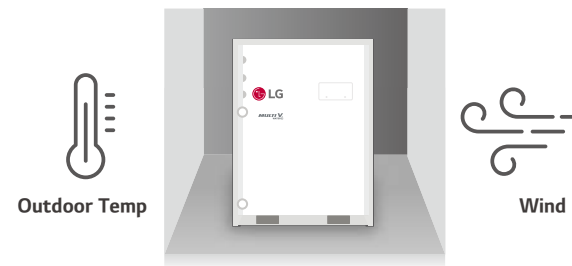


## High Efficiency System Regardless of External Conditions

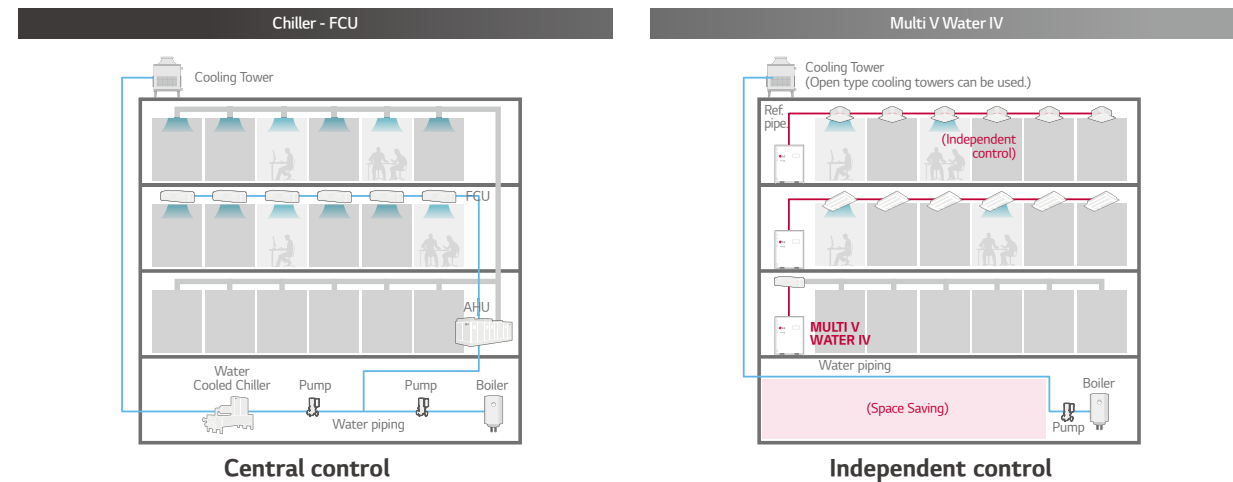
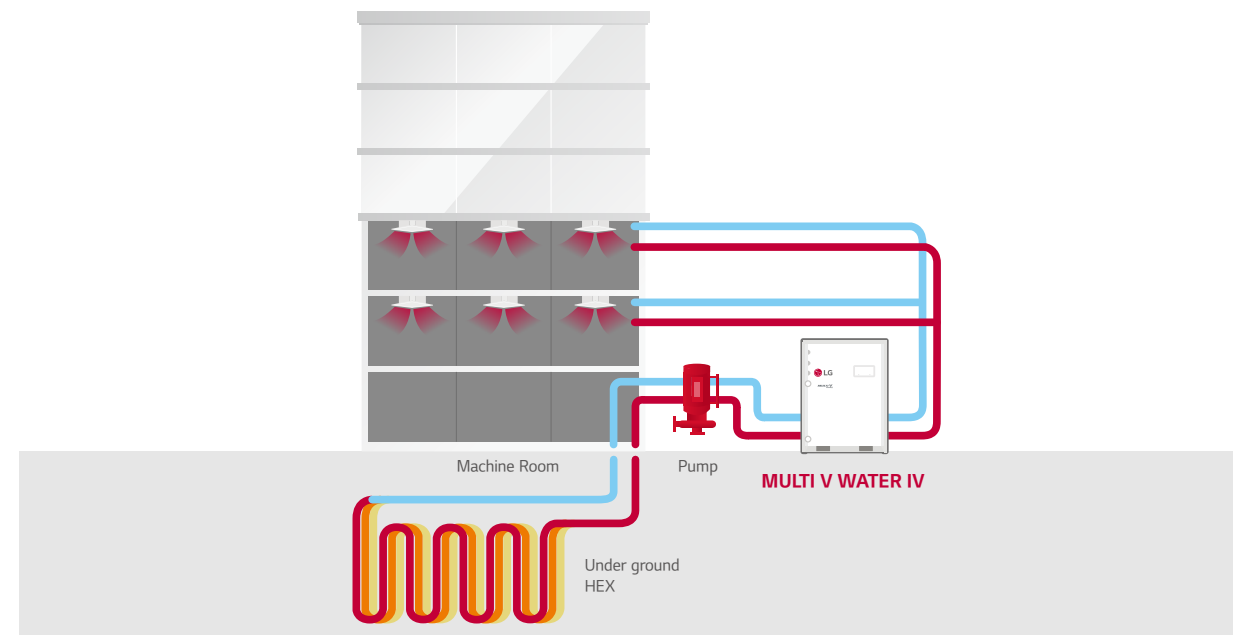
Regardless of outdoor temperature and other environmental conditions, MULTI V WATER IV is the optimal solution.



## MULTI V WATER IV System for Geothermal Applications

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

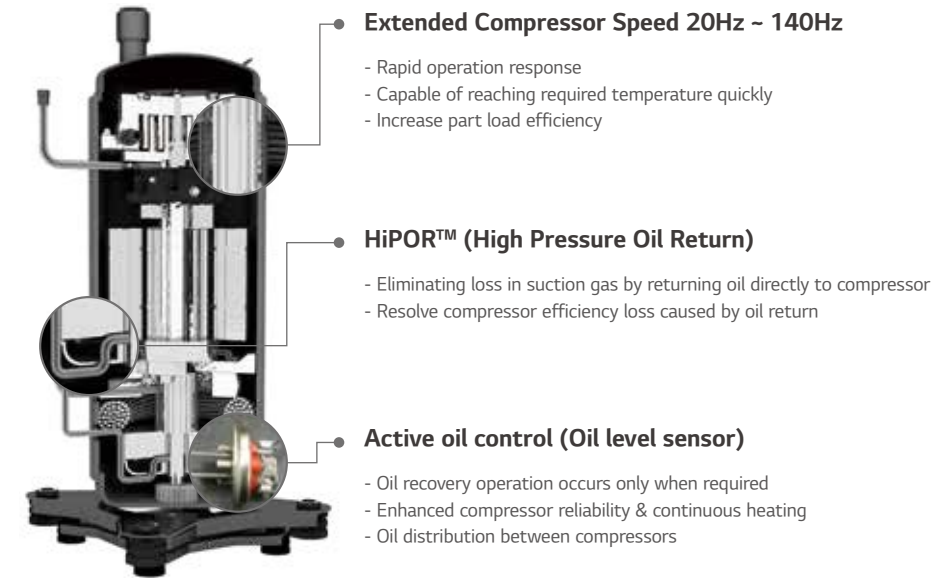
- The Circulating water temperature range is between -5°C ~ 45°C
- Antifreeze should be applied depending on the application



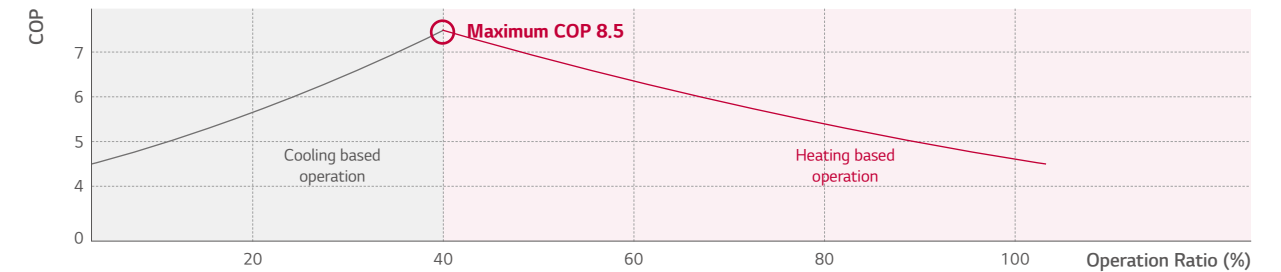
## Economical, Highly Efficient System

LG's key technologies are integrated to inverter compressor

With 4<sup>th</sup> generation inverter compressor, the Multi V Water IV boasts top-class energy efficiency.

