

# LG Air Conditioning Technologies

VRF Heat Recovery & Heat Pump Systems for Light Commercial and Residential Applications



# WHAT IS VRF?

A Variable Refrigerant Flow (VRF) system is a single refrigerant circuit that connects many indoor units to one outdoor unit. VRF is a superior way to heat and cool any space, providing improved humidity control, individual set points per indoor unit, and a very quiet comfort experience. In the heat recovery configuration, VRF also allows for heating and cooling simultaneously in different zones, further enhancing energy savings and increasing occupant comfort.

### **About LG Electronics USA**

LG Electronics USA, Inc., based in Englewood Cliffs, New Jersey, is the North American subsidiary of LG Electronics, Inc., a \$56 billion global force and technology leader in consumer electronics, home appliances and mobile communications. LG Electronics, a proud ENERGY STAR® Partner of the Year for the past 5 consecutive years, sells a range of stylish and innovative home entertainment products, mobile phones, home appliances, commercial displays, air conditioning systems and solar energy solutions in the United States, all under LG's "Life's Good" marketing theme. For more news and information on LG Electronics, please visit www.LG.com.

### **About LG Electronics Air Conditioning Technologies**

The LG Electronics USA Air Conditioning Technologies business is based in Alpharetta, Georgia. LG is a leading player in the global air conditioning market, manufacturing both commercial and residential air conditioners and providing total sustainability and building management solutions. From consumer and individual units to industrial and specialized air conditioning systems, LG provides a wide range of products for heating, ventilating and air conditioning. For more information, please visit www.lghvac.com.



LG MULTI V S 02

### WHY MULTI V S?

The LG Multi V S systems lineup includes the industry's first single phase VRF 5-ton Heat Recovery system. Available in Heat Pump and Heat Recovery configurations, Multi V S is a compact yet powerful VRF solution for residential and light commercial applications. LG Multi V S utilizes single-phase power so it can be used residentially as well as in a wide range of commercial applications, offering overall increased flexibility and efficiency for property owners. For additional adaptability, the Multi V S units require little to no ductwork, resulting in smaller space requirements and allowing for higher ceilings, less structural impact and more usable square footage.



### Smart Load Control

Automatically adjusts operation requirements by sensing both indoor and outdoor conditions

### Inverter Compressor

Allows the system to closely match compressor speed with demand, which translates to higher efficiency



# OPTIMIZED COMFORT

### Individual Zone Control

Allows for the user to control the space to the exact temperature desired

### Quiet Operation

LG Multi  $V^{TM}$  Indoor units are among the quietest in the industry, with rated sound levels as low as 23 dB(A)



### Compact & Lightweight

Connect up to 12 indoor units to one system to heat and cool more zones with less outdoor space (less than  $3.4\,\mathrm{ft^2}$ )

### Design Flexibility

Choose from a wide variety of indoor unit styles, both ducted and non-ducted, including the award-winning LG Art Cool  $^{\text{TM}}$  Gallery



# SUPERIOR PERFORMANCE

### Powerful Heating

Continuous heating down to -13°F

### Heat Recovery

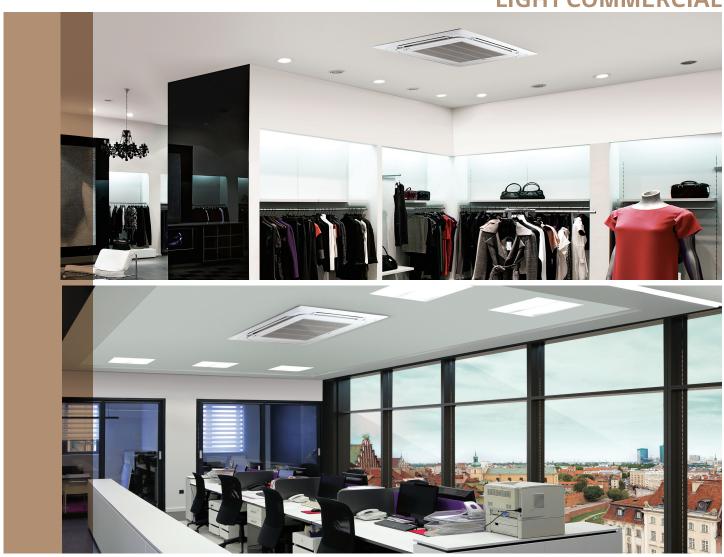
Heat and cool different areas simultaneously by taking heat rejected from one space in cooling mode and delivering it to a space that needs heating

