



VRF HEAT RECOVERY AND HEAT PUMP SYSTEMS WITH LGRED°

LG Air Conditioning Technologies



ABOUT LG VRF ADVANTAGES

WHY MULTI V[™] S?

The LG Multi V S and Multi V S with LGRED° for residential and light commercial applications use a closed refrigerant circuit, connecting one outdoor unit to many indoor units, providing individual zone temperature control systems. Compact yet powerful, LG's VRF solution is an efficient way to condition any space, providing improved humidity control, individual set points per indoor unit, and a very quiet experience for the occupants.

The Multi VS systems are capable of heat pump or heat recovery and several models include LGRED° heat technology. In heat recovery, the system allows for simultaneously heating and cooling different zones by using heat energy from one space to condition another, reducing the amount of 'created' energy, further enhancing energy savings. In addition, Multi VS systems require little to no ductwork, resulting in smaller space requirements which allow for higher interior ceilings, less structural impact, and more usable square footage.



MAXIMIZE EFFICIENCY

Smart Load Control

Automatically adjusts operation requirements by sensing both indoor and outdoor conditions

Inverter Compressor

Allows the outdoor units to closely match compressor speed with output demand, which translates to a higher energy efficiency



Individual Zone Control

Allows the user to control the space to the precise temperature desired

Quiet Operation

LG Multi V[™] Indoor units operate quietly in the interior space, with rated sound levels as low as 23 dB(A)



VERSATILE SOLUTIONS

Compact and Lightweight

Connect up to 12 indoor units to one outdoor unit to heat and cool more zones while using less outdoor space (less than 3.4 ft²)

Design Flexibility

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



SUPERIOR PERFORMANCE

Powerful Heating

Continuous heating down to -13° F on select models

LGRED°

LGRED° models feature 100% heating capacity at 5° F

Heat Recovery

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

APPLICATIONS

LG Multi V S utilizes single-phase and three-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.





About LG Electronics USA Inc

LG Electronics is a global innovator in technology and consumer electronics with a presence in almost every country and an international workforce of more than 75,000. LG's four companies – Home Appliance & Air Solution, Home Entertainment, Vehicle component Solutions and Business Solutions – combined for global sales of over USD 63 billion in 2021. LG is a leading manufacturer of consumer and commercial products ranging from TVs, home appliances, air solutions, monitors, service robots, automotive components and its premium LG SIGNATURE and intelligent LG ThinQ brands are familiar names world over. 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. Visit www.lghvac.com for more information.





Continuous heating down to -13 °F. 100% heating capacity at 5°F.



Model	Specifications	Unit	ARUM036GSS5	ARUM048GSS5
	Heat Pump / Heat Recovery		Heat Pump and Heat Recovery	Heat Pump and Heat Recovery
	Tons		3	4
Capacity Nominal He Rated Cool	Nominal Cooling Capacity ¹	Btu/h	36,000	48,000
	Nominal Heating Capacity ¹	Btu/h	42,000	54,000
	Rated Cooling Capacity ²	Btu/h	36,000	48,000
	Rated Heating Capacity ²	Btu/h	42,000	54,000
Danner	Voltage	V/Hz/Ø	208-230/60/1	208-230/60/1
Power	Power/Communication Wiring ⁵	No. x AWG	2 x 18	2 x 18
0	Cooling Operation Range ⁶	°F	23 - 122	23 - 122
Operating Range	Heating Operation Range	°F	-13 - 61	-13 - 61
Dimensions	Dimensions (WxHxD)	in	37-13/32 x 54-11/32 x 13	37-3/32 x 54-11/32 x 13
NAV. 1.	Net	lbs	263	263
Weight	Shipping	lbs	294	294
Sound Pressure ⁴		dB(A)	50/53	52/54
Fan	Cooling/Heating		Axial Flow Fan x2	Axial Flow Fan x2
ran	Air Flow Rate	CFM	4238	4238
Compressor	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Oil Type		FVC68D	FVC68D
	Quantity		1	1
Heat Exchange	Coating		Black Coated Fin™ / Hydrophilic / Cooper Tube	Black Coated Fin™ / Hydrophilic / Cooper Tube
Heat Exchange	Rows/Fins per inch		208-230/60/1 2 x 18 23 - 122 -13 - 61 37-13/32 x 54-11/32 x 13 263 294 50/53 Axial Flow Fan x2 4238 Hermetically Sealed Scroll FVC68D	3/14
Piping for Heat Recovery Operation	Liquid Line (OD)	in	3/8	3/8
	HP/Vapor Line (OD)	in	5/8	5/8
	LP/Vapor Line (OD)	in	3/4	3/4
Piping for Heat Pump Operation	Liquid Line (OD)	in	3/8	3/8
riping for fleat rump operation	Vapor Line (OD)	in	5/8	5/8
Refrigerant	Туре		R410A	R410A
	Charge	lbs	7.7 lbs.	7.7 lbs.
	Control		EEV	EEV
Number of Indoor Units ³	Minimum / Maximum		2/6	2/8