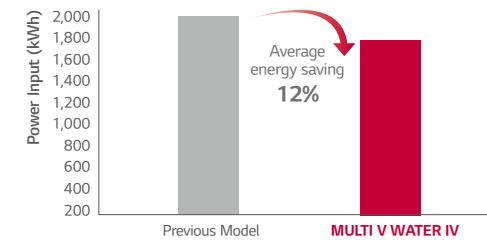


### Maximum COP

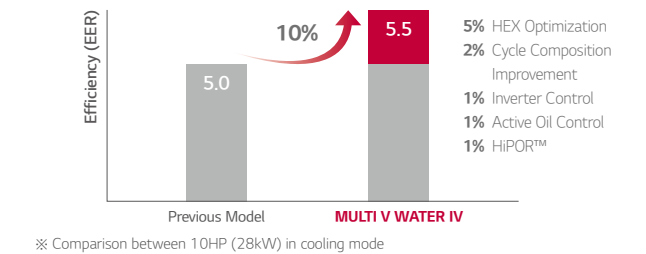


※ Outdoor unit water inlet temperature : 7°C  
 ※ Indoor temperature : 20°C DB / 15°C WB  
 ※ Maximum COP Condition : Cooling 40% + Heating 60% operation

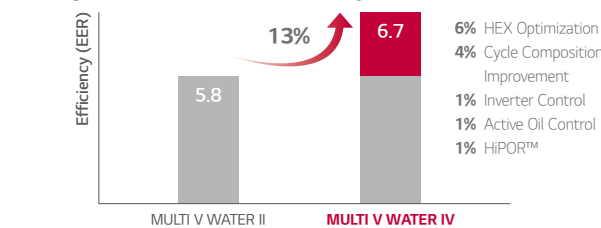
### Economical, Highly Efficient System



### LG's 4<sup>th</sup> Generation Inverter Compressor



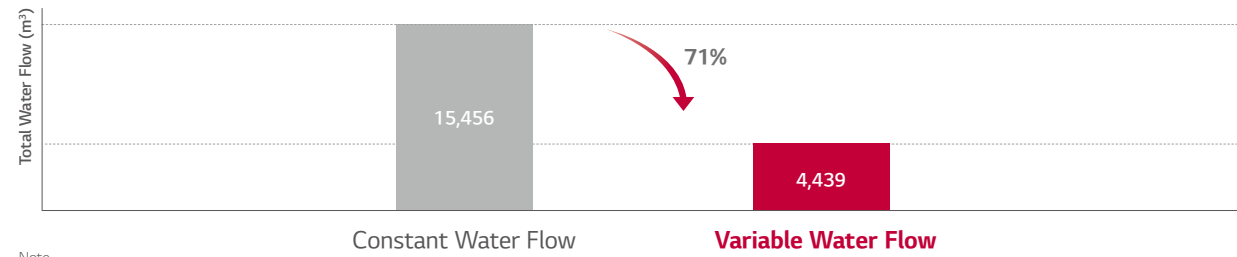
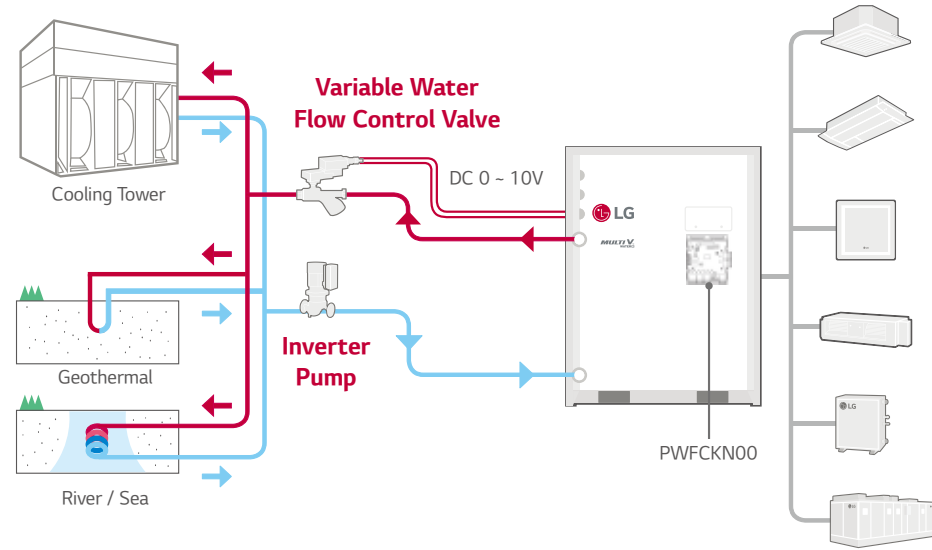
### Integrated Part Load Efficiency



# Variable Water Flow Control (OPTION)

In support of green building initiatives

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

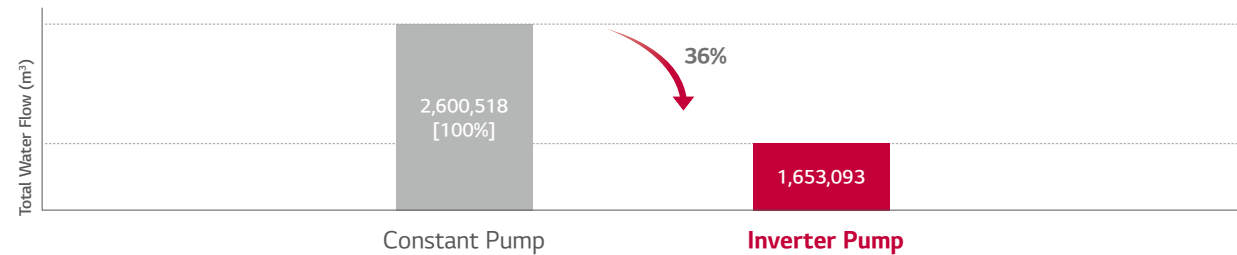


Note  
 1. Location : Paris, France  
 2. Office, 68,000m²  
 3. Operation time : 1,344 hours (Cooling period)

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

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

### 10 years energy cost (\$)



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

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

# Largest Capacity

Sufficient pipe length limitation provides flexible design and installation

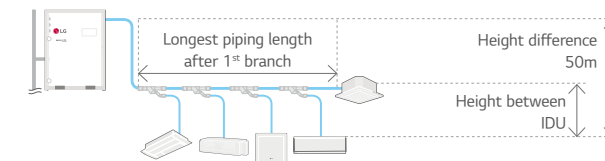
Providing 8 ~ 20HP (22.4 ~ 56kW) with single unit, and up to the world's largest capacity 80HP (224kW) by combination.

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

# Longest Piping Length

Sufficient pipes length limitation in design and Installation for various buildings

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



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

# Compact Size

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

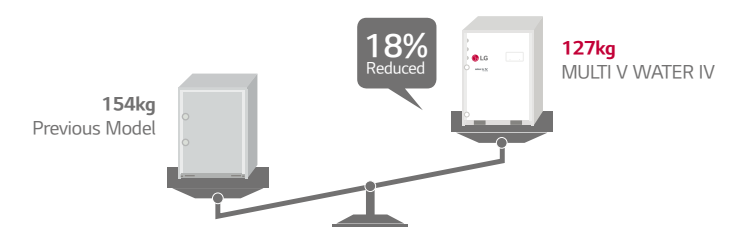
The optimal design of the compact, lightweight outdoor unit enables double stacking, which results in 50% savings in installation space.

Conventional	Multi V Water IV
<p>28kW x 4EA Per each 880 x 550 mm</p>	<p>56kW x 2EA Per each 755 x 500 mm</p> <p>61% Reduced</p>
※ 112kW, Floor area based	※ 112kW, Floor area based

# Lightweight

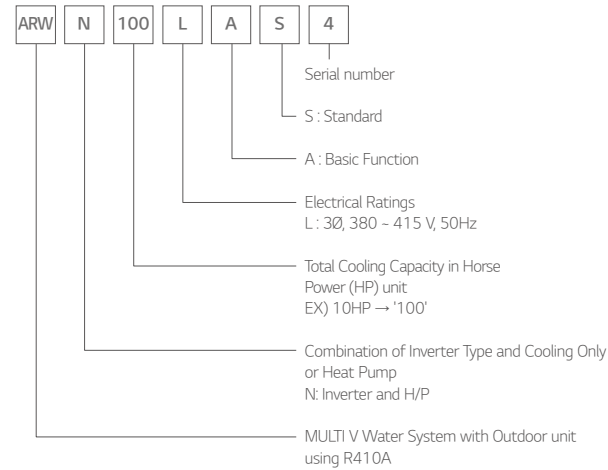
Nothing or Decrease additional load reinforcement work at building

Easier to transport and install, thanks to 18% reduction in overall weight.



