Controller	Is it possible to connect the local humidity sensor with Remote controller (RS3)?	No. All of RS3 remote controller can not be connected with local humidity sensor.
SLC	Does dual sensing SLC function control the humidity ratio?	No. There is no control of humidity ratio.
SLC	Is SLC fully used on Eurovent? Isn't humidity fixed for the test? What about AHRI?	Eurovent (RH 47%) and AHRI (RH 51%) have fixed humidity test condition.
Comfort Cooling	Why is not the comfort heating applied in product?	Comfort cooling need super heating controlled and Comfort heating need sub cooling controlled. In case of controlling EEV for sub cooling, noise and stable operation may be affected and critical.
Installation	Does the IDU - Central controller direct connection for communication cable is possible? (Flat connection)	No, it is not possible.

# MULTI V 5

## HIGH EFFICIENCY

ARUM080LTES / ARUM100LTES / ARUM120LTES / ARUM140LTES / ARUM160LTES



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

HP			8	10	12	14	16
Model Name	Combination Unit		ARUM080LTES	ARUM100LTES	ARUM120LTES	ARUM140LTES	ARUM160LTES
	Independent Unit		ARUM080LTES	ARUM100LTES	ARUM120LTES	ARUM140LTES	ARUM160LTES
Capacity	Cooling (Rated)	kW	22.4	28.0	33.6	39.2	44.8
	Heating (Rated)	kW	22.4	28.0	33.6	39.2	44.8
	Heating (Max)	kW	25.2	31.5	37.8	44.1	50.4
Input	Cooling (Rated)	kW	4.49	5.80	7.58	8.68	10.89
	Heating (Rated)	kW	3.97	4.92	6.85	8.13	10.28
	Heating (Max)	kW	4.78	5.92	8.26	9.72	12.39
EER			4.99	4.83	4.43	4.52	4.11
ESEER			8.41	8.13	7.47	7.33	6.59
ESFER (SLC)			9.46	9.15	8.60	8.26	7.79
COP	COP (Rated)		5.64	5.69	4.91	4.82	4.36
	COP (Max)		5.27	5.32	4.58	4.54	4.07
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output x Number	W x No.	4,200 x 1	5,300 x 1	5,300 x 1	5,300 x 1	5,300 x 1
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Air Flow Rate (High)	m <sup>3</sup> /min	240 x 1	240 x 1	240 x 1	320 x 1	320 x 1
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm(inch)	9.52(3/8)	9.52(3/8)	12.7(1/2)	12.7(1/2)	12.7(1/2)
Low Pressure Gas Pipe		mm(inch)	19.05(3/4)	22.2(7/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)
High Pressure Gas Pipe		mm(inch)	15.88(5/8)	19.05(3/4)	19.05(3/4)	22.2(7/8)	22.2(7/8)
Dimensions (W 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
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)	77.0	78.0	79.0	82.0	83.0
	Heating	dB(A)	78.0	79.0	80.0	84.0	85.0
Communication Cable	No. 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
Refrigerant	Precharged Amount in factory	kg	7.5	9.5	9.5	13.5	13.5
		lbs	16.5	20.9	20.9	29.8	29.8
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO <sub>2</sub> eq		15.7	19.8	19.8	28.2	28.2
Control	Electronic Expansion Valve		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
	Refrigerant Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
Refrigerant Oil	Charge	cc	3,900	3,900	3,900	3,900	3,900
	Power Supply	Ø, V, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
Number of maximum connectable indoor units			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
			13(20)	16(25)	20(30)	23(35)	26(40)

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

## HIGH EFFICIENCY

ARUM180LTES / ARUM200LTES / ARUM220LTES  
ARUM221LTES / ARUM240LTES



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

HP			18	20	22	22'	24
Model Name	Combination Unit		ARUM180LTES	ARUM200LTES	ARUM220LTES	ARUM221LTES	ARUM240LTES
	Independent Unit		ARUM180LTES	ARUM200LTES	ARUM220LTES	ARUM120LTES ARUM100LTES	ARUM240LTES
Capacity	Cooling (Rated)	kW	50.4	56.0	61.6	61.6	67.2
	Heating (Rated)	kW	50.4	56.0	61.6	61.6	67.2
	Heating (Max)	kW	56.7	63.0	69.3	69.3	74.3
Input	Cooling (Rated)	Btu/h	193,500	215,000	236,500	236,500	253,400
	Heating (Rated)	kW	10.91	12.77	15.70	15.70	17.40
	Heating (Max)	kW	10.12	12.20	14.15	11.8	15.89
EER			4.62	4.39	3.92	4.60	3.86
ESEER			7.40	7.03	6.68	7.76	6.57
ESFER (SLC)			8.11	7.70	7.87	8.84	8.05
COP	COP (Rated)		4.98	4.59	4.35	5.23	4.23
	COP (Max)		4.75	4.29	4.13	4.89	3.95
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin
Compressor	Motor Output 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
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Air Flow Rate (High)	m <sup>3</sup> /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)	
Low Pressure Gas Pipe		mm(inch)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	
High Pressure Gas Pipe		mm(inch)	22.2(7/8)	22.2(7/8)	28.58(1-1/8)	28.58(1-1/8)	
Dimensions (W x H x D)		mm	(1,240 x 1,690 x 760) 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 1 (930 x 1,690 x 760) x 1	(1,240 x 1,690 x 760) x 1
Net Weight		kg	300 x 1	300 x 1	300 x 1	(215 x 1) + (215 x 1)	310 x 1
Sound Pressure Level	Cooling	dB(A)	61.0	62.0	64.5	61.5	65.0
	Heating	dB(A)	62.0	64.5	65.5	62.5	67.0
Sound Power Level	Cooling	dB(A)	85.0	86.0	88.0	81.5	88.0
	Heating	dB(A)	86.0	87.0	88.0	82.5	90.0
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	2C x 1.0 - 1.5
	Refrigerant name		R410A	R410A	R410A	R410A	R410A
Refrigerant	Precharged Amount in factory	kg	16.0	16.0	19.0	19.0	17.0
		lbs	35.3	35.3	41.9	41.9	37.5
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO <sub>2</sub> eq		33.4	33.4	33.4	39.7	35.5
Control	Electronic Expansion Valve		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
	Refrigerant Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
Refrigerant Oil	Charge	cc	5,200	5,200	5,200	7,800	5,200
	Power Supply	Ø, V, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
Number of maximum connectable indoor units			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
			29(45)	32(50)	35(44)	35(44)	39(48)

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

# MULTI V 5

## HIGH EFFICIENCY

ARUM260LTES / ARUM241LTES / ARUM261LTES  
ARUM280LTES / ARUM300LTES



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

HP			24'	26	26'	28	30
Model Name	Combination Unit		ARUM241LTES	ARUM260LTES	ARUM261LTES	ARUM280LTES	ARUM300LTES
	Independent Unit		ARUM120LTES ARUM120LTES	ARUM260LTES	ARUM140LTES ARUM120LTES	ARUM160LTES ARUM120LTES	ARUM180LTES ARUM120LTES
Capacity	Cooling (Rated)	kW	67.2	72.8	72.8	78.4	84.0
	Heating (Rated)	kW	67.2	67.2	72.8	78.4	84.0
	Heating (Max)	kW	75.6	74.3	81.9	88.2	94.5
	Heating (Max)	Btu/h	257,900	253,400	279,400	300,900	322,400
Input	Cooling (Rated)	kW	15.2	20.20	16.3	18.5	20.2
	Heating (Rated)	kW	13.7	15.99	15.0	17.1	17.0
	Heating (Max)	kW	16.5	19.15	18.0	20.7	20.2
EER		4.43	3.60	4.48	4.24	4.54	
ESEER		7.47	6.34	7.39	6.94	7.43	
ESEER (SLC)		8.60	7.62	8.41	8.12	8.29	
COP	COP (Rated)		4.91	4.20	4.86	4.58	4.95
	COP (Max)		4.58	3.88	4.56	4.27	4.68
Casing Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	
Heat Exchanger		Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	
Compressor	Motor Output 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)
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Air Flow Rate (High)	m <sup>3</sup> /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 Gas Pipe		mm(inch)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)
High Pressure Gas Pipe		mm(inch)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)
Dimensions (W 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	(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 Pressure Level	Cooling	dB(A)	62.0	65.0	62.5	62.8	63.1
	Heating	dB(A)	63.0	67.0	63.5	63.8	64.1
Sound Power Level	Cooling	dB(A)	82.0	88.0	83.8	84.5	86.0
	Heating	dB(A)	83.0	90.0	85.5	86.2	87.0
Communication Cable		No. 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	Refrigerant name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	19.0	17.0	23.0	23.0	25.5
		lbs	41.9	37.5	50.7	50.7	56.2
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO <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 Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	7,800	5,200	7,800	7,800	9,100
Power Supply		Ø, V, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			39(48)	42(52)	42(52)	45(56)	49(60)

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

## HIGH EFFICIENCY

ARUM320LTES / ARUM340LTES / ARUM360LTES  
ARUM380LTES / ARUM400LTES



HP			32	34	36	38	40
Model Name	Combination Unit		ARUM320LTES	ARUM340LTES	ARUM360LTES	ARUM380LTES	ARUM400LTES
	Independent Unit		ARUM200LTES ARUM120LTES	ARUM220LTES ARUM120LTES	ARUM240LTES ARUM120LTES	ARUM240LTES ARUM140LTES	ARUM240LTES ARUM160LTES
Capacity	Cooling (Rated)	kW	89.6	95.2	100.8	106.4	112.0
	Heating (Rated)	kW	89.6	95.2	100.8	106.4	112.0
	Heating (Max)	kW	100.8	107.1	112.1	118.4	124.7
	Heating (Max)	Btu/h	343,900	365,400	382,300	403,800	425,300
Input	Cooling (Rated)	kW	20.4	23.3	25.0	26.1	28.3
	Heating (Rated)	kW	19.1	21.0	22.7	24.0	26.2
	Heating (Max)	kW	22.9	25.0	27.1	28.5	31.2
EER		4.40	4.09	4.04	4.08	3.96	
ESEER		7.19	6.94	6.85	6.83	6.58	
ESEER (SLC)		8.01	8.11	8.22	8.11	7.94	
COP	COP (Rated)		4.70	4.53	4.43	4.43	4.28
	COP (Max)		4.39	4.28	4.14	4.15	4.00
Casing Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	
Heat Exchanger		Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	
Compressor	Motor Output 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
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Air Flow Rate (High)	m <sup>3</sup> /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)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Low Pressure Gas Pipe		mm(inch)	34.9(1-3/8)	34.9(1-3/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
High Pressure Gas Pipe		mm(inch)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	34.9(1-3/8)	34.9(1-3/8)
Dimensions (W 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 x 1,690 x 760) x 2	(1,240 x 1,690 x 760) x 2
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 Pressure Level	Cooling	dB(A)	63.8	65.6	66.0	66.2	66.3
	Heating	dB(A)	65.8	66.6	67.8	68.0	68.1
Sound Power Level	Cooling	dB(A)	86.8	86.8	88.5	89.0	89.2
	Heating	dB(A)	87.8	88.6	90.4	91.0	91.2
Communication Cable		No. 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	Refrigerant name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	25.5	25.5	26.5	30.5	30.5
		lbs	56.2	56.2	58.4	67.2	67.2
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO <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 Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	9,100	9,100	9,100	9,100	9,100
Power Supply		Ø, V, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			52(64)	55(64)	58(64)	61(64)	64

