

You're
looking at
the future
of VRF



From installation to maintenance, LG runs more than 60 global air conditioning academies, each provides training for air conditioning professionals.



Who is LG ?

LG Electronics is a division of the LG Group founded in 1947. LG air conditioners were first manufactured in 1968. With inverter driven residential and commercial air conditioning equipment and controls, LG is among the world's largest volume compressor and HVAC manufacturers with 8 production sites.



Life's Good!

Establishment

LG Group Established 1947

LGE Established 1958

Manufactured Korea's first air conditioners 1968

Korea's first Inverter air conditioners 1985

Exported Korea's first window air conditioner 1986

Growth

First LG rotary compressor 1990

Company name changed to LG Electronics
First LG scroll compressor 1995

First LG VRF system launched 1998

Reached #1 seller of residential air conditioners 1998

Expansion

Introduced picture frame air conditioner 2000

Achieved world's highest annual air conditioner sales of 10 million units 2001

US Training Center Established (Atlanta) 2004

Reached industry first total global sales of 100 million air conditioning units 2008

US Training Center Established (Southern California) 2009

LG Air Conditioning division created
US Training Center Est. in Secaucus, NJ & Carrollton, TX 2011



What is VRF?

Variable Refrigerant Flow (VRF) technology was introduced as a system to minimize losses found in conventional HVAC systems. An air cooled VRF system is engineered to minimize or remove ductwork, large distribution fans, water pumps and piping, giving back plenum and floor space. The modular design of a VRF system provides exceptional dehumidification and temperature control by rapidly adapting to changing loads. The modular design results in superior energy savings giving occupants the choice to condition only the zones being used. Energy efficient and easy to design, install, and maintain, a VRF system has low life cycle cost compared to other systems on the market today.



6 Why LG VRF?

18 Multi V IV Units

42 Accessories

Why LG VRF?

Multi V is engineered to bring together efficiency and easy installation. With an LG Multi V IV system your building or residence consumes less energy.

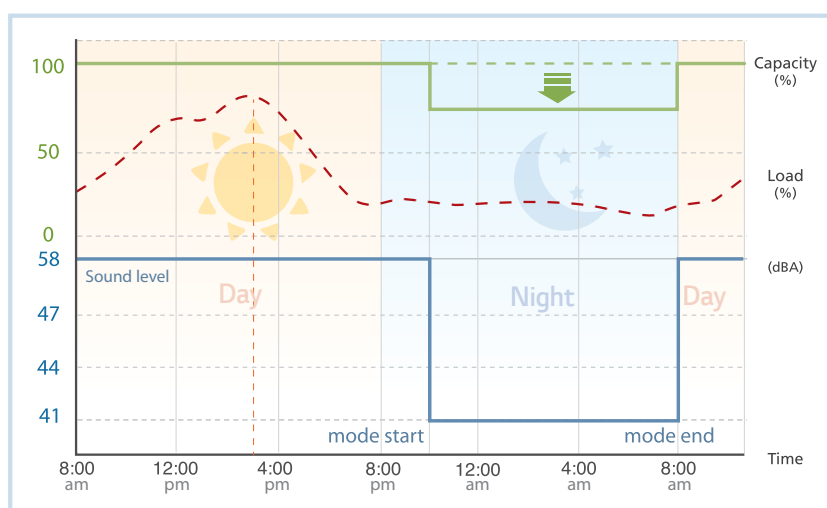


DEHUMIDIFICATION & COMFORT CONTROL

With the use of inverters and multiple compressor outdoor units, the LG Multi V IV system offers superior load matching, preventing constant cycling or large temperature swings. Tight temperature control through precise load matching ensures maximum comfort, efficient operation, and superior dehumidification.

QUIET

With indoor units that can operate at sound levels as low as 23 dB(A) at low speed and outdoor units that can operate in night quiet mode as low as 49 dB(A), Multi V IV creates a comfortable environment so quiet it is almost undetectable.



Heat Pump	Capacity	
	6 Tons	8~14 Tons
Steps	Noise(dB)	
Step 1	55	55
Step 2	52	52
Step 3	49	49

Based on single frame outdoor unit

QUALITY & RELIABILITY

With controls that vary compressor speeds and protect against oil migration, coil icing and short cycling, the Multi V IV offers unmatched quality and reliability. LG also has expertise in compressor design, motors, and printed circuit boards, resulting in superior quality control. Multi V IV is backed up with a 2-year parts warranty and additional 4-year compressor warranty.