※ Based on 28kW

Nomenclature

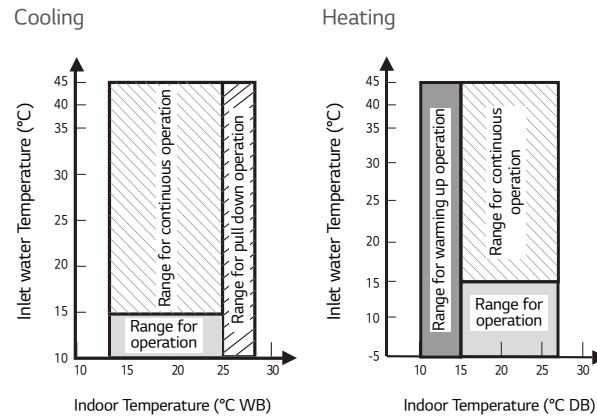


Outdoor Units Function

Category	Functions	Multi V Water IV
Key Refrigerant Components	Variable Path of Outdoor unit HEX	-
	HiPOR™ (High Pressure Oil Return)	○
	Humidity Sensor	-
	Corrosion Resistance Black Fin	-
Useful Function	Oil Sensor	○
	Dual Sensing	-
	Low Noise Operation	-
	Hgh Static Mode of Outdoor Unit Fan	-
	Partial Defrosting	-
Reliability	Auto Dust Cleaning of Outdoor Unit (Fan reverse rotation)	-
	Indoor Cooling Comfort Mode Based Outdoor Temperature	-
	Smart Load Control (SLC) (Changing indoor discharge air temperature according to load)	-
	Outdoor Unit Control Refer to Humidity	-
Central Controller	Defrost / Deicing	-
	High Pressure Switch	○
	Phase Protection	○
	Restart Delay (3-minutes)	○
	Self Diagnosis	○
Installation	Soft Start	○
	AC Ez (Simple Controller)	PQCSZ250S0
	AC Ez Touch	PACEZA000
	AC Smart IV	PACS4B000
	AC Smart 5	PACS5A000
BNU (Building Network Unit)	ACP (Advanced Control Platform) IV	PQCPC22A0
	ACP (Advanced Control Platform) 5	PACP5A000
PDI (Power Distribution Indicator)	AC Manager 5	PACM5A000
	ACP Lonworks	PLNWKB000
Cool / Heat Selector	ACP BACnet	PQNFB17C0
	Refrigerant Charging Kit	-
Low Ambient Kit	Variable Water Flow Valve Control Kit	PWFCKN000
	Standard	PPWRDB000
IO Module (ODU Dry Contact)	Premium	PQNUD1S40
	PRDSBM	-
Cycle Monitoring Device	LGMV	PRCTILO
	Mobile LGMV	PLGMVW100

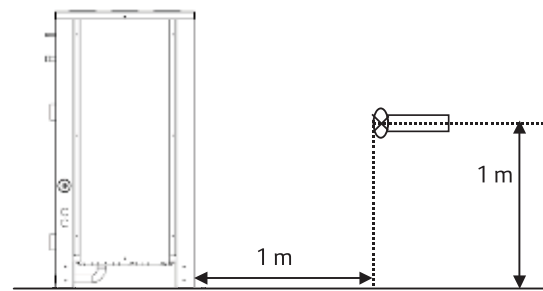
※ ○ : Applied, - : Not Applied

Operation Limits



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

Position of Sound Pressure Level Measuring



Note  
 1. Data is valid at free field condition  
 2. Data is valid at nominal operating condition  
 3. 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  
 4. Sound level can be increased in static pressure mode or air guide application.

Optional Accessories

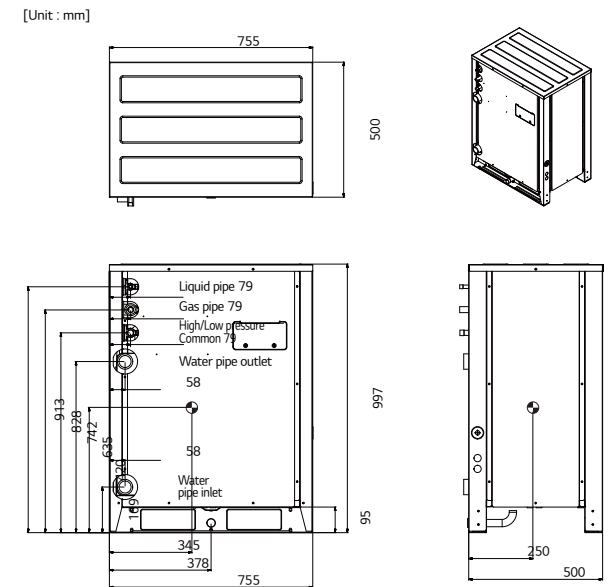
No.	Name	Model
1	Y branch pipe	ARBLN01621
		ARBLN03321
		ARBLN07121
		ARBLN14521
		ARBLN23220
2	Header	ARBL054
		ARBL057
		ARBL104
		ARBL107
		ARBL1010
3	Connection pipe of Outdoor Units	ARBL2010
		ARCNN21
		ARCNN31
		ARCNN41

Multi V Water IV Heating Dissipation Value by Model

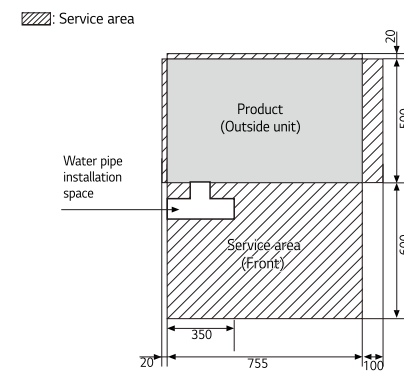
Model	HP	Heating Dissipation Value		
ARWN080LAS4	8	600 W	515.9 kcal/h	0.143 kcal/s
ARWN100LAS4	10	630 W	541.7 kcal/h	0.150 kcal/s
ARWN120LAS4	12	660 W	567.5 kcal/h	0.158 kcal/s
ARWN140LAS4	14	690 W	593.3 kcal/h	0.165 kcal/s
ARWN160LAS4	16	700 W	601.9 kcal/h	0.167 kcal/s
ARWN180LAS4	18	720 W	619.1 kcal/h	0.172 kcal/s
ARWN200LAS4	20	750 W	644.9 kcal/h	0.179 kcal/s

Test condition : Indoor air temperature : DB 40°C, WB : 32°C  
 ※ A design stage should be considered to ventilation system in mechanical room.

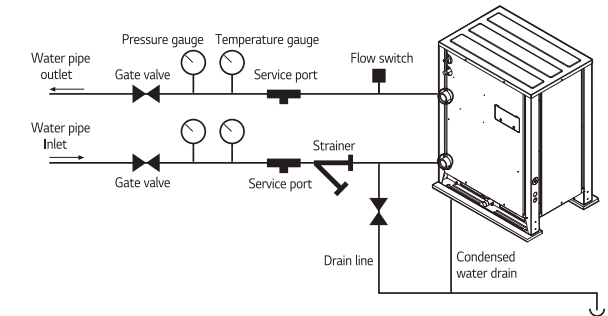
ARWN080LAS4 / ARWN100LAS4  
 ARWN140LAS4 / ARWN200LAS4



Individual Installation



Water Piping Installation



Precaution of Installation

- Do not install the unit at the outdoors. (Installation of the unit outdoors could result in fire or electric shock.) Recommended ambient temperature of outdoor unit is between 0 ~ 40°C.
- Keep the water temperature between 10 ~ 45°C. Standard water supply temperature is 30°C for cooling and 20°C for heating.
- Establish an **anti-freeze plan** for the water supply when the product is stopped during the winter.
- Be careful of the **water purity control**. Ensure water purity control to avoid breakdown due to water pipe corrosion. Refer to 'Standard Table for Water Purity Control' in PDB (Product Data Book).
- The water pressure resistance of the water pipe system of this product is **1.98MPa**.
- Always install a **trap** so that the drained water does not back flush.
- Install a **pressure gauge and temperature gauge** at the inlet and outlet of the water pipe.
- Flexible joints** must be installed not to cause any leakage from the vibration of pipes.
- Install a **service port** to clean the heat exchanger at the each end of the water inlet and outlet.
- It is mandatory to install the **flow switch** to the water collection pipe system connecting to the outdoor unit. (Flow switch acts as the 1st protection device when the heat water is not supplied.)
- When setting the flow switch, it is recommended to use the product with default set value to satisfy the minimum flow rate of this product. (The minimum flow rate range of this product is **50%**)
- To protect the water cooling type product, you must install a **strainer with 50 mesh** or more on the heat water supply pipe. If not installed, it can result in damage of heat exchanger by the following situation.
  - Heat water supply within the plate type heat exchanger is composed of multiple small paths.
  - If you do not use a strainer with 50 mesh or more, alien particles can partially block the water paths.
  - When running the heater, the plate type heat exchanger plays the role of the evaporator, and at this time, the temperature of the refrigerant side drops to drop the temperature of the heat water supply, which can result in icing point in the water paths.
  - As the heating process progresses, the water paths can be partially frozen to lead to damage in plate type heat exchanger.
  - As a result of the damage of the heat exchanger from the freezing, the refrigerant side and the heat water source side will be mixed to make the product unusable.



## Bouygues Challenger

LG MULTI V Water Solution with Geothermal Application.