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

# MULTI V 5

## HIGH EFFICIENCY

ARUM420LTES / ARUM440LTES / ARUM460LTES  
ARUM480LTES / ARUM500LTES



HP			42	44	46	48	50
Model Name	Combination Unit		ARUM420LTES	ARUM440LTES	ARUM460LTES	ARUM480LTES	ARUM500LTES
	Independent Unit		ARUM240LTES ARUM180LTES	ARUM240LTES ARUM200LTES	ARUM240LTES ARUM220LTES	ARUM240LTES ARUM240LTES	ARUM240LTES ARUM140LTES ARUM120LTES
Capacity	Cooling (Rated)	kW	117.6	123.2	128.8	134.4	140.0
	Heating (Rated)	kW	117.6	123.2	128.8	134.4	140.0
	Heating (Max)	kW	131.0	137.3	143.6	148.5	156.2
Input	Cooling (Rated)	kW	28.3	30.2	33.1	34.8	33.7
	Heating (Rated)	kW	26.0	28.1	30.0	31.8	30.9
	Heating (Max)	kW	30.7	33.5	35.6	37.6	36.8
EER		4.15	4.08	3.89	3.86	4.16	
ESEER		6.90	6.77	6.62	6.57	6.97	
ESEER (SLC)		8.05	7.86	7.96	8.05	8.23	
COP	COP (Rated)		4.52	4.39	4.29	4.23	4.54
	COP (Max)		4.26	4.10	4.04	3.95	4.25
Casing Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	
Heat Exchanger		Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	
Compressor	Motor Output × Number	W × No.	(5,300 × 3) + (4,200 × 1)	(5,300 × 3) + (4,200 × 1)	(5,300 × 3) + (4,200 × 1)	5,300 × 4	5,300 × 4
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Air Flow Rate (High)	m <sup>3</sup> /min	320 × 2	320 × 2	320 × 2	320 × 2	(320 × 2) + (240 × 1)
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Low Pressure Gas Pipe		mm(inch)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
High Pressure Gas Pipe		mm(inch)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)
Dimensions (W × H × D)		mm	(1,240 × 1,690 × 760) × 2	(1,240 × 1,690 × 760) × 2	(1,240 × 1,690 × 760) × 2	(1,240 × 1,690 × 760) × 2	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1
Net Weight		kg	(310 × 1) + (300 × 1)	(310 × 1) + (300 × 1)	(310 × 1) + (300 × 1)	310 × 2	(310 × 1) + (237 × 1) + (215 × 1)
Sound Pressure Level	Cooling	dB(A)	66.5	66.8	67.8	68.0	67.0
	Heating	dB(A)	68.2	68.9	69.3	70.0	68.6
Sound Power Level	Cooling	dB(A)	89.8	90.1	90.1	91.0	89.4
	Heating	dB(A)	91.5	91.8	92.1	93.0	91.3
Communication Cable		No. × mm <sup>2</sup> (VCTF-SB)	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	33.0	33.0	33.0	34.0	40.0
		lbs	72.8	72.8	72.8	75.0	88.2
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO <sub>2</sub> eq		68.9	68.9	68.9	71.0	83.5
Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	10,400	10,400	10,400	10,400	13,000
Power Supply	∅, V, Hz		380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			64	64	64	64	64

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

## HIGH EFFICIENCY

ARUM520LTES / ARUM540LTES / ARUM560LTES  
ARUM580LTES / ARUM600LTES



HP			52	54	56	58	60
Model Name	Combination Unit		ARUM520LTES	ARUM540LTES	ARUM560LTES	ARUM580LTES	ARUM600LTES
	Independent Unit		ARUM240LTES ARUM180LTES ARUM120LTES	ARUM240LTES ARUM180LTES ARUM120LTES	ARUM240LTES ARUM200LTES ARUM120LTES	ARUM240LTES ARUM220LTES ARUM120LTES	ARUM240LTES ARUM240LTES ARUM120LTES
Capacity	Cooling (Rated)	kW	145.6	151.2	156.8	162.4	168.0
	Heating (Rated)	kW	145.6	151.2	156.8	162.4	168.0
	Heating (Max)	kW	162.5	168.8	175.1	181.4	186.3
Input	Cooling (Rated)	kW	35.9	35.9	37.8	40.7	42.4
	Heating (Rated)	kW	33.0	32.9	34.9	36.9	38.6
	Heating (Max)	kW	39.4	39.0	41.7	43.8	45.9
EER		4.06	4.21	4.15	3.99	3.96	
ESEER		6.76	7.02	6.91	6.78	6.73	
ESEER (SLC)		8.08	8.17	8.01	8.08	8.15	
COP	COP (Rated)		4.41	4.60	4.49	4.40	4.35
	COP (Max)		4.12	4.33	4.19	4.14	4.06
Casing Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	
Heat Exchanger		Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	
Compressor	Motor Output × Number	W × No.	5,300 × 4	(5,300 × 4) + (4,200 × 1)	(5,300 × 4) + (4,200 × 1)	(5,300 × 4) + (4,200 × 1)	5,300 × 5
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Air Flow Rate (High)	m <sup>3</sup> /min	(320 × 2) + (240 × 1)	(320 × 2) + (240 × 1)	(320 × 2) + (240 × 1)	(320 × 2) + (240 × 1)	(320 × 2) + (240 × 1)
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Liquid Pipe		mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Low Pressure Gas Pipe		mm(inch)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
High Pressure Gas Pipe		mm(inch)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)
Dimensions (W × H × D)		mm	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1
Net Weight		kg	(310 × 1) + (237 × 1) + (215 × 1)	(310 × 1) + (300 × 1) + (215 × 1)	(310 × 1) + (300 × 1) + (215 × 1)	(310 × 1) + (300 × 1) + (215 × 1)	(310 × 2) + (215 × 1)
Sound Pressure Level	Cooling	dB(A)	67.1	67.2	67.4	68.3	68.5
	Heating	dB(A)	68.7	68.8	69.5	69.8	70.4
Sound Power Level	Cooling	dB(A)	89.6	90.1	90.4	90.4	91.3
	Heating	dB(A)	91.5	91.8	92.0	92.4	93.2
Communication Cable		No. × mm <sup>2</sup> (VCTF-SB)	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	40.0	42.5	42.5	42.5	43.5
		lbs	88.2	93.7	93.7	93.7	95.9
	GWP		2087.5	2087.5	2087.5	2087.5	2087.5
	t-CO <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 Valve	
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	13,000	14,300	14,300	14,300	14,300
Power Supply	∅, V, Hz		380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units			64	64	64	64	64

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

# MULTI V 5

## HIGH EFFICIENCY

ARUM620LTES / ARUM640LTES / ARUM660LTES  
ARUM680LTES / ARUM700LTES / ARUM720LTES



HP			62	64	66	68	70	72	
Model Name	Combination Unit		ARUM620LTES	ARUM640LTES	ARUM660LTES	ARUM680LTES	ARUM700LTES	ARUM720LTES	
	Independent Unit		ARUM240LTES ARUM240LTES ARUM140LTES	ARUM240LTES ARUM240LTES ARUM160LTES	ARUM240LTES ARUM240LTES ARUM180LTES	ARUM240LTES ARUM240LTES ARUM200LTES	ARUM240LTES ARUM240LTES ARUM220LTES	ARUM240LTES ARUM240LTES ARUM240LTES	
Capacity	Cooling (Rated)	kW	173.6	179.2	184.8	190.4	196.0	201.6	
	Heating (Rated)	kW	173.6	179.2	184.8	190.4	196.0	201.6	
	Heating (Max)	kW	192.6	198.9	205.2	211.5	217.8	222.8	
	Heating (Max)	Btu/h	657,200	678,700	700,200	721,700	743,200	760,100	
Input	Cooling (Rated)	kW	43.5	45.7	47.6	49.5	50.5	52.2	
	Heating (Rated)	kW	39.9	42.1	41.9	44.0	45.9	47.7	
	Heating (Max)	kW	47.3	50.0	49.5	52.3	54.4	56.4	
EER			3.99	3.92	4.04	4.00	3.88	3.86	
ESEER			6.73	6.58	6.78	6.70	6.60	6.57	
ESEER (SLC)			8.09	7.98	8.05	7.92	7.99	8.05	
COP	COP (Rated)			4.35	4.26	4.41	4.33	4.27	4.23
	COP (Max)			4.07	3.98	4.14	4.05	4.01	3.95
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	
Compressor	Motor Output 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	
	Type			Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	
Fan	Air Flow Rate (High)	m <sup>3</sup> /min	320 x 3	320 x 3	320 x 3	320 x 3	320 x 3	320 x 3	
	Drive			DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	
Liquid Pipe			22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	
Low Pressure Gas Pipe			44.5(1-3/4)	44.5(1-3/4)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	
High Pressure Gas Pipe			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 x 1,690 x 760) x 3	mm (1,240 x 1,690 x 760) x 3	mm (1,240 x 1,690 x 760) x 3	mm (1,240 x 1,690 x 760) x 3	mm (1,240 x 1,690 x 760) x 3	mm (1,240 x 1,690 x 760) x 3	
Net Weight			kg (310 x 2) + (237 x 1)	kg (310 x 2) + (237 x 1)	kg (310 x 2) + (300 x 1)	kg (310 x 2) + (300 x 1)	kg (310 x 2) + (300 x 1)	kg 310 x 3	
Sound Pressure Level	Cooling	dB(A)	68.6	68.7	68.8	69.0	69.6	69.8	
	Heating	dB(A)	70.5	70.6	70.6	71.1	71.3	71.8	
Sound Power Level	Cooling	dB(A)	91.5	91.6	92.0	92.2	92.2	92.8	
	Heating	dB(A)	93.5	93.6	93.8	94.0	94.2	94.8	
Communication Cable			No. x mm <sup>2</sup> (VCTF-SB) 2C x 1.0 - 1.5	No. x mm <sup>2</sup> (VCTF-SB) 2C x 1.0 - 1.5	No. x mm <sup>2</sup> (VCTF-SB) 2C x 1.0 - 1.5	No. x mm <sup>2</sup> (VCTF-SB) 2C x 1.0 - 1.5	No. x mm <sup>2</sup> (VCTF-SB) 2C x 1.0 - 1.5	No. x mm <sup>2</sup> (VCTF-SB) 2C x 1.0 - 1.5	
Refrigerant	Refrigerant name			R410A	R410A	R410A	R410A	R410A	
	Precharged Amount in factory	kg	47.5	47.5	50.0	50.0	50.0	51.0	
		lbs	104.7	104.7	110.2	110.2	110.2	112.4	
	GWP			2087.5	2087.5	2087.5	2087.5	2087.5	
	t-CO <sub>2</sub> eq			99.2	99.2	104.4	104.4	104.4	
	Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Refrigerant Oil	Type			FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	
	Charge	cc	14,300	14,300	15,600	15,600	15,600	15,600	
Power Supply	∅, V, Hz			380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	
				380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	
Number of maximum connectable indoor units			64	64	64	64	64	64	