# **APPLICATIONS**

### RESIDENTIAL



## **LIGHT COMMERCIAL**



# **SPECIFICATIONS**





Model	Specifications	Unit	ARUB060GSS4
	Tons		5
Capacity	Nominal Cooling Capacity <sup>1</sup>	Btu/h	60,000
	Nominal Heating Capacity <sup>1</sup>	Btu/h	64,000
	Rated Cooling Capacity <sup>2</sup>	Btu/h	60,000
	Rated Heating Capacity <sup>2</sup>	Btu/h	64,000
Power	Voltage	V / Ø / Hz	208-230/60/1
	Power/Communication Wiring <sup>4</sup>	No. x AWG	2 x 18
Operating Range	Cooling Operation Range	°F	23 to 122
	Heating Operation Range	°F	-13 to 61
Dimensions	Dimensions (WxHxD)	in	37-13/32 x 54-11/32 x 13
	Net	lbs	256
Weight	Shipping	lbs	284
Sound Pressure <sup>4</sup>		dB(A)	57
-	Туре		Axial Flow Fan
Fan	Air Flow Rate	CFM	3,885
Compressor	Туре		Scroll Inverter
	Oil Type		PVE/FVC68D
	Quantity		1
Hant Friedmann	Coating	Axial Flow Fan  CFM 3,885  Scroll Inverter PVE/FVC68D  1  Gold Fin / Hydrophillic 3 / 14  in 3/8	Gold Fin / Hydrophillic
Heat Exchanger	Rows/Fins per inch		3/14
Piping	Liquid Line (OD)	in	3/8
	HP/Vapor Line (OD)	in	5/8
	LP/Vapor Line (OD)	in	3/4
Refrigerant	Туре		R410A
	Charge	lbs	8.8
	Control		EEV
Number of Indoor Units	Minimum / Maximum		2/12

<sup>1.</sup> Nominal capacity applied with non-ducted indoor units, and is rated 0 ft. above sea level with 25 ft. of refrigerant line per indoor unit and a 0 ft. level difference between outdoor and indoor units. All capacities are net with a Combination Ratio between 95-105%.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB) and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB). Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and 59°F wet bulb (WB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

<sup>2.</sup> Rated capacity is certified under AHRI Standard 1230. See www.ahrinet.org for information. 3. The System Combination Ratio must be between 50–130%.

<sup>4.</sup> Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.

 $<sup>5. \</sup> Due \ to \ our \ commitment \ to \ continued \ innovation, some \ specifications \ may \ be \ changed \ without \ notification.$ 

# **SPECIFICATIONS**





Model	Specifications	Unit	ARUN024GSS4	ARUN038GSS4
	Tons		2	3
Capacity	Nominal Cooling Capacity <sup>1</sup>	Btu/h	24,000	39,500
	Nominal Heating Capacity <sup>1</sup>	Btu/h	27,000	44,000
	Rated Cooling Capacity <sup>2</sup>	Btu/h	24,000	38,000
	Rated Heating Capacity <sup>2</sup>	Btu/h	27,000	42,000
Power	Voltage	V / Ø / Hz	208-230/60/1	208-230/60/1
	Power/Communication Wiring <sup>4</sup>	No. x AWG	2 x 18	2 x 18
Operating Range	Cooling Operation Range	°F	23 to 122	23 to 122
	Heating Operation Range	°F	-4 to 61	-4 to 61
Dimensions	Dimensions (WxHxD)	in	37-13/32 x 32-27/32 x 13	37-13/32 x 54-11/32 x 13
Weight	Net	lbs	159	207
	Shipping	lbs	176	218
Sound Pressure <sup>4</sup>		dB(A)	50	50
Fan	Туре		Axial Flow Fan	Axial Flow Fan
	Air Flow Rate	CFM	2,119	3,885
Compressor	Туре		DC Inverter	DC Inverter
	Oil Type		PVE/FVC68D	PVE/FVC68D
	Quantity		1	1
Heat Exchanger	Coating		Gold Fin / Hydrophillic	Gold Fin / Hydrophillic
	Rows/Fins per inch		2/14	2 / 14
Piping	Liquid Line (OD)	in	3/8	3/8
	LP/Vapor Line (OD)	in	5/8	5/8
Refrigerant	Туре		R410A	R410A
	Charge	lbs	4.0	6.6
	Control		EEV	EEV
Number of Indoor Units	Minimum / Maximum		2 / 4	2/6

<sup>1.</sup> Nominal capacity applied with non-ducted indoor units, and is rated 0 ft. above sea level with 25 ft. of refrigerant line per indoor unit and a 0 ft. level difference between outdoor and indoor units. All capacities are net with a Combination Ratio between 95–105%.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB) and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB). Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and 59°F wet bulb (WB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

<sup>2.</sup> Rated capacity is certified under AHRI Standard 1230. See www.ahrinet.org for information. 3. The System Combination Ratio must be between 50–130%.

<sup>4.</sup> Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.