^{1.} 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).

^{2.} Rated capacity is certified under AHRI Standard 210/240. See www.ahrinet.org for information. 3. The System Combination Ratio must be between 50-130%.

^{4.} Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.

^{5.} Power wiring is field provided, solid or stranded, and must comply with all local and national codes. Refer to the engineering manual for detailed electrical data. 6. Cooling range with the Low Ambient Baffle Kit (sold separately) is down to -9.9°F.

^{7.} Multi VS units with LGRED® ship from the factory configured for heat recovery operation. For heat pump operation, the DIP switch settings must be set accordingly. See the product installation manual for details. $\label{thm:prop:prop:prop:prop:specification} Due \ to \ our \ commitment \ to \ continued \ innovation, \ some \ specifications \ may \ be \ changed \ without \ notification.$







Model	Specifications	Unit	ARUN024GSS4	ARUN038GSS4	ARUN048GSS4	ARUN060GSS4
	Heat Pump / Heat Recovery		Heat Pump	Heat Pump	Heat Pump	Heat Pump
	Tons		2	3	4	5
	Nominal Cooling Capacity ¹	Btu/h	24,000	39,500	50,000	60,000
	Nominal Heating Capacity ¹	Btu/h	27,000	44,000	56,500	64,000
Capacity	Rated Cooling Capacity ²	Btu/h	24,000	38,000	48,000	60,000
	Rated Heating Capacity ² Btu/h 27,000	27,000	42,000	54,000	64,000	
Power	Voltage	V/Hz/Ø	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1
Power	Power/Communication Wiring ⁵	No. x AWG	2 x 18	2 x 18	2 x 18	2 x 18
0	Cooling Operation Range ⁶	°F	23 to 122	23 to 122	23 to 122	23 to 122
Operating Range	Heating Operation Range	°F	-4 to 61	-4 to 61	-4 to 61	-13 to 61
Dimensions	Dimensions (WxHxD)	in	37-13/32 x 32-27/32 x 13	37-13/32 x 54-11/32 x 13	37-13/32 x 54-11/32 x 13	37-13/32 x 54-11/32 x 13
AA4 : 1 :	Net	lbs	159	207	207	260
Weight	Shipping	lbs	176	218	218	291
Sound Pressure ⁴		dB(A)	50	50	51	57
Fan	Туре		Axial Flow Fan	Axial Flow Fan	Axial Flow Fan	Axial Flow Fan
Fall	Air Flow Rate	Air Flow Rate CFM	2,119	3,885	3,885	3,885
Compressor	Туре		DC Inverter	DC Inverter	DC Inverter	Scroll Inverter
	Oil Type		PVE/FVC68D	PVE/FVC68D	PVE/FVC68D	PVE/FVC68D
	Quantity		1	1	1	1
Heat Exchanger	Coating		Gold Fin / Hydrophilic / Copper Tube			
3	Rows/Fins per inch		2/14	2/14	2/14	3/14
Piping	Liquid Line (OD)	in	3/8	3/8	3/8	3/8
	Vapor Line (OD)	in	5/8	5/8	5/8	3/4
Refrigerant	Type		R410A	R410A	R410A	R410A
	Charge	lbs	4.0	6.6	6.6	7.7
	Control		EEV	EEV	EEV	EEV
Number of Indoor Units ³	Minimum / Maximum		2/4	2/6	2/8	2/12

^{1.} 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).