### Site Information

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

### LG Solution

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

## ARWN080LAS4 / ARWN100LAS4 ARWN140LAS4



HP		8	10	14
Model Name	Combination Unit	ARWN080LAS4	ARWN100LAS4	ARWN140LAS4
	Independent Unit	ARWN080LAS4	ARWN100LAS4	ARWN140LAS4
Capacity	Cooling (Rated) kW	22.4	28.0	39.2
	Heating (Rated) kW	25.2	31.5	44.1
Input	Cooling (Rated) kW	3.86	5.09	7.84
	Heating (Rated) kW	4.2	5.34	8.17
EER		5.80	5.50	5.00
COP	Rated Capacity	6.00	5.90	5.40
Exterior	Color	Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray
	RAL Code (Classic)	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030
Heat Exchanger	Type	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45
	Head Loss	kPa	10.7	15.8
	Rated Water Flow	LPM	77	96
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.	(Inverter) x 1	(Inverter) x 1	(Inverter) x 1
	Motor Output x Number	W x No.	4,200 x 1	4,200 x 1
	Oil Type	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)
	Gas Pipe	mm (inch)	Ø22.2 (7/8)	Ø22.2 (7/8)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.	(755 x 997 x 500) x 1	(755 x 997 x 500) x 1	(755 x 997 x 500) x 1
Dimensions (W x H x D) - Shipping	mm x No.	(804 x 1,143 x 630) x 1	(804 x 1,143 x 630) x 1	(804 x 1,143 x 630) x 1
Net Weight	kg x No.	127 x 1	127 x 1	127 x 1
Shipping Weight	kg x No.	137 x 1	137 x 1	137 x 1
Sound Pressure Level	Cooling	dB(A)	47	50
	Heating	dB(A)	51	53
Sound Power Level	Cooling	dB(A)	59	62
	Heating	dB(A)	63	65
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C
Refrigerant	Refrigerant Name		R410A	R410A
	Precharged Amount in Factory	kg	5.8	5.8
	t-CO <sub>2</sub> eq		12.108	12.108
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
Number of Maximum Connectable Indoor Units		13 (20)	16 (25)	23 (35)

Note

- Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.
- Due to our policy of innovation some specifications may be changed without notification.
- Performances are based on the following conditions:
  - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)
  - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)
  - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.
- 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.
- This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)
- Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

ARWN200LAS4 / ARWN160LAS4  
ARWN180LAS4



HP		20	16	18	
Model Name	Combination Unit	ARWN200LAS4	ARWN160LAS4	ARWN180LAS4	
	Independent Unit	ARWN200LAS4	ARWN080LAS4 ARWN080LAS4	ARWN100LAS4 ARWN080LAS4	
Capacity	Cooling (Rated) kW	56.0	44.8	50.4	
	Heating (Rated) kW	63.0	50.4	56.7	
Input	Cooling (Rated) kW	11.20	7.72	8.95	
	Heating (Rated) kW	11.67	8.40	9.54	
EER		5.00	5.80	5.63	
COP	Rated Capacity	5.40	6.00	5.94	
Exterior	Color	Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray	
	RAL Code (Classic)	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	
Heat Exchanger	Type	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	
	Head Loss	kPa	30.1	10.7 + 10.7	15.8 + 10.7
	Rated Water Flow	LPM	192	77 + 77	96 + 77
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination x No.	(Inverter) x 1	(Inverter) x 2	(Inverter) x 2	
	Motor Output x Number	W x No.	5,300 x 1	4,200 x 2	4,200 x 2
	Oil Type	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
	Oil Charge	cc	3,000	5,600	5,600
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø12.7 (1/2)
	Gas Pipe	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.	(755 x 997 x 500) x 1	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2	
Dimensions (W x H x D) - Shipping	mm x No.	(804 x 1,143 x 630) x 1	(804 x 1,143 x 630) x 2	(804 x 1,143 x 630) x 2	
Net Weight	kg x No.	140 x 1	127 x 2	127 x 2	
Shipping Weight	kg x No.	150 x 1	137 x 2	137 x 2	
Sound Pressure Level	Cooling	dB(A)	54	50	52
	Heating	dB(A)	60	54	55
Sound Power Level	Cooling	dB(A)	66	62	64
	Heating	dB(A)	72	66	67
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	
Refrigerant	Refrigerant Name		R410A	R410A	R410A
	Precharged Amount in Factory	kg	3.0	11.6	11.6
	t-CO <sub>2</sub> eq		6.263	24.215	24.215
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50	
Number of Maximum Connectable Indoor Units		32 (50)	26 (40)	29 (45)	

Note  
 1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.  
 2. Due to our policy of innovation some specifications may be changed without notification.  
 3. Performances are based on the following conditions  
 - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)  
 - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)  
 - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.  
 4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard. Therefore, these values can be increased owing to ambient conditions during operation.  
 5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)  
 6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

ARWN220LAS4 / ARWN240LAS4  
ARWN280LAS4



HP		22	24	28	
Model Name	Combination Unit	ARWN220LAS4	ARWN240LAS4	ARWN280LAS4	
	Independent Unit	ARWN140LAS4 ARWN080LAS4	ARWN140LAS4 ARWN100LAS4	ARWN140LAS4 ARWN100LAS4	
Capacity	Cooling (Rated) kW	61.6	67.2	78.4	
	Heating (Rated) kW	69.3	75.6	88.2	
Input	Cooling (Rated) kW	11.70	12.93	15.68	
	Heating (Rated) kW	12.37	13.51	16.34	
EER		5.26	5.20	5.00	
COP	Rated Capacity	5.60	5.60	5.40	
Exterior	Color	Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray	
	RAL Code (Classic)	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	
Heat Exchanger	Type	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	
	Head Loss	kPa	28.6 + 10.7	28.6 + 15.8	28.6 + 28.6
	Rated Water Flow	LPM	135 + 77	135 + 96	135 + 135
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination x No.	(Inverter) x 2	(Inverter) x 2	(Inverter) x 2	
	Motor Output x Number	W x No.	4,200 x 2	4,200 x 2	4,200 x 2
	Oil Type	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
	Oil Charge	cc	5,600	5,600	5,600
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
	Gas Pipe	mm (inch)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2	
Dimensions (W x H x D) - Shipping	mm x No.	(804 x 1,143 x 630) x 2	(804 x 1,143 x 630) x 2	(804 x 1,143 x 630) x 2	
Net Weight	kg x No.	127 x 2	127 x 2	127 x 2	
Shipping Weight	kg x No.	137 x 2	137 x 2	137 x 2	
Sound Pressure Level	Cooling	dB(A)	58	59	59
	Heating	dB(A)	58	58	58
Sound Power Level	Cooling	dB(A)	70	71	72
	Heating	dB(A)	70	70	71
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	
Refrigerant	Refrigerant Name		R410A	R410A	R410A
	Precharged Amount in Factory	kg	11.6	11.6	11.6
	t-CO <sub>2</sub> eq		24.215	24.215	24.215
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50	
Number of Maximum Connectable Indoor Units		35 (44)	39 (48)	45 (56)	

Note  
 1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.  
 2. Due to our policy of innovation some specifications may be changed without notification.  
 3. Performances are based on the following conditions  
 - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)  
 - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)  
 - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.  
 4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard. Therefore, these values can be increased owing to ambient conditions during operation.  
 5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)  
 6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)



ARWN300LAS4 / ARWN340LAS4  
ARWN400LAS4



HP		30	34	40	
Model Name	Combination Unit	ARWN300LAS4	ARWN340LAS4	ARWN400LAS4	
	Independent Unit	ARWN200LAS4 ARWN100LAS4	ARWN200LAS4 ARWN140LAS4	ARWN200LAS4 ARWN140LAS4	
Capacity	Cooling (Rated) kW	84.0	95.2	112.0	
	Heating (Rated) kW	94.5	107.1	126.0	
Input	Cooling (Rated) kW	16.29	19.04	22.40	
	Heating (Rated) kW	17.01	19.84	23.34	
EER		5.16	5.00	5.00	
COP	Rated Capacity	5.56	5.40	5.40	
Exterior	Color	Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray	
	RAL Code (Classic)	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	
Heat Exchanger	Type	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	
	Head Loss	kPa	30.1 + 15.8	30.1 + 28.6	30.1 + 30.1
	Rated Water Flow	LPM	192 + 96	192 + 135	192 + 192
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination x No.	(Inverter) x 2	(Inverter) x 2	(Inverter) x 2	
	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 2
	Oil Type	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
	Oil Charge	cc	5,800	5,800	6,000
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
	Gas Pipe	mm (inch)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)	Ø41.3 (1-5/8)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2	
Dimensions (W x H x D) - Shipping	mm x No.	(804 x 1,143 x 630) x 2	(804 x 1,143 x 630) x 2	(804 x 1,143 x 630) x 2	
Net Weight	kg x No.	(140 x 1) + (127 x 1)	(140 x 1) + (127 x 1)	140 x 2	
Shipping Weight	kg x No.	(150 x 1) + (137 x 1)	(150 x 1) + (137 x 1)	150 x 2	
Sound Pressure Level	Cooling	dB(A)	55	59	55
	Heating	dB(A)	61	61	61
Sound Power Level	Cooling	dB(A)	67	72	68
	Heating	dB(A)	73	74	74
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	
Refrigerant	Refrigerant Name	R410A	R410A	R410A	
	Precharged Amount in Factory	kg	8.8	8.8	6.0
	t-CO <sub>2</sub> eq		18.370	18.370	12.525
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50	
Number of Maximum Connectable Indoor Units		49 (60)	55 (64)	64	

Note  
 1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.  
 2. Due to our policy of innovation some specifications may be changed without notification.  
 3. Performances are based on the following conditions  
 - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)  
 - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)  
 - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.  
 4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard. Therefore, these values can be increased owing to ambient conditions during operation.  
 5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)  
 6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