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

## HIGH EFFICIENCY

ARUM740LTES / ARUM760LTES / ARUM780LTES  
ARUM800LTES / ARUM820LTES / ARUM840LTES



HP			74	76	78	80	82	84	
Model Name	Combination Unit		ARUM740LTES	ARUM760LTES	ARUM780LTES	ARUM800LTES	ARUM820LTES	ARUM840LTES	
	Independent Unit		ARUM240LTES ARUM240LTES ARUM140LTES ARUM120LTES	ARUM240LTES ARUM240LTES ARUM160LTES ARUM120LTES	ARUM240LTES ARUM240LTES ARUM180LTES ARUM120LTES	ARUM240LTES ARUM240LTES ARUM200LTES ARUM120LTES	ARUM240LTES ARUM240LTES ARUM220LTES ARUM120LTES	ARUM240LTES ARUM240LTES ARUM240LTES ARUM120LTES	
Capacity	Cooling (Rated)	kW	207.2	212.8	218.4	224.0	229.6	235.2	
	Heating (Rated)	kW	207.2	212.8	218.4	224.0	229.6	235.2	
	Heating (Max)	kW	230.4	236.7	243.0	249.3	255.6	260.6	
	Heating (Max)	Btu/h	786,200	807,700	829,200	850,700	872,100	889,100	
Input	Cooling (Rated)	kW	51.1	53.3	53.3	55.2	58.1	59.8	
	Heating (Rated)	kW	46.8	48.9	48.8	50.8	52.8	54.5	
	Heating (Max)	kW	55.6	58.2	57.8	60.5	62.6	64.7	
EER			4.06	3.99	4.10	4.06	3.95	3.93	
ESEER			6.84	6.70	6.88	6.80	6.72	6.69	
ESEER (SLC)			8.17	8.07	8.13	8.02	8.07	8.12	
COP	COP (Rated)			4.43	4.35	4.48	4.41	4.35	4.31
	COP (Max)			4.15	4.06	4.20	4.12	4.08	4.03
Casing Color			Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	
Heat Exchanger			Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	Ocean Black Fin	
Compressor	Motor Output 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	
	Type			Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan	
Fan	Air Flow Rate (High)	m <sup>3</sup> /min	(320 x 3) + (240 x 1)	(320 x 3) + (240 x 1)	(320 x 3) + (240 x 1)	(320 x 3) + (240 x 1)	(320 x 3) + (240 x 1)	(320 x 3) + (240 x 1)	
	Drive			DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	
Liquid Pipe			22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)	
Low Pressure Gas Pipe			53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	
High Pressure Gas Pipe			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 x 760) x 3 + (930 x 1,690 x 760) x 1	mm (1,240 x 1,690 x 760) x 3 + (930 x 1,690 x 760) x 1	mm (1,240 x 1,690 x 760) x 3 + (930 x 1,690 x 760) x 1	mm (1,240 x 1,690 x 760) x 3 + (930 x 1,690 x 760) x 1	mm (1,240 x 1,690 x 760) x 3 + (930 x 1,690 x 760) x 1	mm (1,240 x 1,690 x 760) x 3 + (930 x 1,690 x 760) x 1	
Net Weight			kg (310 x 2) + (237 x 1) + (215 x 1)	kg (310 x 2) + (237 x 1) + (215 x 1)	kg (310 x 2) + (300 x 1) + (215 x 1)	kg (310 x 2) + (300 x 1) + (215 x 1)	kg (310 x 2) + (300 x 1) + (215 x 1)	kg (310 x 3) + (215 x 1)	
Sound Pressure Level	Cooling	dB(A)	69.1	69.2	69.2	69.4	70.0	70.1	
	Heating	dB(A)	70.9	70.9	71.0	71.4	71.6	72.1	
Sound Power Level	Cooling	dB(A)	91.8	91.9	92.2	92.4	92.4	92.9	
	Heating	dB(A)	93.7	93.8	94.0	94.2	94.4	94.9	
Communication Cable			No. x mm <sup>2</sup> (VCTF-SB) 2C x 1.0 - 1.5	No. x mm <sup>2</sup> (VCTF-SB) 2C x 1.0 - 1.5	No. x mm <sup>2</sup> (VCTF-SB) 2C x 1.0 - 1.5	No. x mm <sup>2</sup> (VCTF-SB) 2C x 1.0 - 1.5	No. x mm <sup>2</sup> (VCTF-SB) 2C x 1.0 - 1.5	No. x mm <sup>2</sup> (VCTF-SB) 2C x 1.0 - 1.5	
Refrigerant	Refrigerant name			R410A	R410A	R410A	R410A	R410A	
	Precharged Amount in factory	kg	57.0	57.0	59.5	59.5	60.5		
		lbs	125.7	125.7	131.2	131.2	133.4		
	GWP			2087.5	2087.5	2087.5	2087.5	2087.5	
	t-CO <sub>2</sub> eq			119.0	119.0	124.2	124.2	126.3	
	Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Refrigerant Oil	Type			FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	
	Charge	cc	18,200	18,200	19,500	19,500	19,500		
Power Supply	∅, V, Hz			380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	
				380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60	
Number of maximum connectable indoor units			64	64	64	64	64	64	

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

# MULTI V 5

## HIGH EFFICIENCY

ARUM860LTE5 / ARUM880LTE5 / ARUM900LTE5  
ARUM920LTE5 / ARUM940LTE5 / ARUM960LTE5



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

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

## NOTES

- Eurovent Test Condition : For more info regarding program consult [www.eurovent-certification.com](http://www.eurovent-certification.com)
- Capacities are based on the following conditions :
  - Cooling Temperature : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB, Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
  - Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB, Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
  - Piping Length : Interconnected Pipe Length = 7.5m
  - Difference Limit of Elevation (Outdoor - Indoor Unit) is Zero.
- Wiring cable size must comply with the applicable local and national code.
- Sound Level Values can be increased owing to ambient conditions during operation.
- The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- 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%
- Due to our policy of innovation some specifications may be changed without notification.
- Power factor could vary less than 1% according to the operating conditions.
- This product contains Fluorinated greenhouse gases.

# MULTI V 5

## STANDARD

ARUN080LTE5 / ARUN100LTE5 / ARUN120LTE5 / ARUN140LTE5



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



HP			8	10	12	14
Model Name	Combination Unit		ARUN080LTE5	ARUN100LTE5	ARUN120LTE5	ARUN140LTE5
	Independent Unit		ARUN080LTE5	ARUN100LTE5	ARUN120LTE5	ARUN140LTE5
Capacity	Cooling (Rated)	kW	22.4	28.0	33.6	39.2
		Btu/h	76,400	95,500	114,600	133,800
	Heating (Rated)	kW	25.2	31.5	37.8	44.1
		Btu/h	86,000	107,500	129,000	150,500
Input	Cooling (Rated)	kW	4.59	5.70	7.91	9.12
		kW	4.74	5.78	8.06	9.78
	Heating (Rated)	kW	4.99	6.45	8.42	10.21
		kW	4.27	5.29	7.37	9.03
Input <sup>1)</sup>	Heating (Max)	kW	5.14	6.37	8.89	10.80
	EER (Rated)		4.88	4.91	4.25	4.30
	COP (Rated)		5.32	5.45	4.69	4.51
	EER <sup>1)</sup>		4.49	4.34	3.99	3.84
	ESEER		7.57	7.31	6.72	6.23
	ESEER (SLC)		8.51	8.23	7.74	7.03
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
	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 × Number	W × No.	5,300 × 1	5,300 × 1	5,300 × 1	5,300 × 1
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Motor Output × Number	W	1,200 × 1	1,200 × 1	1,200 × 1	900 × 2
	Air Flow Rate (High)	m <sup>3</sup> /min	240 × 1	240 × 1	240 × 1	320 × 1
		ft <sup>3</sup> /min	8,476 × 1	8,476 × 1	8,476 × 1	11,301 × 1
	External Static Pressure (Max, Pa)		80	80	80	80
Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	
Pipe Connections	Discharge	Side / Top	TOP	TOP	TOP	TOP
	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)
Dimensions (W × H × D)		mm	(930 × 1,690 × 760) × 1	(930 × 1,690 × 760) × 1	(930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1
Net Weight		kg	203 × 1	203 × 1	203 × 1	230 × 1
		lbs	448 × 1	448 × 1	448 × 1	507 × 1
Sound Pressure Level	Cooling	dB(A)	58.0	58.0	59.0	60.0
	Heating	dB(A)	59.0	59.0	60.0	61.0
Sound Power Level	Cooling	dB(A)	78.0	78.0	79.0	82.0
	Heating	dB(A)	79.0	79.0	80.0	84.0
Communication Cable		No. × mm <sup>2</sup> (VCTF-SB)	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	10.0	10.0	10.0	13.0
		lbs	22.0	22.0	22.0	28.7
	TCO <sub>eq</sub>		20.9	20.9	20.9	27.1
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units <sup>2)</sup>			13(20)	16(25)	20(30)	23(35)

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.
- Power factor could vary less than ±1% according to the operating conditions.
- 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.
- 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.
- The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)
- 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
Model Name	Combination Unit		ARUN160LTE5	ARUN180LTE5	ARUN200LTE5	ARUN220LTE5
	Independent Unit		ARUN160LTE5	ARUN180LTE5	ARUN200LTE5	ARUN220LTE5
Capacity	Cooling (Rated)	kW	44.8	50.4	56.0	61.6
		Btu/h	152,900	172,000	191,100	210,200
	Heating (Rated)	kW	50.4	56.7	63.0	69.3
		Btu/h	172,000	193,500	215,000	236,500
Input	Cooling (Rated)	kW	10.80	10.96	12.31	14.84
		kW	11.59	12.06	15.52	17.54
	Heating (Rated)	kW	12.80	12.82	15.01	18.44
		kW	11.43	11.25	13.56	15.71
Input <sup>1)</sup>	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 <sup>1)</sup>		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
Exterior	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	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 × Number	W × No.	5,300 × 1	5,300 × 1 + 4,200 × 1	5,300 × 2	5,300 × 2
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Motor Output × Number	W	900 × 2	900 × 2	900 × 2	900 × 2
	Air Flow Rate (High)	m <sup>3</sup> /min	320 × 1	320 × 1	320 × 1	320 × 1
		ft <sup>3</sup> /min	11,301 × 1	11,301 × 1	11,301 × 1	11,301 × 1
	External Static Pressure (Max, Pa)		80	80	80	80
Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER	
Pipe Connections	Discharge	Side / Top	TOP	TOP	TOP	TOP
	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)
Dimensions (W × H × D)		mm	(1,240 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1
Net Weight		kg	270 × 1	270 × 1	288 × 1	288 × 1
		lbs	597 × 1	595 × 1	635 × 1	635 × 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. × mm <sup>2</sup> (VCTF-SB)	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	13.0	14.0	14.0	14.0
		lbs	28.7	28.7	30.9	30.9
	TCO <sub>eq</sub>		27.1	27.1	29.2	29.2
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø, V, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units <sup>2)</sup>			26(40)	29(45)	32(50)	35(56)