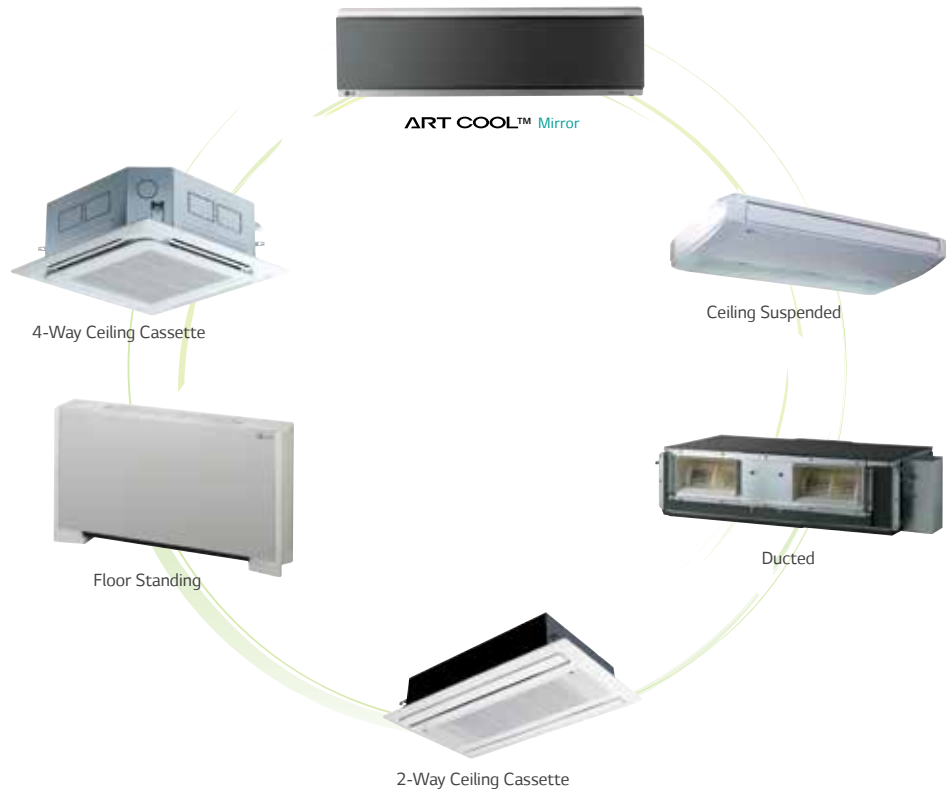
EFFICIENT DESIGN

Without using water piping or large distribution ducts, the Multi V IV system removes losses that are unavoidable in other systems. In addition, the use of optimized scroll compressors, specially designed heat exchangers, and inverter technology, the Multi V IV system minimizes energy consumption to levels lower than non-VRF systems. The modular design offers comfort on demand allowing the choice to use the system only in the zones where it is needed further promoting reduced energy consumption.



STYLISH DESIGN

Multi V indoor units are available in a wide range of styles to fit any interior design. With indoor unit choices including cassettes that mount flush to the ceiling, ducted units that hide completely concealed in the ceiling, and mirror finished wall mounted units that fit into any décor, the LG Multi V system offers unparalleled aesthetic design.



Architectural Appeal

ADAPTABLE & FLEXIBLE

Multi V IV outdoor units can be adapted to a wide range of building types and sizes including but not limited to schools, hotels, hospitals, offices, and residences. Their light weight and small footprint allows them to be moved without expensive cranes easily fitting into most service elevators and set in place with minimal requirements for structural reinforcements. Its modular design means Multi V IV can be commissioned in stages so tenants can move in as each floor or even each room is completed.

Imagine a split system that allows you to minimize components by reaching an area of the building that might otherwise require a second system. The Multi V IV system is capable of the longest piping lengths and largest elevation differences in the industry, allowing maximum flexibility in placement of outdoor condensing units and indoor units. Whether your building is a high rise condominium or hotel, or a sprawling school or office complex, this system will reach even the farthest corners and elevations.



SMALLER CHASES AND PLENUMS

The LG Multi V IV system uses refrigerant piping to move heat resulting in smaller space requirements compared to water piping or air ducts. This will help reduce the overall construction and material cost of your building and give back leasable space. Flexible and logical placement of system components, shorter pipe lengths, and fewer joints lowers installed cost and minimizes potential for leaking.