ARWN420LAS4 / ARWN440LAS4  
ARWN480LAS4



HP		42	44	48	
Model Name	Combination Unit	ARWN420LAS4	ARWN440LAS4	ARWN480LAS4	
	Independent Unit	ARWN200LAS4 ARWN140LAS4 ARWN080LAS4	ARWN200LAS4 ARWN140LAS4 ARWN100LAS4	ARWN200LAS4 ARWN140LAS4 ARWN140LAS4	
Capacity	Cooling (Rated) kW	117.6	123.2	134.4	
	Heating (Rated) kW	132.3	138.6	151.2	
Input	Cooling (Rated) kW	22.9	24.13	26.88	
	Heating (Rated) kW	24.04	25.18	28.01	
EER		5.14	5.11	5.00	
COP	Rated Capacity	5.50	5.50	5.40	
Exterior	Color	Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray	
	RAL Code (Classic)	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	
Heat Exchanger	Type	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	
	Head Loss	kPa	30.1 + 28.6 + 10.7	30.1 + 28.6 + 15.8	30.1 + 28.6 + 28.6
	Rated Water Flow	LPM	192 + 135 + 77	192 + 135 + 96	192 + 135 + 135
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination x No.	(Inverter) x 3	(Inverter) x 3	(Inverter) x 3	
	Motor Output x Number	W x No.	5,300 x 1 + 4,200 x 2	5,300 x 1 + 4,200 x 2	5,300 x 1 + 4,200 x 2
	Oil Type	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
	Oil Charge	cc	8,600	8,600	8,600
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
	Gas Pipe	mm (inch)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.	(755 x 997 x 500) x 3	(755 x 997 x 500) x 3	(755 x 997 x 500) x 3	
Dimensions (W x H x D) - Shipping	mm x No.	(804 x 1,143 x 630) x 3	(804 x 1,143 x 630) x 3	(804 x 1,143 x 630) x 3	
Net Weight	kg x No.	(140 x 1) + (127 x 2)	(140 x 1) + (127 x 2)	(140 x 1) + (127 x 2)	
Shipping Weight	kg x No.	(150 x 1) + (137 x 2)	(150 x 1) + (137 x 2)	(150 x 1) + (137 x 2)	
Sound Pressure Level	Cooling	dB(A)	60	60	60
	Heating	dB(A)	62	62	62
Sound Power Level	Cooling	dB(A)	72	72	74
	Heating	dB(A)	74	74	76
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	
Refrigerant	Refrigerant Name	R410A	R410A	R410A	
	Precharged Amount in Factory	kg	14.6	14.6	14.6
	t-CO <sub>2</sub> eq		30.478	30.478	30.478
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50	
Number of Maximum Connectable Indoor Units		64	64	64	

Note  
 1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.  
 2. Due to our policy of innovation some specifications may be changed without notification.  
 3. Performances are based on the following conditions  
 - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)  
 - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)  
 - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.  
 4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard. Therefore, these values can be increased owing to ambient conditions during operation.  
 5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)  
 6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

**ARWN500LAS4 / ARWN540LAS4  
ARWN600LAS4**



HP			50	54	60
Model Name	Combination Unit		ARWN500LAS4	ARWN540LAS4	ARWN600LAS4
	Independent Unit		ARWN200LAS4 ARWN200LAS4 ARWN100LAS4	ARWN200LAS4 ARWN200LAS4 ARWN140LAS4	ARWN200LAS4 ARWN200LAS4 ARWN200LAS4
Capacity	Cooling (Rated)	kW	140.0	151.2	168.0
	Heating (Rated)	kW	157.5	170.1	189.0
Input	Cooling (Rated)	kW	27.49	30.24	33.60
	Heating (Rated)	kW	28.68	31.51	35.01
EER			5.09	5.00	5.00
COP	Rated Capacity		5.49	5.40	5.40
Exterior	Color		Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray
	RAL Code (Classic)		RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030
Heat Exchanger	Type		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45
	Head Loss	kPa	30.1 + 30.1 + 15.8	30.1 + 28.6 + 28.6	30.1 + 30.1 + 30.1
	Rated Water Flow	LPM	192 + 192 + 96	192 + 192 + 135	192 + 192 + 192
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 3	(Inverter) x 3	(Inverter) x 3
	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
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Oil Charge	cc	8,800	8,800	9,000
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
	Gas Pipe	mm (inch)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.		(755 x 997 x 500) x 3	(755 x 997 x 500) x 3	(755 x 997 x 500) x 3
Dimensions (W x H x D) - Shipping	mm x No.		(804 x 1,143 x 630) x 3	(804 x 1,143 x 630) x 3	(804 x 1,143 x 630) x 3
Net Weight	kg x No.		(140 x 2) + (127 x 1)	(140 x 2) + (127 x 1)	140 x 3
Shipping Weight	kg x No.		(150 x 2) + (137 x 1)	(150 x 2) + (137 x 1)	150 x 3
Sound Pressure Level	Cooling	dB(A)	58	60	56
	Heating	dB(A)	63	62	62
Sound Power Level	Cooling	dB(A)	70	74	70
	Heating	dB(A)	75	76	76
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)		1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C
Refrigerant	Refrigerant Name		R410A	R410A	R410A
	Precharged Amount in Factory	kg	11.8	11.8	9.0
	t-CO <sub>2</sub> eq		24.633	24.633	18.788
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz		3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
Number of Maximum Connectable Indoor Units			64	64	64

- Note
- Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.
  - Due to our policy of innovation some specifications may be changed without notification
  - Performances are based on the following conditions
    - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)
    - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)
    - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.
  - 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.
  - This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)
  - Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

**ARWN620LAS4 / ARWN640LAS4  
ARWN680LAS4**



HP			62	64	68
Model Name	Combination Unit		ARWN620LAS4	ARWN640LAS4	ARWN680LAS4
	Independent Unit		ARWN200LAS4 ARWN200LAS4 ARWN140LAS4 ARWN080LAS4	ARWN200LAS4 ARWN200LAS4 ARWN140LAS4 ARWN100LAS4	ARWN200LAS4 ARWN200LAS4 ARWN140LAS4 ARWN140LAS4
Capacity	Cooling (Rated)	kW	173.6	179.2	190.4
	Heating (Rated)	kW	195.3	201.6	214.2
Input	Cooling (Rated)	kW	34.10	35.33	38.08
	Heating (Rated)	kW	35.71	36.85	39.68
EER			5.09	5.07	5.00
COP	Rated Capacity		5.47	5.47	5.40
Exterior	Color		Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray
	RAL Code (Classic)		RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030
Heat Exchanger	Type		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45
	Head Loss	kPa	30.1 + 30.1 + 28.6 + 10.7	30.1 + 30.1 + 28.6 + 15.8	30.1 + 30.1 + 28.6 + 28.6
	Rated Water Flow	LPM	192 + 192 + 135 + 77	192 + 192 + 135 + 96	192 + 192 + 135 + 135
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 4	(Inverter) x 4	(Inverter) x 4
	Motor Output x Number	W x No.	5,300 x 2 + 4,200 x 2	5,300 x 2 + 4,200 x 2	5,300 x 2 + 4,200 x 2
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Oil Charge	cc	11,600	11,600	11,600
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø22.2 (7/8)	Ø22.2 (7/8)	Ø22.2 (7/8)
	Gas Pipe	mm (inch)	Ø44.5 (1-3/4)	Ø44.5 (1-3/4)	Ø53.98 (2-1/8)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.		(755 x 997 x 500) x 4	(755 x 997 x 500) x 4	(755 x 997 x 500) x 4
Dimensions (W x H x D) - Shipping	mm x No.		(804 x 1,143 x 630) x 4	(804 x 1,143 x 630) x 4	(804 x 1,143 x 630) x 4
Net Weight	kg x No.		(140 x 2) + (127 x 2)	(140 x 2) + (127 x 2)	(140 x 2) + (127 x 2)
Shipping Weight	kg x No.		(150 x 2) + (137 x 2)	(150 x 2) + (137 x 2)	(150 x 2) + (137 x 2)
Sound Pressure Level	Cooling	dB(A)	61	61	61
	Heating	dB(A)	64	64	63
Sound Power Level	Cooling	dB(A)	73	73	75
	Heating	dB(A)	76	76	77
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)		1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C
Refrigerant	Refrigerant Name		R410A	R410A	R410A
	Precharged Amount in Factory	kg	17.6	17.6	17.6
	t-CO <sub>2</sub> eq		36.740	36.740	36.740
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz		3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
Number of Maximum Connectable Indoor Units			64	64	64

- Note
- Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.
  - Due to our policy of innovation some specifications may be changed without notification
  - Performances are based on the following conditions
    - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)
    - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)
    - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.
  - 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.
  - This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)
  - Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