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.
- Power factor could vary less than ±1% according to the operating conditions.
- 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.
- 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.
- The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)
- Eurovent test Condition

# MULTI V 5

## 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'
Model Name	Combination Unit		ARUN240LTE5	ARUN260LTE5	ARUN221LTE5	ARUN241LTE5
	Independent Unit		ARUN140LTE5	ARUN160LTE5	ARUN120LTE5 ARUN100LTE5	ARUN120LTE5 ARUN120LTE5
Capacity	Cooling (Rated)	kW	67.2	72.8	61.6	67.2
		Btu/h	229,300	248,400	210,100	229,200
	Heating (Rated)	kW	74.3	74.3	69.3	75.6
		Btu/h	253,400	253,400	236,500	258,000
Input	Cooling (Rated)	kW	16.76	19.41	13.60	15.81
	Heating (Rated)	kW	18.85	19.49	13.80	16.12
Input <sup>1)</sup>	Cooling (Rated)	kW	14.9	20.49	16.8	23.79
	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 <sup>1)</sup>		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
Exterior	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	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 × Number	W × No.	5,300 × 2	5,300 × 2	5,300 × 2	5,300 × 2
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output × Number	W	900 × 2	900 × 2	(1,200 × 1) + (1,200 × 1)	(1,200 × 1) + (1,200 × 1)
		m <sup>3</sup> /min	320 × 1	320 × 1	(240 × 1) + (240 × 1)	(240 × 1) + (240 × 1)
	Air Flow Rate (High)	ft <sup>3</sup> /min	11,301 × 1	11,301 × 1	(8,476 × 1) + (8,476 × 1)	(8,476 × 1) + (8,476 × 1)
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Pipe Connections	Discharge	Side / Top	TOP	TOP	TOP	TOP
	Liquid Pipe	mm(inch)	15.88(5/8)	19.05(3/4)	15.88(5/8)	15.88(5/8)
	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 × H × D)	mm	(1,240 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1	(930 × 1,690 × 760) × 2	(930 × 1,690 × 760) × 2	
Net Weight	kg	290 × 1	290 × 1	203 × 2	203 × 2	
	lbs	639 × 1	639 × 1	448 × 2	448 × 2	
Sound Pressure Level	Cooling	dB(A)	65.0	65.0	61.5	62.0
	Heating	dB(A)	67.0	67.0	62.5	63.0
Sound Power Level	Cooling	dB(A)	88.0	88.0	81.5	82.0
	Heating	dB(A)	90.0	90.0	82.5	83.0
Communication Cable	No. × mm <sup>2</sup> (VCTF-SB)		2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	16.0	16.0	10.0 + 10.0	10.0 + 10.0
		lbs	35.3	35.3	22.0 + 22.0	22.0 + 22.0
	TCO <sub>eq</sub>		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		380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units <sup>2)</sup>			39(61)	42(64)	35(44)	39(48)

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.
- Power factor could vary less than ±1% according to the operating conditions.
- 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.
- 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.
- The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- 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
Model Name	Combination Unit		ARUN261LTE5	ARUN280LTE5	ARUN300LTE5	ARUN320LTE5
	Independent Unit		ARUN140LTE5 ARUN120LTE5	ARUN160LTE5 ARUN120LTE5	ARUN180LTE5 ARUN120LTE5	ARUN200LTE5 ARUN120LTE5
Capacity	Cooling (Rated)	kW	72.8	78.4	84.0	89.6
		Btu/h	248,400	267,500	286,600	305,700
	Heating (Rated)	kW	81.9	88.2	94.5	100.8
		Btu/h	279,500	301,000	322,500	344,000
Input	Cooling (Rated)	kW	17.02	18.70	18.86	20.21
	Heating (Rated)	kW	17.84	19.65	20.12	23.58
Input <sup>1)</sup>	Cooling (Rated)	kW	18.6	21.2	21.2	23.4
	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 <sup>1)</sup>		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
Exterior	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	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 × Number	W × No.	5,300 × 2	5,300 × 2	(5,300 × 2) + (4,200 × 1)	(5,300 × 2) + (4,200 × 1)
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output × Number	W	(900 × 2) + (1,200 × 1)	(900 × 2) + (1,200 × 1)	(900 × 2) + (1,200 × 1)	(900 × 2) + (1,200 × 1)
		m <sup>3</sup> /min	(320 × 1) + (240 × 1)	(320 × 1) + (240 × 1)	(320 × 1) + (240 × 1)	(320 × 1) + (240 × 1)
	Air Flow Rate (High)	ft <sup>3</sup> /min	(11,301 × 1) + (8,476 × 1)	(11,301 × 1) + (8,476 × 1)	(11,301 × 1) + (8,476 × 1)	(11,301 × 1) + (8,476 × 1)
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Pipe Connections	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)
	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 × H × D)	mm	(1,240 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1	
Net Weight	kg	(230 × 1) + (203 × 1)	(230 × 1) + (203 × 1)	(270 × 1) + (203 × 1)	(288 × 1) + (203 × 1)	
	lbs	(507 × 1) + (448 × 1)	(507 × 1) + (448 × 1)	(595 × 1) + (448 × 1)	(635 × 1) + (448 × 1)	
Sound Pressure Level	Cooling	dB(A)	62.5	62.8	63.1	63.8
	Heating	dB(A)	63.5	63.8	64.1	65.8
Sound Power Level	Cooling	dB(A)	83.8	84.5	86.0	86.8
	Heating	dB(A)	85.5	86.2	87.0	87.8
Communication Cable	No. × mm <sup>2</sup> (VCTF-SB)		2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	13.0 + 10.0	13.0 + 10.0	13.0 + 10.0	14.0 + 10.0
		lbs	28.7 + 22.0	28.7 + 22.0	28.7 + 22.0	30.9 + 22.0
	TCO <sub>eq</sub>		48.0	48.0	48.0	50.1
Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Power Supply	Ø, V, Hz		380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units <sup>2)</sup>			42(52)	45(56)	49(60)	52(64)

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- 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.
- Power factor could vary less than ±1% according to the operating conditions.
- 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.
- 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.
- The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- This product contains Fluorinated greenhouse gases (R410A, GWP(Global warming potential) = 2087.5)
- Eurovent test Condition

# MULTI V 5

## STANDARD

ARUN340LTE5 / ARUN360LTE5 / ARUN380LTE5 / ARUN400LTE5



HP			34	36	38	40
Model Name	Combination Unit		ARUN340LTE5	ARUN360LTE5	ARUN380LTE5	ARUN400LTE5
	Independent Unit		ARUN220LTE5 ARUN120LTE5	ARUN240LTE5 ARUN120LTE5	ARUN240LTE5 ARUN140LTE5	ARUN240LTE5 ARUN160LTE5
Capacity	Cooling (Rated)	kW	95.2	100.8	106.4	112.0
		Btu/h	324,800	343,900	363,100	382,200
	Heating (Rated)	kW	107.1	112.1	118.4	124.7
		Btu/h	365,500	382,400	403,900	425,400
Input	Cooling (Rated)	kW	22.75	24.66	25.87	27.55
		kW	25.60	26.91	28.62	30.43
	Heating (Rated)	kW	26.9	28.9	30.7	33.3
		kW	23.1	25.0	26.7	29.1
Input <sup>1)</sup>	Cooling (Rated)	kW	27.5	29.8	31.7	34.6
		kW	4.18	4.09	4.11	4.06
	Heating (Rated)	kW	4.18	4.16	4.13	4.10
		kW	3.54	3.49	3.47	3.36
EER (Rated)	EER		6.01	5.92	5.80	5.59
			7.03	7.11	6.89	6.75
	ESEER		0.93	0.93	0.93	0.93
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
		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 × Number	W × No.	5,300 × 3	5,300 × 3	5,300 × 3	5,300 × 3
		Type	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output × Number	W	(900 × 2) + (1,200 × 1)	(900 × 2) + (1,200 × 1)	900 × 4	900 × 4
		m <sup>3</sup> /min	(320 × 1) + (240 × 1)	(320 × 1) + (240 × 1)	320 × 2	320 × 2
Fan	Air Flow Rate (High)	ft <sup>3</sup> /min	(11,301 × 1) + (8,476 × 1)	(11,301 × 1) + (8,476 × 1)	11,301 × 2	11,301 × 2
		External Static Pressure (Max, Pa)	80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
		Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	Liquid Pipe	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
		Gas Pipe	mm(inch)	34.9(1-3/8)	41.3(1-5/8)	41.3(1-5/8)
	Dimensions (W × H × D)	mm	(1,240 × 1,690 × 760) × 1 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 1 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2	(1,240 × 1,690 × 760) × 2
		kg	(288 × 1) + (203 × 1)	(290 × 1) + (203 × 1)	(290 × 1) + (230 × 1)	(290 × 1) + (230 × 1)
Net Weight	Cooling	lbs	(635 × 1) + (448 × 1)	(639 × 1) + (448 × 1)	(639 × 1) + (507 × 1)	(639 × 1) + (507 × 1)
		lbs	65.6	66.0	66.3	66.3
	Heating	lbs	66.6	67.8	68.0	68.1
		lbs	86.8	88.5	89.0	89.2
Sound Power Level	Cooling	dB(A)	88.6	90.4	91.0	91.2
		dB(A)				
	Heating	dB(A)				
		dB(A)				
Communication Cable	No. × mm <sup>2</sup> (VCTF-SB)		2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
	Refrigerant name		R410A	R410A	R410A	R410A
		Precharged Amount in factory	kg	14.0 + 10.0	16.0 + 10.0	16.0 + 13.0
Refrigerant	Precharged Amount in factory	lbs	30.9 + 22.0	35.3 + 22.0	35.3 + 28.7	35.3 + 28.7
		lbs	50.1	54.3	60.5	60.5
	TCO <sub>eq</sub>		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		380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units <sup>5)</sup>			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)  
 1) Eurovent test Condition