Multi V Indoor Unit (eliminate soffit)

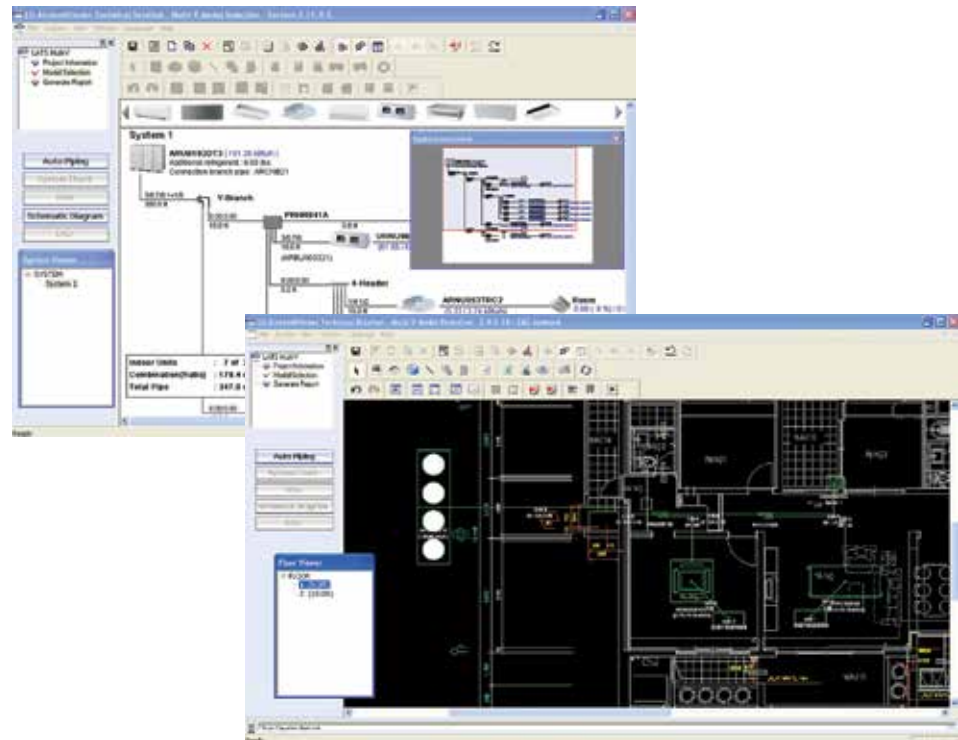


Conventional Duct Soffit

Engineering Advantage

INTUITIVE DESIGN

The LATS Multi V design and layout software provides an intuitive method of laying out a Multi V IV system. LATS Multi V checks piping lengths and elevations, and assists the sizing of indoor and outdoor units by calculating capacity based on design conditions. LATS Multi V is the industry's only software that can import AutoCAD™ drawings and lay out the Multi V IV system to scale. When the user finishes the AutoCAD™ system layout, all of the piping lengths will be calculated and a drawing file with the Multi V system can be exported.



COMMISSIONING & TROUBLESHOOTING

Installation and Commissioning Support

LG is committed to the success of every Multi V IV project. Proper installation is important to operation and system longevity. Installation and commissioning training conducted at our training centers will provide the knowledge and tools to properly install Multi V systems. For on site startup and commissioning, our technical staff or an approved technical agent will be on hand to record system operation to start the warranty validation process.

LGMV (LG Monitoring View) Service Tool

Aligning with LG's commitment to quality, the LGMV service tool provides the user a window into the inner workings of our very sophisticated operating systems. From a laptop computer, this tool is used to monitor low side and high side pressures, status of liquid injection, hot gas by-pass valves, operating frequency of the inverter compressor and condenser fan motors, electronic expansion valve (EEV) position and fan status for all connected indoor units. The software provides an accurate picture of an operating system without the need to manually check system temperatures, access the refrigerant circuit for system pressures, or perform time consuming resistance and voltage tests. This service tool provides the most effective troubleshooting method for LG Multi V equipment.

Easy to maintain

Though highly advanced, Multi V IV equipment is simple to maintain, mainly consisting of cleaning filters. Fan motors use permanently lubricated ball bearings. The nonmetallic condenser fan blades don't rust and attenuate vibration. The specially designed louvered fin coils are as quick and easy to clean as any outdoor unit coil on the market today. LGMV software provides a window into the system for the technician to quickly check operating conditions as part of an annual or semi-annual maintenance program.

SUSTAINABILITY

The architectural and engineering community is adopting a balanced design approach that considers energy and water consumption, repetitive maintenance costs, the impact of development on the environment, and the building's initial cost as equally important factors in developing high performance, sustainable buildings that will increase building value.

The American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) and the U.S. Green Building Council (USGBC) have been instrumental in developing and documenting voluntary best practice standards that provide the construction industry an all encompassing balanced approach for developing sustainable buildings.