2. Rated capacity is certified under AHRI Standard 210/240. See www.ahrinet.org for information.

3. The System Combination Ratio must be between 50–130%.

 $^{4. \,} Sound \, pressure \, levels \, are \, tested \, in \, an \, anechoic \, chamber \, under \, ISO \, Standard \, 3745.$

^{5.} Power wiring is field provided, solid or stranded, and must comply with all local and national codes. Refer to the engineering manual for detailed electrical data. 6. Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

Due to our commitment to continued innovation, some specifications may be changed without notification.





Heat Pump / Heat Recovery Tons Nominal Cooling Capacity¹ Nominal Heating Capacity¹ Rated Cooling Capacity²	Btu/h Btu/h Btu/h Btu/h	Heat Recovery 5 60,000 60,000 60,000
Nominal Cooling Capacity ¹ Nominal Heating Capacity ¹	Btu/h Btu/h Btu/h	60,000 60,000
Nominal Heating Capacity ¹	Btu/h Btu/h Btu/h	60,000
Canacity	Btu/h	·
Pated Cooling Capacity ²	Btu/h	60,000
Rated Cooling Capacity		
Rated Heating Capacity ²		60,000
Voltage	V / Hz / Ø	208-230/60/1
Power Power/Communication Wiring ⁵	No. x AWG	2 x 18
Cooling Operation Range ⁶	°F	23 to 122
Operating Range Heating Operation Range	°F	-13 to 61
Dimensions Dimensions (WxHxD)	in	37-13/32 x 54-11/32 x 13
Net	lbs	260
Weight Shipping	Shipping lbs 291	291
Sound Pressure ⁴	dB(A)	57
Type Type		Axial Flow Fan
Fan Air Flow Rate	CFM	3,885
Type		Scroll Inverter
Compressor Oil Type		PVE/FVC68D
Quantity		1
Coating	Coating	Gold Fin / Hydrophilic / Copper Tube
Heat Exchange Rows/Fins per inch		3/14
Liquid Line (OD)	in	3/8
Piping HP/Vapor Line (OD)	in	5/8
LP/Vapor Line (OD)	in	3/4
Туре		R410A
Refrigerant Charge	lbs	7.7
Control		EEV
Number of Indoor Units ³ Minimum / Maximum		2/12

^{1.} 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).

2. Rated capacity is certified under AHRI Standard 210/240. See www.ahrinet.org for information.

3. The System Combination Ratio must be between 50–130%.

 $^{4. \,} Sound \, pressure \, levels \, are \, tested \, in \, an \, anechoic \, chamber \, under \, ISO \, Standard \, 3745.$

^{5.} Power wiring is field provided, solid or stranded, and must comply with all local and national codes. Refer to the engineering manual for detailed electrical data. 6. Cooling range with the Low Ambient Baffle Kit (sold separately) is down to -9.9°F.