## STANDARD

ARUN420LTE5 / ARUN440LTE5 / ARUN460LTE5 / ARUN480LTE5



HP			42	44	46	48
Model Name	Combination Unit		ARUN420LTE5	ARUN440LTE5	ARUN460LTE5	ARUN480LTE5
	Independent Unit		ARUN240LTE5 ARUN180LTE5	ARUN240LTE5 ARUN200LTE5	ARUN240LTE5 ARUN220LTE5	ARUN240LTE5 ARUN240LTE5
Capacity	Cooling (Rated)	kW	117.6	123.2	128.8	134.4
		Btu/h	401,300	420,400	439,500	458,600
	Heating (Rated)	kW	131.0	137.3	143.6	148.5
		Btu/h	446,900	468,400	489,900	506,800
Input	Cooling (Rated)	kW	27.71	29.07	31.60	33.52
		kW	30.91	34.36	36.39	37.69
	Heating (Rated)	kW	33.3	35.5	38.9	41.0
		kW	28.9	31.2	33.4	35.3
Input <sup>1)</sup>	Cooling (Rated)	kW	34.1	37.2	39.5	41.7
		kW	4.24	4.24	4.08	4.01
	Heating (Rated)	kW	4.24	3.99	3.94	3.94
		kW	3.53	3.47	3.31	3.28
EER (Rated)	EER		5.87	5.75	5.63	5.58
			6.84	6.68	6.77	6.83
	ESEER		0.93	0.93	0.93	0.93
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
		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 × Number	W × No.	(5,300 × 3) + (4,200 × 1)	5,300 × 4	5,300 × 4	5,300 × 4
		Type	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Output × Number	W	900 × 4	900 × 4	900 × 4	900 × 4
		m <sup>3</sup> /min	320 × 2	320 × 2	320 × 2	320 × 2
Fan	Air Flow Rate (High)	ft <sup>3</sup> /min	11,301 × 2	11,301 × 2	11,301 × 2	11,301 × 2
		External Static Pressure (Max, Pa)	80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
		Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	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)
	Dimensions (W × H × D)	mm	(1,240 × 1,690 × 760) × 2	(1,240 × 1,690 × 760) × 2	(1,240 × 1,690 × 760) × 2	(1,240 × 1,690 × 760) × 2
		kg	(290 × 1) + (270 × 1)	(290 × 1) + (288 × 1)	(290 × 1) + (288 × 1)	290 × 2
Net Weight	Cooling	lbs	(639 × 1) + (595 × 1)	(639 × 1) + (635 × 1)	(639 × 1) + (635 × 1)	639 × 2
		lbs	66.5	66.8	67.8	68.0
	Heating	lbs	68.2	68.9	69.3	70.0
		lbs	89.8	90.1	91.0	91.0
Sound Power Level	Cooling	dB(A)	91.5	91.8	92.1	93.0
		dB(A)				
	Heating	dB(A)				
		dB(A)				
Communication Cable	No. × mm <sup>2</sup> (VCTF-SB)		2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
	Refrigerant name		R410A	R410A	R410A	R410A
		Precharged Amount in factory	kg	16.0 + 13.0	16.0 + 14.0	16.0 + 14.0
Refrigerant	Precharged Amount in factory	lbs	35.3 + 28.7	35.3 + 30.9	35.3 + 30.9	35.3 + 35.3
		lbs	60.5	62.6	62.6	66.8
	TCO <sub>eq</sub>		60.5	62.6	62.6	66.8
		Control	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz		380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units <sup>5)</sup>			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)  
 1) Eurovent test Condition

# MULTI V 5

## STANDARD

ARUN500LTE5 / ARUN520LTE5 / ARUN540LTE5 / ARUN560LTE5



HP			50	52	54	56
Model Name	Combination Unit		ARUN500LTE5	ARUN520LTE5	ARUN540LTE5	ARUN560LTE5
	Independent Unit		ARUN240LTE5 ARUN140LTE5 ARUN120LTE5	ARUN240LTE5 ARUN160LTE5 ARUN120LTE5	ARUN240LTE5 ARUN180LTE5 ARUN120LTE5	ARUN240LTE5 ARUN200LTE5 ARUN120LTE5
Capacity	Cooling (Rated)	kW	140.0	145.6	151.2	156.8
		Btu/h	477,700	496,800	515,900	535,000
	Heating (Rated)	kW	156.2	162.5	168.8	175.1
		Btu/h	532,900	554,400	575,900	597,400
Input	Cooling (Rated)	kW	33.78	35.46	35.62	36.97
	Heating (Rated)	kW	36.68	38.49	38.97	42.42
Input <sup>1)</sup>	Cooling (Rated)	kW	39.1	41.7	41.7	43.9
	Heating (Rated)	kW	34.0	36.4	36.4	38.6
EER (Rated)	Cooling (Rated)	kW	40.6	43.5	43.0	46.1
	Heating (Max)	kW	4.14	4.11	4.24	4.24
COP (Rated)	Cooling (Rated)	kW	4.26	4.22	4.33	4.13
	Heating (Max)	kW	3.58	3.49	3.62	3.57
ESEER	Cooling (Rated)	kW	6.00	5.82	6.04	5.94
	Heating (Max)	kW	7.08	6.95	7.02	6.89
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		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output × Number	W × No.	5,300 × 4	5,300 × 4	(5,300 × 4) + (4,200 × 1)	5,300 × 5
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Motor Output × Number	W	(900 × 4) + (1,200 × 1)	(900 × 4) + (1,200 × 1)	(900 × 4) + (1,200 × 1)	(900 × 4) + (1,200 × 1)
	Air Flow Rate (High)	m <sup>3</sup> /min	(320 × 2) + (240 × 1)	(320 × 2) + (240 × 1)	(320 × 2) + (240 × 1)	(320 × 2) + (240 × 1)
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Pipe Connections	Liquid Pipe	Side / Top	TOP	TOP	TOP	TOP
	Gas Pipe	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Dimensions (W × H × D)	mm		(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1
	kg		(290 × 1) + (230 × 1) + (203 × 1)	(290 × 1) + (230 × 1) + (203 × 1)	(290 × 1) + (270 × 1) + (203 × 1)	(290 × 1) + (288 × 1) + (203 × 1)
Net Weight	lbs		(639 × 1) + (507 × 1) + (448 × 1)	(639 × 1) + (507 × 1) + (448 × 1)	(639 × 1) + (595 × 1) + (448 × 1)	(639 × 1) + (635 × 1) + (448 × 1)
	Sound Pressure Level	Cooling	dB(A)	67.0	67.1	67.2
Sound Power Level	Heating	dB(A)	68.6	68.7	68.8	69.5
	Cooling	dB(A)	89.4	89.6	90.1	90.4
Communication Cable	Heating	dB(A)	91.3	91.5	91.8	92.0
	No. × mm <sup>2</sup> (VCTF-SB)		2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A
	Precharged Amount in factory	kg	16.0 + 13.0 + 10.0	16.0 + 13.0 + 10.0	16.0 + 13.0 + 10.0	16.0 + 16.0 + 10.0
	TCO <sub>eq</sub>	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
	Control		81.4	81.4	81.4	83.5
Power Supply	Electronic Expansion Valve		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
	Ø, V, Hz		380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
Number of maximum connectable indoor units <sup>2)</sup>	Ø, V, Hz		380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
			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)  
 1) Eurovent test Condition

## STANDARD

ARUN580LTE5 / ARUN600LTE5 / ARUN620LTE5 / ARUN640LTE5



HP			58	60	62	64
Model Name	Combination Unit		ARUN580LTE5	ARUN600LTE5	ARUN620LTE5	ARUN640LTE5
	Independent Unit		ARUN240LTE5 ARUN220LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN140LTE5	ARUN240LTE5 ARUN240LTE5 ARUN160LTE5
Capacity	Cooling (Rated)	kW	162.4	168.0	173.6	179.2
		Btu/h	554,100	573,200	592,400	611,500
	Heating (Rated)	kW	181.4	186.3	192.6	198.9
		Btu/h	618,900	635,800	657,300	678,800
Input	Cooling (Rated)	kW	39.51	41.42	42.63	44.31
	Heating (Rated)	kW	44.45	45.75	47.47	49.28
Input <sup>1)</sup>	Cooling (Rated)	kW	47.4	49.4	51.2	53.8
	Heating (Rated)	kW	40.7	42.6	44.3	46.7
EER (Rated)	Cooling (Rated)	kW	48.4	50.6	52.5	55.5
	Heating (Max)	kW	4.11	4.06	4.07	4.04
COP (Rated)	Cooling (Rated)	kW	4.08	4.07	4.06	4.04
	Heating (Max)	kW	3.43	3.40	3.39	3.33
ESEER	Cooling (Rated)	kW	5.83	5.78	5.71	5.59
	Heating (Max)	kW	6.95	7.00	6.87	6.78
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		Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output × Number	W × No.	5,300 × 5	5,300 × 5	5,300 × 5	5,300 × 5
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Motor Output × Number	W	(900 × 4) + (1,200 × 1)	(900 × 4) + (1,200 × 1)	900 × 6	900 × 6
	Air Flow Rate (High)	m <sup>3</sup> /min	(320 × 2) + (240 × 1)	(320 × 2) + (240 × 1)	320 × 3	320 × 3
	External Static Pressure (Max, Pa)		80	80	80	80
	Drive		DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Pipe Connections	Liquid Pipe	Side / Top	TOP	TOP	TOP	TOP
	Gas Pipe	mm(inch)	19.05(3/4)	19.05(3/4)	22.2(7/8)	22.2(7/8)
Dimensions (W × H × D)	mm		(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 2 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 3	(1,240 × 1,690 × 760) × 3
	kg		(290 × 1) + (288 × 1) + (203 × 1)	(290 × 2) + (203 × 1)	(290 × 2) + (230 × 1)	(290 × 2) + (230 × 1)
Net Weight	lbs		(639 × 1) + (635 × 1) + (448 × 1)	(639 × 2) + (448 × 1)	(639 × 2) + (507 × 1)	(639 × 2) + (507 × 1)
	Sound Pressure Level	Cooling	dB(A)	68.3	68.5	68.6
Sound Power Level	Heating	dB(A)	69.8	70.4	70.5	70.6
	Cooling	dB(A)	90.4	91.3	91.5	91.6
Communication Cable	Heating	dB(A)	92.4	93.2	93.5	93.6
	No. × mm <sup>2</sup> (VCTF-SB)		2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A
	Precharged Amount in factory	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
	TCO <sub>eq</sub>	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
	Control		83.5	87.7	93.9	93.9
Power Supply	Electronic Expansion Valve		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
	Ø, V, Hz		380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
Number of maximum connectable indoor units <sup>2)</sup>	Ø, V, Hz		380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
			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)  
 1) Eurovent test Condition