ASHRAE Standards provide best practices for safe refrigerant handling, proper building ventilation, controlling building temperature and relative humidity and energy and water efficiency. The USGBC has developed holistic design standards for constructing new and retrofitting existing buildings known as LEED® - Leadership in Energy and Environmental Design. The LEED® Green Building Rating System is a voluntary, consensus based program for developing high performance, sustainable buildings. Based on well founded scientific standards, LEED® emphasizes state-of-the-art strategies for sustainable site development, water and energy conservation as well as a guide for selecting construction materials that are easily renewable and manufactured to promote indoor environmental quality.

The LEED® rating system provides a complete framework for assessing building performance and meeting sustainability goals. Based on a system of prerequisites and credits, often referring to ASHRAE Standards, LEED® projects earn points during the certification process and then are awarded one of four available certification levels: Certified, Silver, Gold, and Platinum. The LEED® rating system does not endorse products, but sets performance criteria to award prerequisites and points toward certification.



The Multi V IV variable refrigerant flow air conditioning system is engineered for sustainable green buildings and provides opportunities for designers to claim numerous LEED® prerequisites and points.

1. The Multi V IV system uses refrigerant R410A (LEED point).
2. Unlike traditional applied air conditioning systems using chilled water or condenser water, the air-to-air Multi V IV system does not use water or evaporative cooling that requires make-up water nor does it require any water treatment chemicals.
3. The Multi V IV system offers exceptional energy performance by using state-of-the-art controls, high efficiency variable speed condenser and evaporator fan assemblies, and a combination of variable and constant speed compressors that provide unmatched unloading performance.
4. The modular design of the Multi V IV system uses multiple indoor units allowing the designer to provide individualized control for each occupant.
5. LG's family of local, central, building management controllers, and communication gateways make it easy to monitor energy usage and control the Multi V IV system operations based on building usage or indoor air quality.



TRAINING

At LG, we are committed to excellence in Multi V IV design and installation training. We offer comprehensive training for engineers, architects, installers and servicers to ensure Multi V installation projects are successful.

Engineers and Architects

We have designed a comprehensive workshop tailored to specifying engineers and architects. Training includes a complete product and controls introduction which explains advanced features and benefits of the LG Multi V IV system. A live tutorial covers the setup and use of the LATSTM Multi V design and layout software. A standard feature of all LG training is open forum interaction between the facilitator and all attendees.



Installers and Commissioners

The installation and commissioning course addresses installation, piping, and wiring of Multi V IV systems. In depth technical topics are covered for all systems. Lab activities are designed to reinforce classroom discussion, including topics such as V-Net™ controls. Time is also set aside to provide hands-on experience using LGMV (commissioning and troubleshooting software) used on operating equipment in our training labs.





MULTI V IV UNITS



MULTI V™ IV

Advanced Compressor Technology

VAPOR INJECTION

COMPRESSOR SPEED

SMART OIL CONTROL OPERATION

Hi-POR™

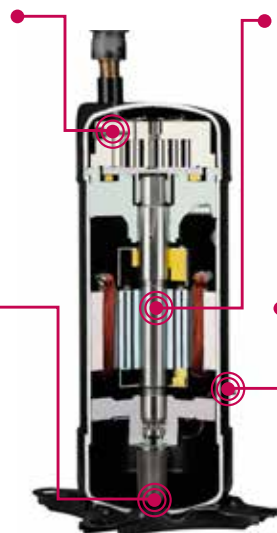
4th Generation of LG Inverter Compressor

VAPOR INJECTION

- Max. heating capability by two-stage compression
- Energy efficiency improved
- Greater heating capacity at lower ambient temperatures

SMART OIL CONTROL OPERATION

- Oil sensor: Smart oil recovery operation only when required
- Enhanced comp. reliability & user comfort



COMPRESSOR SPEED 15HZ~150HZ

Enhanced heating, rapid response capability

- Compact core design (concentrated motor)
- Down to 15 Hz b
Partial load efficiency g

HIPOR (HIGH PRESSURE OIL RETURN)

- Improving partial load efficiency at all Hz
- Fundamentally resolving efficiency reduction caused by oil recovery

INVERTER TECHNOLOGY

With compressors optimized around R410A and the latest inverter technology, the LG Multi V IV system precisely matches the load. This helps prevent constant cycling resulting in tight temperature control, superior dehumidification, and optimized system efficiency. Occupants will stay comfortable while reducing utility costs.