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THREE-PHASE





Model	Specifications	Unit	ARUN072BSS5	ARUN096BSS5
	Heat Pump / Heat Recovery		Heat Pump	Heat Pump
	Tons		6	8
	Nominal Cooling Capacity ¹	Btu/h	72,000	96,000
	Nominal Heating Capacity ¹	Btu/h	81,000	108,000
Capacity	Rated Cooling Capacity ²	Btu/h	69,000	92,000
	Rated Heating Capacity ²	Btu/h	77,000	103,000
-	Voltage	V / Hz / Ø	208-230/60/3	208-230/60/3
Power	Power/Communication Wiring ^{5,6}	No. x AWG	2 x 18	2 x 18
Operating Range	Cooling Operation Range ⁷	°F	23 to 122	23 to 122
	Heating Operation Range	°F	-13 to 61	-13 to 61
Dimensions	Dimensions (WxHxD)	in	42-29/32 x 63-3/8 x 17-17/32	42-29/32 x 63-3/8 x 17-17/32
	Net	lbs	348	348
Weight	Shipping	lbs	379	379
Sound Pressure ⁴		dB(A)	55 / 57	59 / 60
Fan	Туре		Axial Flow Fan	Axial Flow Fan
	Air Flow Rate	CFM	7,416	7,416
	Туре		Hermetically Sealed Scroll	Hermetically Sealed Scroll
Compressor	Oil Type		PVE/FW68D	PVE/FW68D
	Quantity		1	1
Heat Exchanger	Coating		Black Coated Fin™ / Hydrophilic / Cooper Tube	Black Coated Fin™ / Hydrophilic/ Cooper Tube
	Rows/Fins per inch		(3 x 14) x 2	(3 x 14) x 2
Piping	Liquid Line (OD)	in	3/8	3/8
	Vapor Line (OD)	in	3/4	7/8
Refrigerant	Туре		R410A	R410A
	Charge	lbs	13.2	13.2
	Control		EEV	EEV
Number of Indoor Units ³	Minimum / Maximum		2/13	2/16

^{1.} 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).

2. Rated capacity is certified under AHRI Standard 210/240. See www.ahrinet.org for information.

3. The System Combination Ratio must be between 50–130%.

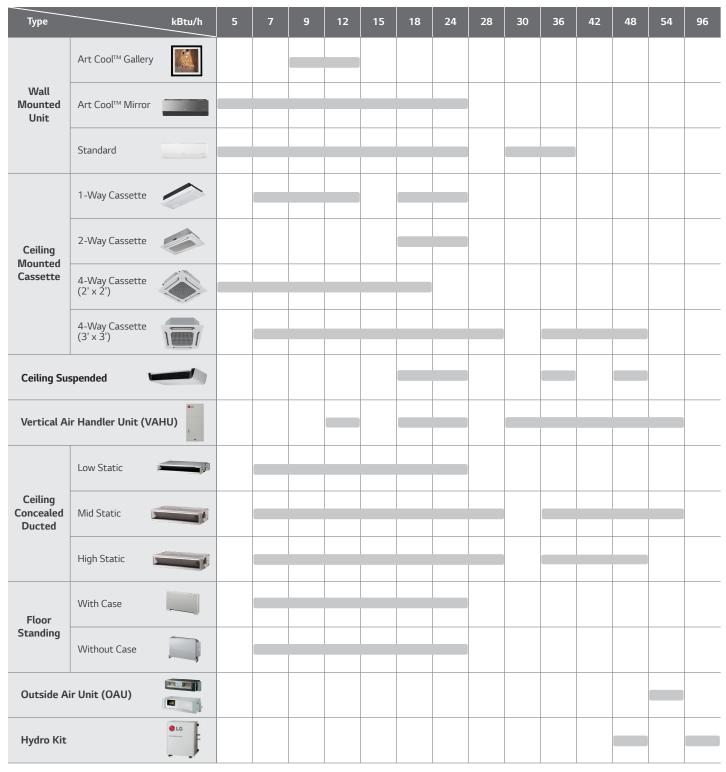
^{4.} Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.

^{5.} Power wiring is field provided, solid or stranded, and must comply with all local and national codes. Refer to the engineering manual for detailed electrical data.

6. Communication cable between outdoor unit and indoor units must be a minimum of 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the outdoor unit chassis only. Do not ground the outdoor unit to the indoor units communication cable at any other point. Wiring must comply with all applicable local and national codes 7. Cooling range with the Low Ambient Baffle Kit (sold separately) is covered to -9.9°F.

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INDOOR UNIT LINE-UP



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

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