# MULTI V 5

## STANDARD

ARUN660LTE5 / ARUN680LTE5 / ARUN700LTE5 / ARUN720LTE5



HP			66	68	70	72
Model Name	Combination Unit		ARUN660LTE5	ARUN680LTE5	ARUN700LTE5	ARUN720LTE5
	Independent Unit		ARUN240LTE5 ARUN240LTE5 ARUN180LTE5	ARUN240LTE5 ARUN240LTE5 ARUN200LTE5	ARUN240LTE5 ARUN240LTE5 ARUN200LTE5	ARUN240LTE5 ARUN240LTE5 ARUN200LTE5
Capacity	Cooling (Rated)	kW	184.8	190.4	196.0	201.6
		Btu/h	630,600	649,700	668,800	687,900
	Heating (Rated)	kW	205.2	211.5	217.8	222.8
		Btu/h	700,300	721,800	743,300	760,200
Input	Cooling (Rated)	kW	44.7	45.82	48.36	50.27
	Heating (Rated)	kW	49.76	53.21	55.24	56.54
Input <sup>1)</sup>	Cooling (Rated)	kW	53.8	56.0	59.4	61.5
	Heating (Rated)	kW	46.5	48.8	51.0	52.9
EER (Rated)	Cooling (Rated)	kW	55.0	58.1	60.3	62.6
	Heating (Max)	kW	4.16	4.16	4.05	4.01
COP (Rated)	Cooling (Rated)	kW	4.12	3.97	3.94	3.94
	Heating (Max)	kW	3.43	3.40	3.30	3.28
ESEER	Cooling (Rated)	kW	5.76	5.69	5.61	5.58
	Heating (Max)	kW	6.84	6.73	6.79	6.83
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	-	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output × Number	W × No.	(5,300 × 5) + (4,200 × 1)	5,300 × 6	5,300 × 6	5,300 × 6
	Type	-	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Motor Output × Number	W	900 × 6	900 × 6	900 × 6	900 × 6
	Air Flow Rate (High)	m <sup>3</sup> /min	320 × 3	320 × 3	320 × 3	320 × 3
	External Static Pressure (Max. Pa)	ft <sup>3</sup> /min	11,301 × 3	11,301 × 3	11,301 × 3	11,301 × 3
	Drive	-	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
Pipe Connections	Liquid Pipe	Side / Top	TOP	TOP	TOP	TOP
	Gas Pipe	mm(inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
Dimensions (W × H × D)	mm	-	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)
	kg	-	(1,240 × 1,690 × 760) × 3	(1,240 × 1,690 × 760) × 3	(1,240 × 1,690 × 760) × 3	(1,240 × 1,690 × 760) × 3
Net Weight	lbs	-	(290 × 2) + (270 × 1)	(290 × 2) + (288 × 1)	(290 × 2) + (288 × 1)	290 × 3
	Sound Pressure Level	-	(639 × 2) + (595 × 1)	(639 × 2) + (635 × 1)	(639 × 2) + (635 × 1)	639 × 3
Sound Power Level	Cooling	-	68.8	69.0	69.6	69.8
	Heating	-	70.6	71.1	71.3	71.8
Communication Cable	Cooling	-	92.0	92.2	92.2	92.8
	Heating	-	93.8	94.0	94.2	94.8
Refrigerant	Refrigerant name	-	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
	Precharged Amount in factory	kg	R410A	R410A	R410A	R410A
Power Supply	Control	-	16.0 + 16.0 + 13.0	16.0 + 16.0 + 14.0	16.0 + 16.0 + 14.0	16.0 + 16.0 + 16.0
	Control	-	35.3 + 35.3 + 28.7	35.3 + 35.3 + 30.9	35.3 + 35.3 + 30.9	35.3 + 35.3 + 35.3
Number of maximum connectable indoor units <sup>5)</sup>	Electronic Expansion Valve	-	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	-	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
	Control	-	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units <sup>5)</sup>	Control	-	64	64	64	64
	Control	-	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.
- Power factor could vary less than ±1% according to the operating conditions.
- 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.
- 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.
- The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- 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
Model Name	Combination Unit		ARUN740LTE5	ARUN760LTE5	ARUN780LTE5	ARUN800LTE5
	Independent Unit		ARUN240LTE5 ARUN240LTE5 ARUN140LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN160LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN180LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN200LTE5 ARUN120LTE5
Capacity	Cooling (Rated)	kW	207.2	212.8	218.4	224.0
		Btu/h	707,000	726,100	745,200	764,300
	Heating (Rated)	kW	230.4	236.7	243.0	249.3
		Btu/h	786,300	807,800	829,300	850,800
Input	Cooling (Rated)	kW	50.54	52.22	52.38	53.73
	Heating (Rated)	kW	55.53	57.34	57.82	61.27
Input <sup>1)</sup>	Cooling (Rated)	kW	59.6	62.2	62.2	64.4
	Heating (Rated)	kW	51.7	54.1	53.9	56.2
EER (Rated)	Cooling (Rated)	kW	61.4	64.4	63.9	66.9
	Heating (Max)	kW	4.10	4.08	4.17	4.17
COP (Rated)	Cooling (Rated)	kW	4.15	4.13	4.20	4.07
	Heating (Max)	kW	3.48	3.42	3.51	3.48
ESEER	Cooling (Rated)	kW	5.86	5.74	5.89	5.83
	Heating (Max)	kW	7.00	6.91	6.96	6.87
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	-	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Motor Output × Number	W × No.	5,300 × 6	5,300 × 6	(5,300 × 6) + (4,200 × 1)	5,300 × 7
	Type	-	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Motor Output × Number	W	(900 × 6) + (1,200 × 1)	(900 × 6) + (1,200 × 1)	(900 × 6) + (1,200 × 1)	(900 × 6) + (1,200 × 1)
	Air Flow Rate (High)	m <sup>3</sup> /min	(320 × 3) + (240 × 1)	(320 × 3) + (240 × 1)	(320 × 3) + (240 × 1)	(320 × 3) + (240 × 1)
	External Static Pressure (Max. Pa)	ft <sup>3</sup> /min	(11,301 × 3) + (8,476 × 1)	(11,301 × 3) + (8,476 × 1)	(11,301 × 3) + (8,476 × 1)	(11,301 × 3) + (8,476 × 1)
	Drive	-	80	80	80	80
Pipe Connections	Liquid Pipe	Side / Top	DC INVERTER	DC INVERTER	DC INVERTER	DC INVERTER
	Gas Pipe	mm(inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
Dimensions (W × H × D)	mm	-	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)	53.98(2-1/8)
	kg	-	(1,240 × 1,690 × 760) × 3 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 3 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 3 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 3 + (930 × 1,690 × 760) × 1
Net Weight	lbs	-	(290 × 2) + (230 × 1) + (203 × 1)	(290 × 2) + (230 × 1) + (203 × 1)	(290 × 2) + (270 × 1) + (203 × 1)	(290 × 2) + (288 × 1) + (203 × 1)
	Sound Pressure Level	-	(639 × 2) + (507 × 1) + (448 × 1)	(639 × 2) + (507 × 1) + (448 × 1)	(639 × 2) + (595 × 1) + (448 × 1)	(639 × 2) + (635 × 1) + (448 × 1)
Sound Power Level	Cooling	-	69.1	69.2	69.2	69.4
	Heating	-	70.9	70.9	71.0	71.4
Communication Cable	Cooling	-	91.8	91.9	92.2	92.4
	Heating	-	93.7	93.8	94.0	94.2
Refrigerant	Refrigerant name	-	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
	Precharged Amount in factory	kg	R410A	R410A	R410A	R410A
Power Supply	Control	-	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
	Control	-	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
Number of maximum connectable indoor units <sup>5)</sup>	Electronic Expansion Valve	-	114.8	114.8	114.8	116.9
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz	-	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
	Control	-	380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units <sup>5)</sup>	Control	-	64	64	64	64
	Control	-	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.
- Power factor could vary less than ±1% according to the operating conditions.
- 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.
- 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.
- The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- This product contains Fluorinated greenhouse gases (R410A, GWP(Global warming potential) = 2087.5)
- Eurovent test Condition

# MULTI V 5

## STANDARD

ARUN820LTE5 / ARUN840LTE5  
ARUN860LTE5 / ARUN880LTE5



HP			82	84	86	88
Model Name	Combination Unit		ARUN820LTE5	ARUN840LTE5	ARUN860LTE5	ARUN880LTE5
	Independent Unit		ARUN240LTE5 ARUN240LTE5 ARUN220LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN120LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN120LTE5
Capacity	Cooling (Rated)	kW	229.6	235.2	240.8	246.4
	Heating (Rated)	kW	255.6	260.6	266.9	273.2
Input	Cooling (Rated)	kW	56.27	58.18	59.39	61.07
	Heating (Rated)	kW	63.30	64.60	66.32	68.13
Input <sup>1)</sup>	Cooling (Rated)	kW	67.8	69.9	71.7	74.3
	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 <sup>1)</sup>		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	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
	RAL code		NLS03K / NAS07K	NLS03K / NAS07K	NLS03K / NAS07K	NLS03K / NAS07K
Heat Exchanger		Wide Lower Plus	Wide Lower Plus	Wide Lower Plus	Wide Lower Plus	
Compressor	Motor Output × Number	W × No.	5,300 × 7	5,300 × 7	5,300 × 7	5,300 × 7
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Motor Output × Number	W	(900 × 6) + (1,200 × 1)	(900 × 6) + (1,200 × 1)	900 × 8	900 × 8
	Air Flow Rate (High)	m <sup>3</sup> /min	(320 × 3) + (240 × 1)	(320 × 3) + (240 × 1)	320 × 4	320 × 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 Connections	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 × H × D)	mm	(1,240 × 1,690 × 760) × 3 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 3 + (930 × 1,690 × 760) × 1	(1,240 × 1,690 × 760) × 4	(1,240 × 1,690 × 760) × 4	
Net Weight	kg	(290 × 2) + (288 × 1) + (203 × 1)	(290 × 3) + (203 × 1)	(290 × 3) + (230 × 1)	(290 × 3) + (230 × 1)	
	lbs	(639 × 2) + (635 × 1) + (448 × 1)	(639 × 3) + (448 × 1)	(639 × 3) + (507 × 1)	(639 × 3) + (507 × 1)	
Sound Pressure Level	Cooling	dB(A)	70.0	70.1	70.2	70.3
	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. × mm <sup>2</sup> (VCTF-SB)		2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A
	Precharged Amount in factory	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
	TCO <sub>eq</sub>	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
	Control		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		380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units <sup>2)</sup>		64	64	64	64	

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- 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.
- Power factor could vary less than ±1% according to the operating conditions.
- 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.
- 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.
- The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- This product contains Fluorinated greenhouse gases (R410A, GWP(Global warming potential) = 2087.5)
  - Eurovent test Condition