DUAL COMPRESSORS

Multi V IV takes advantage of a digitally controlled (DC) inverter speed compressor combination that maximizes efficiency while precisely matching load. The inverter drive on the first compressor matches the load exactly, recapturing the efficiency of a partially loaded compressor while eliminating compressor cycling.

Inverter



DC Inverter
Compressor

+



DC Inverter
Compressor

LG Compressor Advantages

- Enhanced for cold ambient heating
- Smart Oil Control eliminates timed oil return cycles
- Hi-POR™ (High Pressure Oil Return) improves the system's efficiency performance

Heat Transfer Efficiency

FIN DESIGN

All Multi V IV outdoor units use louvered fin coils engineered to increase surface area enabling more efficient heat transfer. The louvered fin coil decreases compressor lift reducing energy consumption without adding difficulty to coil cleaning.

GoldFin™

All Multi V IV outdoor unit coils have a corrosion resistant GoldFin™ coating standard from the factory. Corrosion shortens coil life and adds a barrier to efficient heat transfer. GoldFin™ will promote sustainable efficiency and coil life by helping to prevent corrosion caused by everyday pollutants.



MULTI V™

IV

Outdoor Units

LG Multi V IV consists of two distinct products that will fit most applications. With long and flexible piping, the Multi V IV system can reduce installation cost by reaching that last zone in the building that would otherwise require an additional outdoor unit and piping network.

	Ton	6	8	10	12	14	16
	MBh	72	96	120	144	168	192

MULTI V™

IV

Heat Pump

208V/230V-60Hz-3Ø

pg. 32

MULTI V™

IV

Heat Pump

460V-60Hz-3Ø

pg. 34

MULTI V™

IV

Heat Recovery

208V/230V-60Hz-3Ø

pg. 36

MULTI V™

IV

Heat Recovery

460V-60Hz-3Ø

pg. 38



18

20

22

24

26

28

30

216

240

264

288

312

336

360



MULTI V IV Heat Pump

The Multi V IV Heat Pump is a two pipe heat pump system that is available in capacities from 6 to 30 tons. This system is best suited for applications that require either heating or cooling, such as large office buildings with a common exposure, hotel ballrooms, and meeting areas. Multi V IV heat pump units are available in 208-230V and 460V three phase and outdoor fans can be ducted up to 0.32 in. external static pressure.

Heating: -13°F to 60°F (wet bulb)

Cooling: 14°F to 122°F (dry bulb)



* For more information see page 32



• Piping length (equivalent)

Total	3280 ft.
Longest	738 ft.
From first branch	295 ft.

• Elevation

Outdoor above indoor	360 ft.
Indoor above outdoor	360 ft.
Indoor maximum separation	131 ft.



MULTI V IV Heat Recovery

The Multi V IV Heat Recovery unit is a three pipe Heat Pump system that is available in capacities from 6 to 30 tons. This system is best suited for diverse loads that require simultaneous heating and cooling in different zones, such as hotel guest rooms, high-rise residences, multiple tenant shopping, or any building that can utilize exposures from opposite sides or interior and exterior zones on the same system. Multi V IV Heat Recovery units are available in 208-230V and 460V three phase and outdoor fans can be ducted up to 0.32 in. external static pressure.



Heating: -13°F to 60°F (wet bulb)
Cooling: 14°F to 122°F (dry bulb)

Simultaneous: Heating: 14°F to 60°F (wet bulb)
Cooling: 14°F to 81°F (dry bulb)