ARWN700LAS4 / ARWN740LAS4  
ARWN800LAS4



HP		70	74	80
Model Name	Combination Unit	ARWN700LAS4	ARWN740LAS4	ARWN800LAS4
	Independent Unit	ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN100LAS4	ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN140LAS4	ARWN200LAS4 ARWN200LAS4 ARWN200LAS4 ARWN200LAS4
Capacity	Cooling (Rated) kW	196.0	207.2	224.0
	Heating (Rated) kW	220.5	233.1	252.0
Input	Cooling (Rated) kW	38.69	41.44	44.80
	Heating (Rated) kW	40.35	43.18	46.68
EER		5.07	5.00	5.00
COP	Rated Capacity	5.46	5.40	5.40
Exterior	Color	Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray
	RAL Code (Classic)	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030
Heat Exchanger	Type	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance kgf/cm <sup>2</sup>	45	45	45
	Head Loss kPa	30.1 + 30.1 + 30.1 + 15.8	30.1 + 30.1 + 30.1 + 28.6	30.1 + 30.1 + 30.1 + 30.1
	Rated Water Flow LPM	192 + 192 + 192 + 96	192 + 192 + 192 + 135	192 + 192 + 192 + 192
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.	(Inverter) x 4	(Inverter) x 4	(Inverter) x 4
	Motor Output x Number W x No.	5,300 x 3 + 4,200 x 1	5,300 x 3 + 4,200 x 1	5,300 x 4
	Oil Type	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Oil Charge cc	11,800	11,800	12,000
Refrigerant Connecting Pipes	Liquid Pipe mm (inch)	Ø22.2 (7/8)	Ø22.2 (7/8)	Ø22.2 (7/8)
	Gas Pipe mm (inch)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)
Water Connecting Pipes	Inlet A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)
	Outlet A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)
	Drain Outlet A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.	(755 x 997 x 500) x 4	(755 x 997 x 500) x 4	(755 x 997 x 500) x 4
Dimensions (W x H x D) - Shipping	mm x No.	(804 x 1,143 x 630) x 4	(804 x 1,143 x 630) x 4	(804 x 1,143 x 630) x 4
Net Weight	kg x No.	(140 x 3) + (127 x 1)	(140 x 3) + (127 x 1)	140 x 4
Shipping Weight	kg x No.	(150 x 3) + (137 x 1)	(150 x 3) + (137 x 1)	150 x 4
Sound Pressure Level	Cooling dB(A)	59	61	57
	Heating dB(A)	65	63	63
Sound Power Level	Cooling dB(A)	71	75	71
	Heating dB(A)	77	77	77
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C
Refrigerant	Refrigerant Name	R410A	R410A	R410A
	Precharged Amount in Factory kg	14.8	14.8	12.0
	t-CO <sub>2</sub> eq	30.895	30.895	25.050
	Control	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
Number of Maximum Connectable Indoor Units <sup>1)</sup>		64	64	64

Note  
 1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.  
 2. Due to our policy of innovation some specifications may be changed without notification.  
 3. Performances are based on the following conditions  
 - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)  
 - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)  
 - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.  
 4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard. Therefore, these values can be increased owing to ambient conditions during operation.  
 5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)  
 6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

ARWB080LAS4 / ARWB100LAS4  
ARWB140LAS4



HP		8	10	14
Model Name	Combination Unit	ARWB080LAS4	ARWB100LAS4	ARWB140LAS4
	Independent Unit	ARWB080LAS4	ARWB100LAS4	ARWB140LAS4
Capacity	Cooling (Rated) kW	22.4	28.0	39.2
	Heating (Rated) kW	25.2	31.5	44.1
Input	Cooling (Rated) kW	3.86	5.09	7.84
	Heating (Rated) kW	4.20	5.34	8.17
EER		5.80	5.50	5.00
COP	Rated Capacity	6.00	5.90	5.40
Exterior	Color	Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray
	RAL Code (Classic)	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030
Heat Exchanger	Type	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance kgf/cm <sup>2</sup>	45	45	45
	Head Loss kPa	10.7	15.8	28.6
	Rated Water Flow LPM	77	96	135
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.	(Inverter) x 1	(Inverter) x 1	(Inverter) x 1
	Motor Output x Number W x No.	4,200 x 1	4,200 x 1	4,200 x 1
	Oil Type	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Oil Charge cc	2,800	2,800	2,800
Refrigerant Connecting Pipes	Liquid Pipe mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø12.7 (1/2)
	Low Pressure Gas Pipe mm (inch)	Ø22.2 (7/8)	Ø22.2 (7/8)	Ø25.4 (1)
	High Pressure Gas Pipe mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
Water Connecting Pipes	Inlet A (inch)	40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) (Internal Thread)
	Outlet A (inch)	40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) (Internal Thread)
	Drain Outlet A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.	(755 x 997 x 500) x 1	(755 x 997 x 500) x 1	(755 x 997 x 500) x 1
Dimensions (W x H x D) - Shipping	mm x No.	(804 x 1,143 x 630) x 1	(804 x 1,143 x 630) x 1	(804 x 1,143 x 630) x 1
Net Weight	kg x No.	127 x 1	127 x 1	127 x 1
Shipping Weight	kg x No.	137 x 1	137 x 1	137 x 1
Sound Pressure Level	Cooling dB(A)	47	50	58
	Heating dB(A)	51	53	57
Sound Power Level	Cooling dB(A)	59	62	70
	Heating dB(A)	63	65	69
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C
Refrigerant	Refrigerant Name	R410A	R410A	R410A
	Precharged Amount in Factory kg	5.8	5.8	5.8
	t-CO <sub>2</sub> eq	12.108	12.108	12.108
	Control	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
Number of Maximum Connectable Indoor Units <sup>1)</sup>		13 (20)	16 (25)	23 (35)

Note  
 1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.  
 2. Due to our policy of innovation some specifications may be changed without notification.  
 3. Performances are based on the following conditions  
 - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)  
 - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)  
 - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.  
 4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard. Therefore, these values can be increased owing to ambient conditions during operation.  
 5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)  
 6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)



ARWB200LAS4 / ARWB160LAS4  
ARWB180LAS4



HP		20	16	18	
Model Name	Combination Unit	ARWB200LAS4	ARWB160LAS4	ARWB180LAS4	
	Independent Unit	ARWB200LAS4	ARWB080LAS4 ARWB080LAS4	ARWB100LAS4 ARWB080LAS4	
Capacity	Cooling (Rated) kW	56.0	44.8	50.4	
	Heating (Rated) kW	63.0	50.4	56.7	
Input	Cooling (Rated) kW	11.20	7.72	8.95	
	Heating (Rated) kW	11.67	8.40	9.54	
EER		5.00	5.80	5.63	
COP	Rated Capacity	5.40	6.00	5.94	
Exterior	Color	Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray	
	RAL Code (Classic)	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	
Heat Exchanger	Type	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	
	Head Loss	kPa	30.1	10.7 + 10.7	15.8 + 10.7
	Rated Water Flow	LPM	192	77 + 77	96 + 77
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination x No.	(Inverter) x 1	(Inverter) x 2	(Inverter) x 2	
	Motor Output x Number	W x No.	5,300 x 1	4,200 x 2	4,200 x 2
	Oil Type	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	
	Oil Charge	cc	3,000	5,600	5,600
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø12.7 (1/2)	Ø12.7 (1/2)	Ø12.7 (1/2)
	Low Pressure Gas Pipe	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
	High Pressure Gas Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.	(755 x 997 x 500) x 1	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2	
Dimensions (W x H x D) - Shipping	mm x No.	(804 x 1,143 x 630) x 1	(804 x 1,143 x 630) x 2	(804 x 1,143 x 630) x 2	
Net Weight	kg x No.	140 x 1	127 x 2	127 x 2	
Shipping Weight	kg x No.	150 x 1	137 x 2	137 x 2	
Sound Pressure Level	Cooling	dB(A)	54	50	52
	Heating	dB(A)	60	54	55
Sound Power Level	Cooling	dB(A)	66	62	64
	Heating	dB(A)	72	66	67
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	
Refrigerant	Refrigerant Name		R410A	R410A	R410A
	Precharged Amount in Factory	kg	3.0	11.6	11.6
	t-CO <sub>2</sub> eq		6.263	24.215	24.215
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50	
Number of Maximum Connectable Indoor Units		32(50)	26(40)	29(45)	

- Note
- Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.
  - Due to our policy of innovation some specifications may be changed without notification
  - Performances are based on the following conditions
    - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)
    - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)
    - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.
  - 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.
  - This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)
  - Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

ARWB220LAS4 / ARWB240LAS4  
ARWB280LAS4



HP		22	24	28	
Model Name	Combination Unit	ARWB220LAS4	ARWB240LAS4	ARWB280LAS4	
	Independent Unit	ARWB140LAS4 ARWB080LAS4	ARWB140LAS4 ARWB100LAS4	ARWB140LAS4 ARWB140LAS4	
Capacity	Cooling (Rated) kW	61.6	67.2	78.4	
	Heating (Rated) kW	69.3	75.6	88.2	
Input	Cooling (Rated) kW	11.70	12.93	15.68	
	Heating (Rated) kW	12.37	13.51	16.34	
EER		5.26	5.20	5.00	
COP	Rated Capacity	5.60	5.60	5.40	
Exterior	Color	Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray	
	RAL Code (Classic)	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	
Heat Exchanger	Type	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	
	Head Loss	kPa	28.6 + 10.7	28.6 + 15.8	28.6 + 28.6
	Rated Water Flow	LPM	135 + 77	135 + 96	135 + 135
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination x No.	(Inverter) x 2	(Inverter) x 2	(Inverter) x 2	
	Motor Output x Number	W x No.	4,200 x 2	4,200 x 2	4,200 x 2
	Oil Type	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
	Oil Charge	cc	5,600	5,600	5,600
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
	Low Pressure Gas Pipe	mm (inch)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)
	High Pressure Gas Pipe	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2	
Dimensions (W x H x D) - Shipping	mm x No.	(804 x 1,143 x 630) x 2	(804 x 1,143 x 630) x 2	(804 x 1,143 x 630) x 2	
Net Weight	kg x No.	127 x 2	127 x 2	127 x 2	
Shipping Weight	kg x No.	137 x 2	137 x 2	137 x 2	
Sound Pressure Level	Cooling	dB(A)	58	59	59
	Heating	dB(A)	58	58	58
Sound Power Level	Cooling	dB(A)	70	71	72
	Heating	dB(A)	70	70	71
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	
Refrigerant	Refrigerant Name		R410A	R410A	R410A
	Precharged Amount in Factory	kg	11.6	11.6	11.6
	t-CO <sub>2</sub> eq		24.215	24.215	24.215
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50	
Number of Maximum Connectable Indoor Units		35 (44)	39 (48)	45 (56)	