## STANDARD

ARUN900LTE5 / ARUN920LTE5 / ARUN940LTE5 / ARUN960LTE5

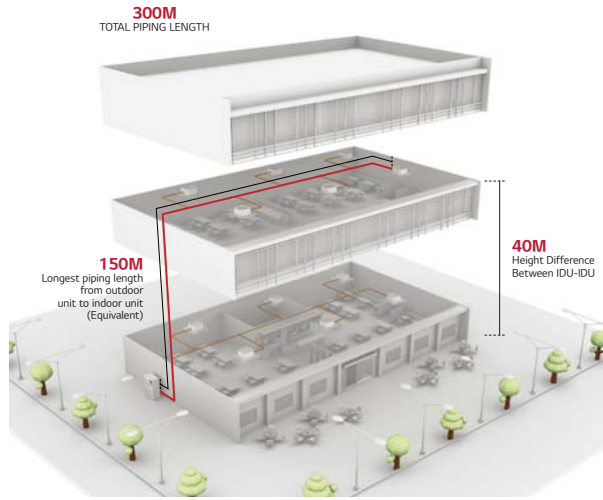


HP			90	92	94	96
Model Name	Combination Unit		ARUN900LTE5	ARUN920LTE5	ARUN940LTE5	ARUN960LTE5
	Independent Unit		ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN180LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN200LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN240LTE5	ARUN240LTE5 ARUN240LTE5 ARUN240LTE5 ARUN240LTE5
Capacity	Cooling (Rated)	kW	252.0	257.6	263.2	268.8
	Heating (Rated)	kW	279.5	285.8	292.1	297.0
Input	Cooling (Rated)	kW	61.23	62.58	65.12	67.03
	Heating (Rated)	kW	68.60	72.06	74.08	75.39
Input <sup>1)</sup>	Cooling (Rated)	kW	74.3	76.5	79.9	82.0
	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 <sup>1)</sup>		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
Exterior	Color		Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray	Warm Gray / Dawn Gray
	RAL code		NLS03K / NAS07K	NLS03K / NAS07K	NLS03K / NAS07K	NLS03K / NAS07K
Heat Exchanger		Wide Lower Plus	Wide Lower Plus	Wide Lower Plus	Wide Lower Plus	
Compressor	Motor Output × Number	W × No.	(5,300 × 7) + (4,200 × 1)	5,300 × 8	5,300 × 8	5,300 × 8
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Motor Output × Number	W	900 × 8	900 × 8	900 × 8	900 × 8
	Air Flow Rate (High)	m <sup>3</sup> /min	320 × 4	320 × 4	320 × 4	320 × 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 Connections	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 × H × D)	mm	(1,240 × 1,690 × 760) × 4	(1,240 × 1,690 × 760) × 4	(1,240 × 1,690 × 760) × 4	(1,240 × 1,690 × 760) × 4	
Net Weight	kg	(290 × 3) + (270 × 1)	(290 × 3) + (288 × 1)	(290 × 3) + (288 × 1)	(290 × 3) + (288 × 1)	
	lbs	(639 × 3) + (595 × 1)	(639 × 3) + (635 × 1)	(639 × 3) + (635 × 1)	(639 × 3) + (635 × 1)	
Sound Pressure Level	Cooling	dB(A)	70.3	70.4	70.9	71.0
	Heating	dB(A)	72.2	72.5	72.7	73.0
Sound Power Level	Cooling	dB(A)	93.4	93.6	93.6	94.0
	Heating	dB(A)	95.3	95.4	95.6	96.0
Communication Cable	No. × mm <sup>2</sup> (VCTF-SB)		2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A	R410A
	Precharged Amount in factory	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
	TCO <sub>eq</sub>	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
	Control		127.3	129.4	129.4	133.6
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz		380-415, 3, 50	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60	380, 3, 60
Number of maximum connectable indoor units <sup>2)</sup>		64	64	64	64	

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- 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.
- Power factor could vary less than ±1% according to the operating conditions.
- 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.
- 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.
- The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination. The recommended ratio is 130%.
- This product contains Fluorinated greenhouse gases (R410A, GWP(Global warming potential) = 2087.5)
  - Eurovent test Condition

# MULTI V S

## Piping Length



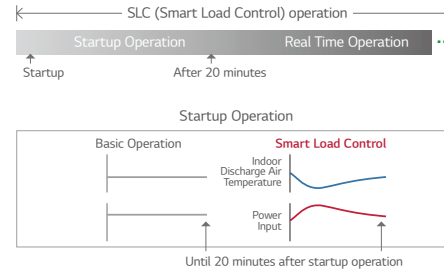
Total Piping Length	300m
Longest piping length (Equivalent)	150m (175m)
Longest piping length after 1 <sup>st</sup> branch (Conditional application)	40m (90m)
Height difference between ODU - IDU	40m* (50m**)
Height difference between IDU - IDU	15m

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

## Smart Load Control applied

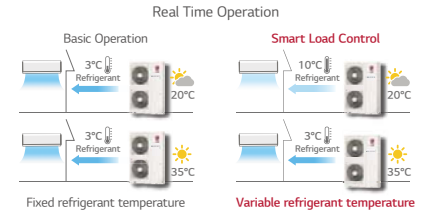
Increase comfortable sensation and Max. 23% energy saving thanks to Multi V load control

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**

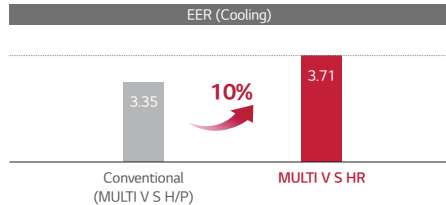
How to set up: By dip switch in outdoor unit (Referred to Product Data Book) Factory default setting is Off.

\* ESEER (European seasonal energy efficiency Ratio) conditions based on 15.5kw unit  
- Outdoor temperature condition :  
EER 100% / 75% / 50% / 25% = 35°C(DB) / 30°C(DB) / 25°C(DB) / 20°C(DB)  
- Indoor temperature condition : 27°C(DB) / 19°C(WB)  
\* Dual sensing (Temperature & humidity) smart load control is possible with Remote controller PTMTB100 (White) / PREMTBB10 (Black)

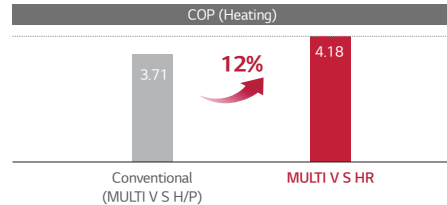
## EER/COP/Part load

Saving Energy Cost with High Efficient Product

### Heat Pump

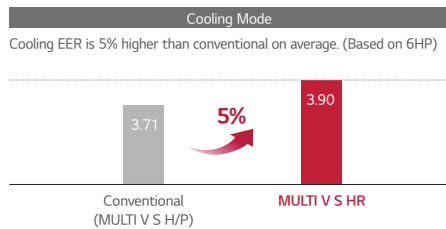


\* Comparison Based on 15.5kW in cooling mode

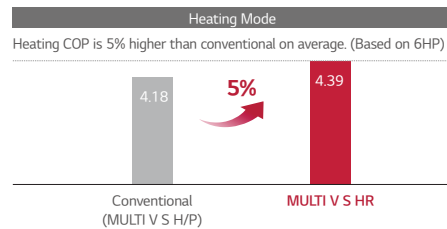


\* Comparison Based on 15.5kW in heating mode

### Heat Recovery



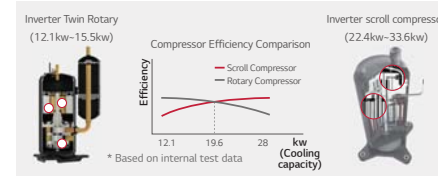
Cooling EER is 5% higher than conventional on average. (Based on 6HP)



Heating COP is 5% higher than conventional on average. (Based on 6HP)

## 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

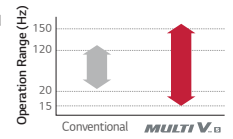
Surface coating of outstanding abrasion resistance property on vane and crank shaft.

### 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  
- Prevent compressor damage due to excessively compressed refrigerant more efficiently than 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

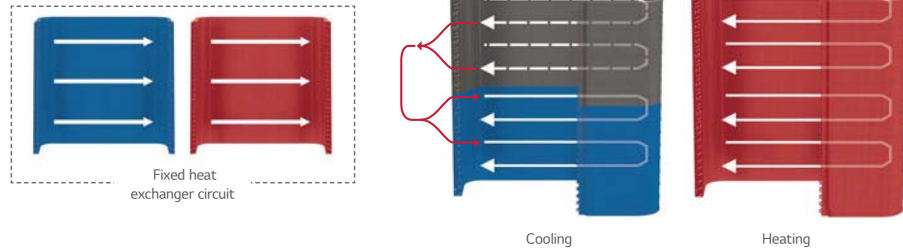
- The enhanced reliability by increasing the thickness of scroll central part within largest pressure  
- Efficiency increases by expanding 96% bypass area and 17% improved volume ratio by non uniform scroll thickness

# MULTI V S

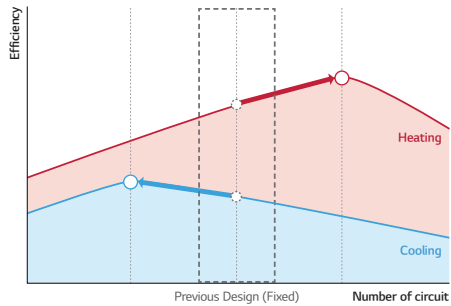
## Optimal Heat Exchanger

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

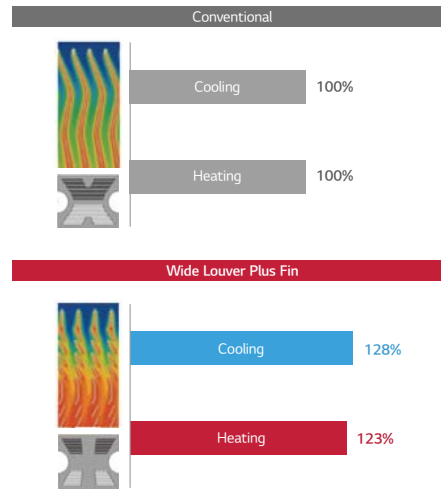
Variable Heat Exchanger Circuit intelligently selects the optimal path for both heating and cooling operations. With this smart path selection technology, an average of 6% increase in the efficiency of both operations has been achieved. The paths number and circuit velocity are adjusted to match temperatures 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.



## Efficiency performance



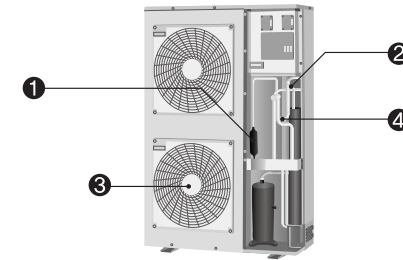
## Efficiency up due to Fin shape



## High Reliability of Refrigerant components

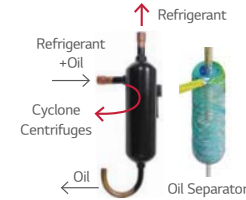
Superior Performance and Strong Durable Components are developed by LG's technologies

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



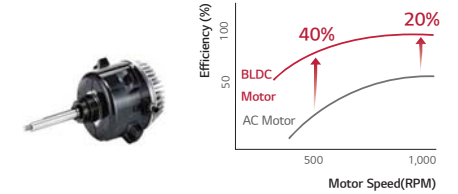
### ❶ Cyclonic oil separator

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



### ❷ 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



### ❸ Large Volume Accumulator

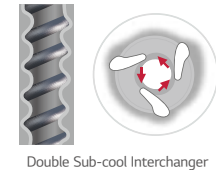
- Improved reliability by adopting the large volume accumulator (38% volume up compared to conventional)
- Prevents the liquid refrigerant entering the compressor suction
- Maximize efficiency by optimal amount of refrigerant
- Protect compressor break down and increase life time



### ❹ 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



# MULTI V S

## Temperature & Pressure control

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

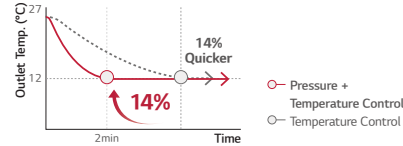
### Temperature + Pressure Control

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 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.