* For more information see page 36

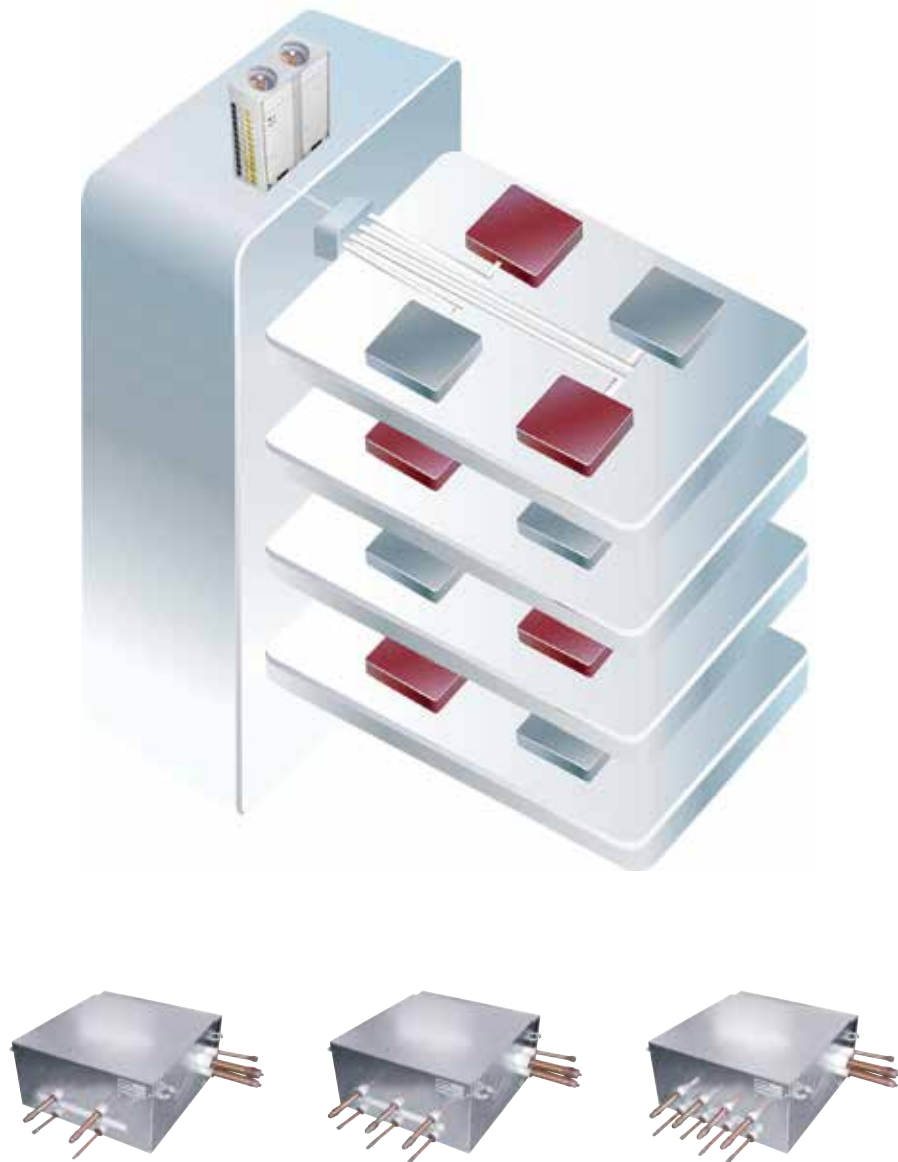


• Piping length (equivalent)		• Elevation	
Total	3280 ft.	Outdoor above indoor	360 ft.
Longest	738 ft.	Indoor above outdoor	360 ft.
From first branch	295 ft.	Indoor maximum separation	49 ft.



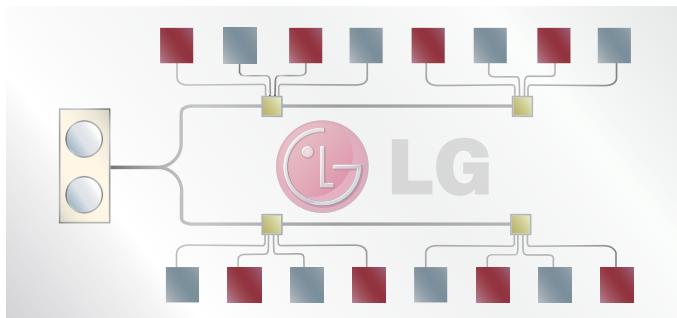
HEAT RECOVERY

There is no better way to maximize efficiency than to increase condensing heat exchanger surface area and reject heat to zones that would otherwise require an additional system. Multi V IV Heat Recovery is a three pipe system with heat recovery units that can turn some indoor units into zoned condensers providing heat while leaving others in cooling mode. Heat recovery with the Multi V IV system provides full heating in its operating range to nearby zones in the same system. By pairing interior with exterior zones or eastern with western exposures, this system takes full advantage of building diversity. Heat can be moved from zones requiring cooling to zones that need heat, providing ultimate individual comfort control with minimal power consumption. In addition, under rapidly changing conditions, the Multi V IV Heat Recovery units will change between heating and cooling in just three minutes.