- Note
- Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.
  - Due to our policy of innovation some specifications may be changed without notification
  - Performances are based on the following conditions
    - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)
    - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)
    - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.
  - 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.
  - This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)
  - Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

**ARWB300LAS4 / ARWB340LAS4  
ARWB400LAS4**



HP		30	34	40	
Model Name	Combination Unit	ARWB300LAS4	ARWB340LAS4	ARWB400LAS4	
	Independent Unit	ARWB200LAS4 ARWB100LAS4	ARWB200LAS4 ARWB140LAS4	ARWB200LAS4 ARWB140LAS4	
Capacity	Cooling (Rated) kW	84.0	95.2	112.0	
	Heating (Rated) kW	94.5	107.1	126.0	
Input	Cooling (Rated) kW	16.29	19.04	22.40	
	Heating (Rated) kW	17.01	19.84	23.34	
EER		5.16	5.00	5.00	
COP	Rated Capacity	5.56	5.40	5.40	
Exterior	Color	Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray	
	RAL Code (Classic)	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	
Heat Exchanger	Type	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	
	Head Loss	kPa	30.1 + 15.8	30.1 + 28.6	30.1 + 30.1
	Rated Water Flow	LPM	192 + 96	192 + 135	192 + 192
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination x No.	(Inverter) x 2	(Inverter) x 2	(Inverter) x 2	
	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 2
	Oil Type	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
	Oil Charge	cc	5,800	5,800	6,000
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
	Low Pressure Gas Pipe	mm (inch)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)	Ø41.3 (1-5/8)
	High Pressure Gas Pipe	mm (inch)	Ø28.58 (1-1/8)	Ø28.58 (1-1/8)	Ø34.9 (1-3/8)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2	(755 x 997 x 500) x 2	
Dimensions (W x H x D) - Shipping	mm x No.	(804 x 1,143 x 630) x 2	(804 x 1,143 x 630) x 2	(804 x 1,143 x 630) x 2	
Net Weight	kg x No.	(140 x 1) + (127 x 1)	(140 x 1) + (127 x 1)	140 x 2	
Shipping Weight	kg x No.	(150 x 1) + (137 x 1)	(150 x 1) + (137 x 1)	150 x 2	
Sound Pressure Level	Cooling	dB(A)	55	59	55
	Heating	dB(A)	61	61	61
Sound Power Level	Cooling	dB(A)	67	72	68
	Heating	dB(A)	73	74	74
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	
Refrigerant	Refrigerant Name		R410A	R410A	R410A
	Precharged Amount in Factory	kg	8.8	8.8	6.0
	t-CO <sub>2</sub> eq		18.370	18.370	12.525
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50	
Number of Maximum Connectable Indoor Units		49 (60)	55 (64)	64	

Note  
 1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.  
 2. Due to our policy of innovation some specifications may be changed without notification.  
 3. Performances are based on the following conditions  
 - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)  
 - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)  
 - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.  
 4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard. Therefore, these values can be increased owing to ambient conditions during operation.  
 5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)  
 6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

**ARWB420LAS4 / ARWB440LAS4  
ARWB480LAS4**



HP		42	44	48	
Model Name	Combination Unit	ARWB420LAS4	ARWB440LAS4	ARWB480LAS4	
	Independent Unit	ARWB200LAS4 ARWB140LAS4 ARWB080LAS4	ARWB200LAS4 ARWB140LAS4 ARWB100LAS4	ARWB200LAS4 ARWB140LAS4 ARWB140LAS4	
Capacity	Cooling (Rated) kW	117.6	123.2	134.4	
	Heating (Rated) kW	132.3	138.6	151.2	
Input	Cooling (Rated) kW	22.9	24.13	26.88	
	Heating (Rated) kW	24.04	25.18	28.01	
EER		5.14	5.11	5.00	
COP	Rated Capacity	5.50	5.50	5.40	
Exterior	Color	Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray	
	RAL Code (Classic)	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	
Heat Exchanger	Type	Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	
	Head Loss	kPa	30.1 + 28.6 + 10.7	30.1 + 28.6 + 15.8	30.1 + 28.6 + 28.6
	Rated Water Flow	LPM	192 + 135 + 77	192 + 135 + 96	192 + 135 + 135
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination x No.	(Inverter) x 3	(Inverter) x 3	(Inverter) x 3	
	Motor Output x Number	W x No.	5,300 x 1 + 4,200 x 2	5,300 x 1 + 4,200 x 2	5,300 x 1 + 4,200 x 2
	Oil Type	FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
	Oil Charge	cc	8,600	8,600	8,600
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
	Low Pressure Gas Pipe	mm (inch)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)
	High Pressure Gas Pipe	mm (inch)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.	(755 x 997 x 500) x 3	(755 x 997 x 500) x 3	(755 x 997 x 500) x 3	
Dimensions (W x H x D) - Shipping	mm x No.	(804 x 1,143 x 630) x 3	(804 x 1,143 x 630) x 3	(804 x 1,143 x 630) x 3	
Net Weight	kg x No.	(140 x 1) + (127 x 2)	(140 x 1) + (127 x 2)	(140 x 1) + (127 x 2)	
Shipping Weight	kg x No.	(150 x 1) + (137 x 2)	(150 x 1) + (137 x 2)	(150 x 1) + (137 x 2)	
Sound Pressure Level	Cooling	dB(A)	60	60	60
	Heating	dB(A)	62	62	62
Sound Power Level	Cooling	dB(A)	72	72	74
	Heating	dB(A)	74	74	76
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	
Refrigerant	Refrigerant Name		R410A	R410A	R410A
	Precharged Amount in Factory	kg	14.6	14.6	14.6
	t-CO <sub>2</sub> eq		30.478	30.478	30.478
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50	
Number of Maximum Connectable Indoor Units		64	64	64	

Note  
 1. Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.  
 2. Due to our policy of innovation some specifications may be changed without notification.  
 3. Performances are based on the following conditions  
 - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)  
 - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)  
 - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.  
 4. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard. Sound power level is measured on the rated condition in the reverberation rooms by ISO 3741 standard. Therefore, these values can be increased owing to ambient conditions during operation.  
 5. This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)  
 6. Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

**ARWB500LAS4 / ARWB540LAS4  
ARWB600LAS4**



HP			50	54	60
Model Name	Combination Unit		ARWB500LAS4	ARWB540LAS4	ARWB600LAS4
	Independent Unit		ARWB200LAS4 ARWB200LAS4 ARWB100LAS4	ARWB200LAS4 ARWB200LAS4 ARWB140LAS4	ARWB200LAS4 ARWB200LAS4 ARWB200LAS4
Capacity	Cooling (Rated)	kW	140.0	151.2	168.0
	Heating (Rated)	kW	157.5	170.1	189.0
Input	Cooling (Rated)	kW	27.49	30.24	33.60
	Heating (Rated)	kW	28.68	31.51	35.01
EER			5.09	5.00	5.00
COP	Rated Capacity		5.49	5.40	5.40
Exterior	Color		Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray
	RAL Code (Classic)		RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030
Heat Exchanger	Type		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45
	Head Loss	kPa	30.1 + 30.1 + 15.8	30.1 + 28.6 + 28.6	30.1 + 30.1 + 30.1
	Rated Water Flow	LPM	192 + 192 + 96	192 + 192 + 135	192 + 192 + 192
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 3	(Inverter) x 3	(Inverter) x 3
	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
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Oil Charge	cc	8,800	8,800	9,000
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø19.05 (3/4)	Ø19.05 (3/4)	Ø19.05 (3/4)
	Low Pressure Gas Pipe	mm (inch)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)
	High Pressure Gas Pipe	mm (inch)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)	Ø34.9 (1-3/8)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.		(755 x 997 x 500) x 3	(755 x 997 x 500) x 3	(755 x 997 x 500) x 3
Dimensions (W x H x D) - Shipping	mm x No.		(804 x 1,143 x 630) x 3	(804 x 1,143 x 630) x 3	(804 x 1,143 x 630) x 3
Net Weight	kg x No.		(140 x 2) + (127 x 1)	(140 x 2) + (127 x 1)	140 x 3
Shipping Weight	kg x No.		(150 x 2) + (137 x 1)	(150 x 2) + (137 x 1)	150 x 3
Sound Pressure Level	Cooling	dB(A)	58	60	56
	Heating	dB(A)	63	62	62
Sound Power Level	Cooling	dB(A)	70	74	70
	Heating	dB(A)	75	76	76
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)		1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C
Refrigerant	Refrigerant Name		R410A	R410A	R410A
	Precharged Amount in Factory		11.8	11.8	9.0
	t-CO <sub>2</sub> eq		24.633	24.633	18.788
Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz		3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
Number of Maximum Connectable Indoor Units			64	64	64