### Corrosion Resistance Proven by Certified Tests

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

#### Certified protection



\* Test Method B Simulation Validated (Test condition: Salt contaminated condition + severe industrial/traffic environment (NO<sub>2</sub>/SO<sub>2</sub>))  
\* Based on 1,500 UL test hours

#### Condition of salt spray test

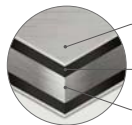
Temperature	35°C
Mist of 5% sodium chloride solution	

#### Condition of gas exposure test

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



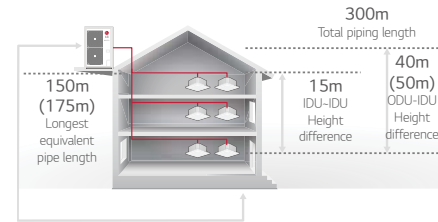
- Hydrophilic film** (Water flow)  
The Hydrophilic coating minimizes moisture buildup on the fin.
- Epoxy resin** (Corrosion resistant)  
The Black coating provides strong protection from corrosion.
- Aluminum fin**

## Sufficient pipe pipelength limit

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

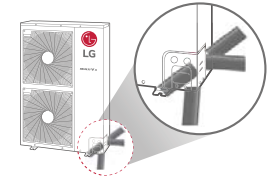
MULTI V S inverter technology and sub cooling control circuit technology allows greater piping length and outstanding elevation differences. A cooling system can be implemented more flexibly in a shop, office and even high-rise building, reducing the designer's work time and providing more efficient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

### Piping Capabilities



### 4 Way Piping

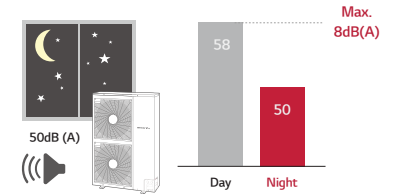
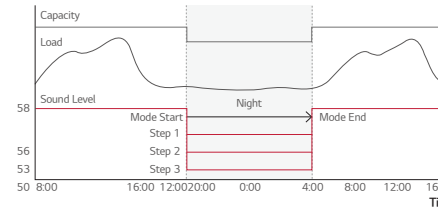
- Free design and installation by 4 way piping.



## 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.



\* Normal mode noise level (28kw) : 58dB(A)  
\* Night 3 step noise level (28kw) : 56dB(A), 53dB(A), 50dB(A)  
\* Sound pressure tested by following conditions : 1m distance / 1.5m height

# MULTI V S

## Fan Technology and RPM control

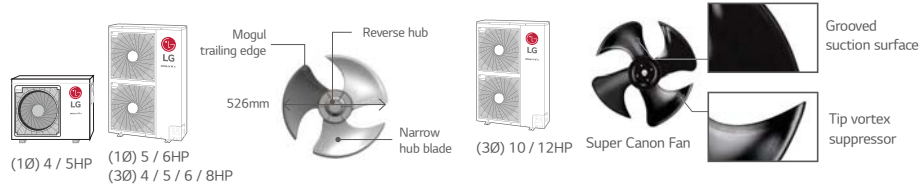
External static pressure control for outdoor unit fan to adapt more flexibly to various installation conditions of outdoor unit

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

### Fan Technology

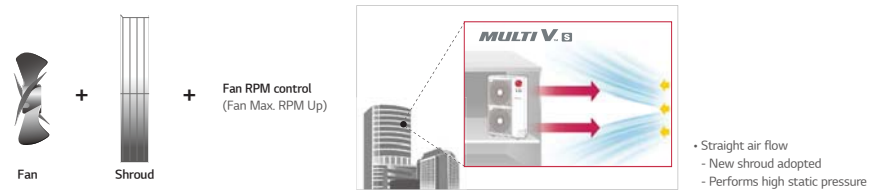
The new axial fan has a mogul trailing edge, narrow hub blade and reverse hub, this provides a high efficiency, low noise, wide fan, as well as improving the air flow rate.

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



### Fan RPM control

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

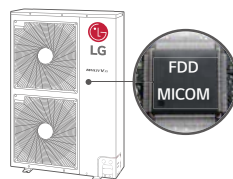


\* E.S.P : External Static Pressure

## Upgraded Fault Detection and Diagnosis

Easy and convenient maintenance with self-diagnosis

- 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

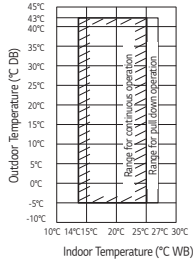




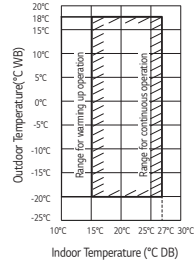
# MULTI V S

## Heat Pump

### Cooling

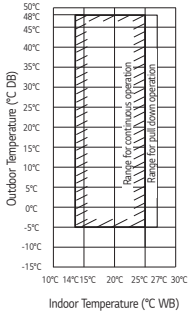


### Heating

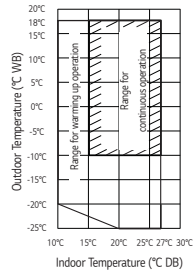


## Heat Recovery

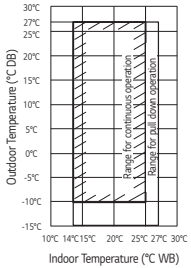
### Cooling Operation



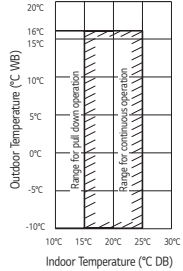
### Heating Operation



### Simultaneous Cooling Operation



### Simultaneous Heating Operation



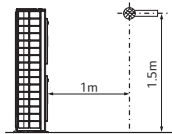
Note

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

2.Range of pull down operation :  
If the relative humidity is too high, cooling capacity can be decreased by the sensible

Note

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



## HEAT PUMP

ARUN040GSS0 / ARUN040GSR0 / ARUN050GSLO



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



HP		4	5	
Model Name	Combination Unit	ARUN040GSS0 / ARUN040GSR0*	ARUN050GSLO	
Capacity <sup>1)</sup> (Rated)	Cooling	kW	12.1	14.0
	Heating	kW	12.5	15.0
Input (Rated) <sup>1)</sup>	Cooling	kW	3.57	3.78
	Heating	kW	2.91	3.75
EER			3.39	3.70
COP			4.3	4.0
Compressor	Type		BLDC Inverter Twin Rotary	BLDC Inverter Twin Rotary
	Piston Displacement	cm <sup>3</sup> /rev	44.2	44
	Motor Output	W	4,000	4,000
	Starting Method		DC Inverter Starting	DC Inverter Starting
Fan	Type		Axial Flow Fan	Axial Flow Fan
	Motor Output x Number	W	124 x 1	124 x 1
	Air Flow Rate (High)	m <sup>3</sup> /min	60	60
		ft <sup>3</sup> /min	2,119	2,119
Pipe Connections	Liquid	mm(inch)	Ø 9.52(3/8)	Ø 9.52(3/8)
	Gas	mm(inch)	Ø 15.88(5/8)	Ø 15.88(5/8)
Dimensions (W x H x D)	mm	950 x 834 x 330	950 x 834 x 330	
Net Weight	kg	69	73	
Sound Pressure Level	Cooling	dB(A)	50	52
	Heating	dB(A)	52	58
Sound Power Level	dB(A)	66	68	
Communication Cable	No. x mm <sup>2</sup> (VCTF-SB)	2C x 1.0 - 1.5	2C x 1.0 - 1.5	
Refrigerant	Refrigerant name		R410A	R410A
	Precharged Amount	kg	1.8	2.4
		lbs	4.0	5.3
	GWP		2,087.5	2,087.5
Control	F-CO <sub>2</sub> eq		3.8	5.0
	Type		Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)
	Charge	cc	1,300	1,300
Power Supply		V, Ø, Hz	220-240, 1, 50	220-240, 1, 50
			220, 1, 60	220, 1, 60
Number of maximum connectable indoor units <sup>8)</sup>		8	10	

\* GSR0 관련 주석 추가예정.

Notes:

- 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.
- 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
- The maximum combination ratio is 160% (the maximum combination ratio of ARUN050GSLO is 130%)
- Wiring cable size must comply with the applicable local and national codes.
- Due to our policy of innovation some specifications may be changed without notification.
- 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.
- This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

# MULTI V S

## HEAT PUMP

ARUN050GSS0 / ARUN050GSR0 / ARUN060GSS0 / ARUN060GSR0



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

\* GSRO 관련 주석 추가예정.

Notes:

- 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.
- 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
- The maximum combination ratio is 160%.
- Wiring cable size must comply with the applicable local and national codes.
- Due to our policy of innovation some specifications may be changed without notification.
- 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.
- This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

## HEAT PUMP

ARUN040LSS0 / ARUN050LSS0 / ARUN060LSS0  
ARUN040LSR0 / ARUN050LSR0 / ARUN060LSR0



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



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

\* Full Corrosion Resistance Model (Heat Exchanger, Motor and Case)

Notes:

- 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.
- 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
- The maximum combination ratio is 160%.
- Wiring cable size must comply with the applicable local and national codes.
- Due to our policy of innovation some specifications may be changed without notification.
- 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.
- This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

# MULTI V S

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

### Notes:

- 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.
- 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
- The maximum combination ratio is 160%.
- Wiring cable size must comply with the applicable local and national codes.
- Due to our policy of innovation some specifications may be changed without notification.
- 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.
- 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
Capacity (Rated) <sup>1)</sup>	Cooling	Nom kW	15.5
	Heating	Nom kW	18.0
Power Input (Rated) <sup>1)</sup>	Cooling	Nom kW	3.97
	Heating	Nom kW	4.10
EER			3.90
COP			4.39
ESEER			7.15
SLC ESEER			8.05
Compressor	Type		Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	43.8
	Motor Output	W	4,200
	Starting Method		DC Inverter Starting
Fan	Type		Axial Flow Fan
	Motor Output x Number	W	124 x 2
	Air Flow Rate (High)	m <sup>3</sup> /min	110
	Discharge	ft <sup>3</sup> /min	3,885
Pipe Connections	Liquid	mm(mch)	Ø 9.52 (3/8)
	High Pressure Gas	mm(mch)	Ø 15.88 (5/8)
Dimensions (W x H x D)	mm		950 x 1,380 x 330
Net Weight	kg		118
Sound Pressure Level	Cooling	dB(A)	56
	Heating	dB(A)	58
Sound Power Level	Cooling	dB(A)	69
	Heating	dB(A)	71
Communication Cable	(VCTF-SB)	No. x mm <sup>2</sup>	2C x 1.0 - 1.5
Refrigerant	Refrigerant Name		R410A
	Precharged Amount	kg	3.5
	t-CO <sub>2</sub> eq		7.3
	Control		Electronic Expansion Valve
Refrigerant Oil	Type		FVC68D(PVE)
	Charge	cc	1,300
Power Supply	V, Ø, Hz		220-240, 1, 50
			220, 1, 60
Number of maximum connectable indoor units			13

### Notes:

- 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.
- Performances are based on the following conditions:  
- Cooling Temperature : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB / Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB  
- Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB / Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
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