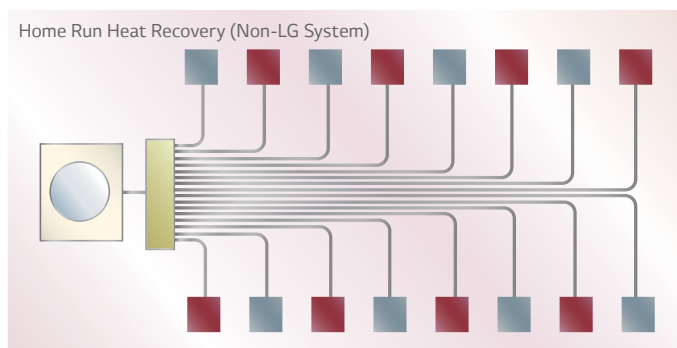


INSTALLATION

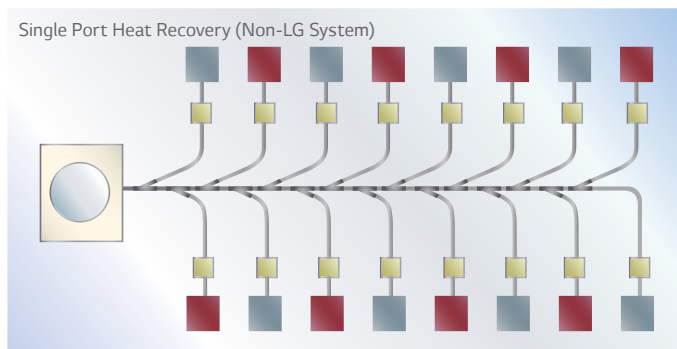
The Multi V IV system combines the best features of heat recovery VRF systems. Condensate drains are not required for Multi V Heat Recovery units. Heat recovery units that can serve 2, 3, or 4 zones are strategically placed in series or in parallel to maximize piping reach while minimizing material and labor costs. Piping, fittings, branches, headers, hangers, insulation, joints, nitrogen, and labor hours can be greatly reduced resulting in significantly lower installed cost.



- Configured for fully independent heating and cooling
- Series and/or parallel configuration
- Short piping
- Few joints
- No heat recovery unit condensate drains
- Fast 3 minute mode change



- Configured for fully independent heating and cooling
- Series configuration only
- Lengthy homerun piping
- May require heat recovery unit condensate drain



- Configured for fully independent heating and cooling
- Parallel configuration only
- Many heat recovery units for independent heating and cooling
- Numerous joints



Multi V IV Outdoor Units

Family

ARU = Multi V Outdoor Unit (Refrigerant R410A)

Type

N = Inverter Heat Pump
B = Inverter and Heat Recovery

Nominal Capacity

(Nominal Cooling Capacity in Btu/h)

0 7 2 = 7 2 , 0 0 0	Btu/h	2 6 4 = 2 6 4 , 0 0 0	Btu/h
0 9 6 = 9 6 , 0 0 0	Btu/h	2 8 8 = 2 8 8 , 0 0 0	Btu/h
1 2 1 = 1 2 1 , 0 0 0	Btu/h	3 1 2 = 3 1 2 , 0 0 0	Btu/h
1 4 4 = 1 4 4 , 0 0 0	Btu/h	3 3 6 = 3 3 6 , 0 0 0	Btu/h
1 6 8 = 1 6 8 , 0 0 0	Btu/h	3 6 0 = 3 6 0 , 0 0 0	Btu/h
1 9 2 = 1 9 2 , 0 0 0	Btu/h		
2 1 6 = 2 1 6 , 0 0 0	Btu/h		
2 4 0 = 2 4 0 , 0 0 0	Btu/h		

Electrical Connection

B = 208-230V/60Hz/3Ph
D = 460V/60Hz/3Ph

Airflow Configuration

T = Top Discharge

Efficiency

E = High Efficiency

Generation

4 = Fourth

ARU

N

072

B

T

E

4

Heat Recovery Units

Family

PRHR = Multi V Heat Recovery Unit
(Refrigerant R410A)

Configuration

02 = up to 8 indoor units per port, 2 ports
03 = up to 8 indoor units per port, 3 ports
04 = up to 8 indoor units per port, 4 ports

Generation

1A = Second

PRHR

04

1A

MULTI V™ IV

Heat Pump



Note :

1. Rated Capacities are in accordance with AHRI Standard 1230.
2. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3794.
3. Due to our policy of innovation some specifications may be changed without notification.