- Note
- Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.
  - Due to our policy of innovation some specifications may be changed without notification
  - Performances are based on the following conditions
    - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)
    - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)
    - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.
  - 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.
  - This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)
  - Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)

**ARWB620LAS4 / ARWB640LAS4  
ARWB680LAS4**



HP			62	64	68
Model Name	Combination Unit		ARWB620LAS4	ARWB640LAS4	ARWB680LAS4
	Independent Unit		ARWB200LAS4 ARWB200LAS4 ARWB140LAS4 ARWB080LAS4	ARWB200LAS4 ARWB200LAS4 ARWB140LAS4 ARWB100LAS4	ARWB200LAS4 ARWB200LAS4 ARWB140LAS4 ARWB140LAS4
Capacity	Cooling (Rated)	kW	173.6	179.2	190.4
	Heating (Rated)	kW	195.3	201.6	214.2
Input	Cooling (Rated)	kW	34.10	35.33	38.08
	Heating (Rated)	kW	35.71	36.85	39.68
EER			5.09	5.07	5.00
COP	Rated Capacity		5.47	5.47	5.40
Exterior	Color		Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray
	RAL Code (Classic)		RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030
Heat Exchanger	Type		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45
	Head Loss	kPa	30.1 + 30.1 + 28.6 + 10.7	30.1 + 30.1 + 28.6 + 15.8	30.1 + 30.1 + 28.6 + 28.6
	Rated Water Flow	LPM	192 + 192 + 135 + 77	192 + 192 + 135 + 96	192 + 192 + 135 + 135
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Combination x No.		(Inverter) x 4	(Inverter) x 4	(Inverter) x 4
	Motor Output x Number	W x No.	5,300 x 2 + 4,200 x 2	5,300 x 2 + 4,200 x 2	5,300 x 2 + 4,200 x 2
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)
	Oil Charge	cc	11,600	11,600	11,600
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø22.2 (7/8)	Ø22.2 (7/8)	Ø22.2 (7/8)
	Low Pressure Gas Pipe	mm (inch)	Ø44.5 (1-3/4)	Ø44.5 (1-3/4)	Ø53.98 (2-1/8)
	High Pressure Gas Pipe	mm (inch)	Ø41.3 (1-5/8)	Ø41.3 (1-5/8)	Ø44.5 (1-3/4)
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)
	Outlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)
Dimensions (W x H x D)	mm x No.		(755 x 997 x 500) x 4	(755 x 997 x 500) x 4	(755 x 997 x 500) x 4
Dimensions (W x H x D) - Shipping	mm x No.		(804 x 1,143 x 630) x 4	(804 x 1,143 x 630) x 4	(804 x 1,143 x 630) x 4
Net Weight	kg x No.		(140 x 2) + (127 x 2)	(140 x 2) + (127 x 2)	(140 x 2) + (127 x 2)
Shipping Weight	kg x No.		(150 x 2) + (137 x 2)	(150 x 2) + (137 x 2)	(150 x 2) + (137 x 2)
Sound Pressure Level	Cooling	dB(A)	61	61	61
	Heating	dB(A)	64	64	63
Sound Power Level	Cooling	dB(A)	73	73	75
	Heating	dB(A)	76	76	77
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)		1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C
Refrigerant	Refrigerant Name		R410A	R410A	R410A
	Precharged Amount in Factory		17.6	17.6	17.6
	t-CO <sub>2</sub> eq		36.740	36.740	36.740
Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz		3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
Number of Maximum Connectable Indoor Units			64	64	64

- Note
- Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.
  - Due to our policy of innovation some specifications may be changed without notification
  - Performances are based on the following conditions
    - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)
    - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)
    - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.
  - 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.
  - This product contains Fluorinated Greenhouse Gases. (R410A, GWP (Global warming potential) = 2,087.5)
  - Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)



ARWB700LAS4 / ARWB740LAS4  
ARWB800LAS4



HP			70	74	80	
Model Name	Combination Unit		ARWB700LAS4	ARWB740LAS4	ARWB800LAS4	
	Independent Unit		ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB100LAS4	ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB140LAS4	ARWB200LAS4 ARWB200LAS4 ARWB200LAS4 ARWB200LAS4	
Capacity	Cooling (Rated)	kW	196.0	207.2	224.0	
	Heating (Rated)	kW	220.5	233.1	252.0	
Input	Cooling (Rated)	kW	38.69	41.44	44.80	
	Heating (Rated)	kW	40.35	43.18	46.68	
EER			5.07	5.00	5.00	
COP	Rated Capacity		5.46	5.40	5.40	
Exterior	Color		Warm Gray / Morning Gray	Warm Gray / Morning Gray	Warm Gray / Morning Gray	
	RAL Code (Classic)		RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	RAL 7044 / RAL 7030	
Heat Exchanger	Type		Stainless Steel Plate	Stainless Steel Plate	Stainless Steel Plate	
	Maximum Pressure Resistance	kgf/cm <sup>2</sup>	45	45	45	
	Head Loss	kPa	30.1 + 30.1 + 30.1 + 15.8	30.1 + 30.1 + 30.1 + 28.6	30.1 + 30.1 + 30.1 + 30.1	
	Rated Water Flow	LPM	192 + 192 + 192 + 96	192 + 192 + 192 + 135	192 + 192 + 192 + 192	
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Combination x No.		(Inverter) x 4	(Inverter) x 4	(Inverter) x 4	
	Motor Output x Number	W x No.	5,300 x 3 + 4,200 x 1	5,300 x 3 + 4,200 x 1	5,300 x 4	
	Oil Type		FVC68D (PVE)	FVC68D (PVE)	FVC68D (PVE)	
	Oil Charge	cc	11,800	11,800	12,000	
Refrigerant Connecting Pipes	Liquid Pipe	mm (inch)	Ø22.2 (7/8)	Ø22.2 (7/8)	Ø22.2 (7/8)	
	Low Pressure Gas Pipe	mm (inch)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)	Ø53.98 (2-1/8)	
	High Pressure Gas Pipe	mm (inch)	Ø44.5 (1-3/4)	Ø44.5 (1-3/4)	Ø44.5 (1-3/4)	
Water Connecting Pipes	Inlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	
	Outlet	A (inch)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	40A (PT 1-1/2) + 40A (PT 1-1/2) + 40A (PT 1-1/2) + PT40 (Internal Thread)	
	Drain Outlet	A (inch)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	20A (PT 3/4) (External Thread)	
Dimensions (W x H x D)		mm x No.	(755 x 997 x 500) x 4	(755 x 997 x 500) x 4	(755 x 997 x 500) x 4	
Dimensions (W x H x D) - Shipping		mm x No.	(804 x 1,143 x 630) x 4	(804 x 1,143 x 630) x 4	(804 x 1,143 x 630) x 4	
Net Weight		kg x No.	(140 x 3) + (127 x 1)	(140 x 3) + (127 x 1)	140 x 4	
Shipping Weight		kg x No.	(150 x 3) + (137 x 1)	(150 x 3) + (137 x 1)	150 x 4	
Sound Pressure Level	Cooling	dB(A)	59	61	57	
	Heating	dB(A)	65	63	63	
Sound Power Level	Cooling	dB(A)	71	75	71	
	Heating	dB(A)	77	77	77	
Communication Cable	mm <sup>2</sup> x No. (VCTF-SB)		1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C	
Refrigerant	Refrigerant Name		R410A	R410A	R410A	
	Precharged Amount in Factory		kg	14.8	14.8	12.0
	t-CO <sub>2</sub> eq			30.895	30.895	25.050
	Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø, V, Hz		3, 380-415, 50	3, 380-415, 50	3, 380-415, 50	
Number of Maximum Connectable Indoor Units			64	64	64	

Note

- Maximum numbers are prepared based on assumption that all 2.2kW indoor units are connected. The numbers in parentheses means maximum connectable indoor units in accordance with outdoor units combination (160% - 200%). The recommended ratio is 130%.
- Due to our policy of innovation some specifications may be changed without notification.
- Performances are based on the following conditions
  - Cooling : Indoor temp 27°C (80.6°F) DB / 19°C (66.2°F) WB, Water inlet temp 30°C (86°F)
  - Heating : Indoor temp 20°C (68°F) DB, Water inlet temp 20°C (68°F)
  - Interconnected Pipe Length is 7.5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.
- 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.
- This product contains Fluorinated Greenhouse Gases (R410A, GWP (Global warming potential) = 2,087.5)
- Add an anti freeze to circulation water when outdoor unit is operating under 10°C (50°F), and change the DIP switch on main PCB. (For more information on installation section.)