 $<sup>5. \</sup> Due \ to \ our \ commitment \ to \ continued \ innovation, some \ specifications \ may \ be \ changed \ without \ notification.$ 





Model	Specifications	Unit	ARUN048GSS4	ARUN053GSS4
	Tons		4	4.4
Capacity	Nominal Cooling Capacity <sup>1</sup>	Btu/h	50,000	55,500
	Nominal Heating Capacity <sup>1</sup>	Btu/h	56,500	61,500
	Rated Cooling Capacity <sup>2</sup>	Btu/h	48,000	53,000
	Rated Heating Capacity <sup>2</sup>	Btu/h	54,000	59,000
Power	Voltage	V / Ø / Hz	208-230/60/1	208-230/60/1
	Power/Communication Wiring <sup>4</sup>	No. x AWG	2 x 18	2 x 18
Operating Range	Cooling Operation Range	°F	23 to 122	23 to 122
	Heating Operation Range	°F	-4 to 61	-4 to 61
Dimensions	Dimensions (WxHxD)	in	37-13/32 x 54-11/32 x 13	37-13/32 x 54-11/32 x 13
Weight	Net	lbs	207	207
	Shipping	lbs	218	218
Sound Pressure <sup>4</sup>		dB(A)	51	52
Fan	Туре		Axial Flow Fan	Axial Flow Fan
	Air Flow Rate	CFM	3,885	3,885
Compressor	Туре		DC Inverter	DC Inverter
	Oil Type		PVE/FVC68D	PVE/FVC68D
	Quantity		1	1
Heat Exchanger	Coating		Gold Fin / Hydrophillic	Gold Fin / Hydrophillic
	Rows/Fins per inch		2/14	2 / 14
Piping	Liquid Line (OD)	in	3/8	3/8
	LP/Vapor Line (OD)	in	5/8	3/4
Refrigerant	Туре		R410A	R410A
	Charge	lbs	6.6	6.6
	Control		EEV	EEV
Number of Indoor Units	Minimum / Maximum		2/8	2/9

<sup>1.</sup> Nominal capacity applied with non-ducted indoor units, and is rated 0 ft. above sea level with 25 ft. of refrigerant line per indoor unit and a 0 ft. level difference between outdoor and indoor units. All capacities are net with a Combination Ratio between 95-105%.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB) and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

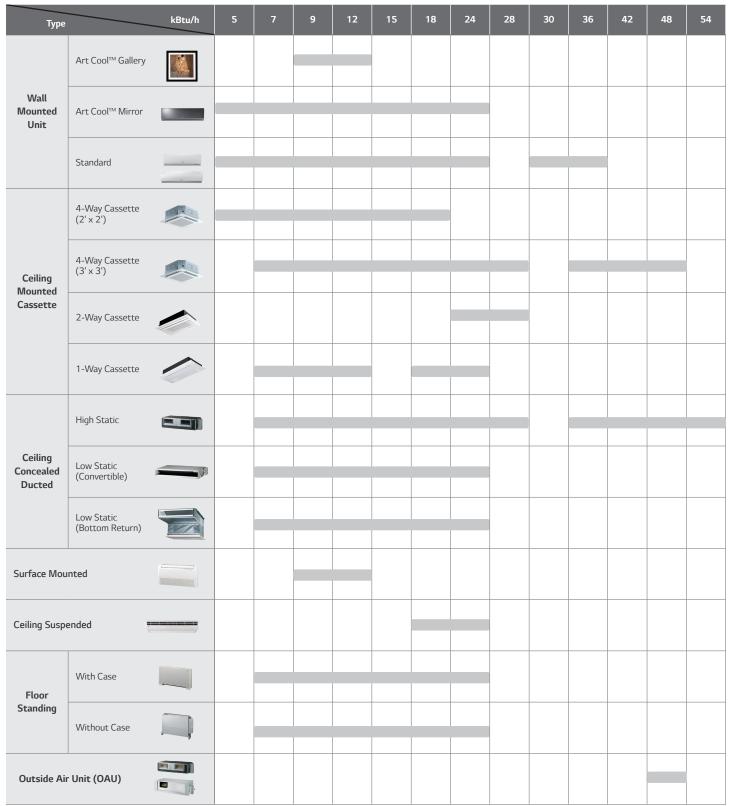
Nominal cooling capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and 59°F wet bulb (WB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

<sup>2.</sup> Rated capacity is certified under AHRI Standard 1230. See www.ahrinet.org for information. 3. The System Combination Ratio must be between 50–130%.

<sup>4.</sup> Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.

 $<sup>5. \</sup> Due \ to \ our \ commitment \ to \ continued \ innovation, some \ specifications \ may \ be \ changed \ without \ notification.$ 

## INDOOR UNIT LINE-UP



AHRI Certified, Variable Refrigerant Flow (VRF) Multi-Split AC and HP AHRI Standard 1230

### **LG Electronics USA**

Air Conditioning Technologies 4300 North Point Parkway, Alpharetta, Georgia 30022