208-230V/60Hz/3Ø

Model ARUN ••• BTE4			072	096	121	144	168
Ton			6	8	10	12	14
Nominal Capacity	Cooling	Btu/h	72,000	96,000	120,000	144,000	168,000
	Heating	Btu/h	81,000	108,000	135,000	162,000	189,000
Rated Capacity	Cooling	Btu/h	69,000	92,000	114,000	138,000	160,000
	Heating	Btu/h	77,000	103,000	129,000	154,000	180,000
Power Supply		V / Hz / ø	208-230 / 60 / 3	208-230 / 60 / 3	208-230 / 60 / 3	208-230 / 60 / 3	208-230 / 60 / 3
Dimensions (W × H × D)		inch	36.2 × 66.1 × 29.9	48.8 × 66.1 × 29.9	48.8 × 66.1 × 29.9	48.8 × 66.1 × 29.9	48.8 × 66.1 × 29.9
Net Weight		lbs	430	540	540	628	628
Sound Pressure		dB(A)	59.0	60.0	60.0	60.0	61.0
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate	cfm	7,400	10,200	10,200	10,200	10,200
Compressor	Type		DC Scroll	DC Scroll	DC Scroll	DC Scroll	DC Scroll
	Number of Compressors		1	1	1	2	2
Heat Exchanger			GoldFin™	GoldFin™	GoldFin™	GoldFin™	GoldFin™
Refrigerant	Refrigerant Type		R410A	R410A	R410A	R410A	R410A
	Charge	lbs	16.9	23.6	23.6	23.6	23.6
	Control		EEV	EEV	EEV	EEV	EEV
Maximum Number of Indoor Units			13	16	20	23	29



208-230V/60Hz/3Ø

ModelARUN ••• BTE4			192	216	240	264	288
			072	072	096	121	144
			121	144	144	144	144
Ton			16	18	20	22	24
Nominal Capacity	Cooling	Btu/h	192,000	216,000	240,000	264,000	288,000
	Heating	Btu/h	216,000	243,000	270,000	297,000	324,000
Rated Capacity	Cooling	Btu/h	184,000	206,000	228,000	250,000	274,000
	Heating	Btu/h	206,000	230,000	256,000	282,000	308,000
Power Supply		V / Hz / Ø	208-230 / 60 / 3	208-230 / 60 / 3	208-230 / 60 / 3	208-230 / 60 / 3	208-230 / 60 / 3
Dimensions (W × H × D)		inch	(36.2 × 66.1 × 29.9) × 1 (48.8 × 66.1 × 29.9) × 1	(36.2 × 66.1 × 29.9) × 1 (48.8 × 66.1 × 29.9) × 1	(48.8 × 66.1 × 29.9) × 2	(48.8 × 66.1 × 29.9) × 2	(48.8 × 66.1 × 29.9) × 2
Net Weight		lbs	430 + 540	430 + 628	540 + 628	540 + 628	628 × 2
Sound Pressure		dB(A)	61.8	62.0	62.3	62.3	62.5
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate	cfm	7,400 + 10,200	7,400 + 10,200	10,200 + 10,200	10,200 + 10,200	10,200 + 10,200
Compressor	Type		DC Scroll	DC Scroll	DC Scroll	DC Scroll	DC Scroll
	Number of Compressors		2	3	3	3	4
Heat Exchanger			GoldFin™	GoldFin™	GoldFin™	GoldFin™	GoldFin™
Refrigerant	Refrigerant Type		R410A	R410A	R410A	R410A	R410A
	Charge	lbs	40.5	40.5	47.2	47.2	47.2
	Control		EEV	EEV	EEV	EEV	EEV
Maximum Number of Indoor Units			32	35	39	42	45



208-230V/60Hz/3Ø

ModelARUN ••• BTE4			312	336	360
			072	096	096
			096	096	121
			144	144	144
Ton			26	28	30
Nominal Capacity	Cooling	Btu/h	312,000	336,000	360,00
	Heating	Btu/h	351,000	378,000	405,000
Rated Capacity	Cooling	Btu/h	296,000	320,000	360,000
	Heating	Btu/h	334,000	361,000	387,000
Power Supply		V / Hz / ø	208-230 / 60 / 3	208-230 / 60 / 3	208-230 / 60 / 3
Dimensions (W × H × D)		inch	(36.2 × 66.1 × 29.9) × 1 (48.8 × 66.1 × 29.9) × 2	(48.8 × 66.1 × 29.9) × 3	(48.8 × 66.1 × 29.9) × 3
Net Weight		lbs	430 + 540 + 628	540 + 540 + 628	540 + 540 + 628
Sound Pressure		dB(A)	63.8	63.9	63.9
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate	cfm	7,400 + 10,200	(10,200 × 3)	(10,200 × 3)
Compressor	Type		DC Scroll	DC Scroll	DC Scroll
	Number of Compressors		4	4	4
Heat Exchanger			GoldFin™	GoldFin™	GoldFin™
Refrigerant	Refrigerant Type		R410A	R410A	R410A
	Charge	lbs	64.1	70.8	70.8
	Control		EEV	EEV	EEV
Maximum Number of Indoor Units			52	55	58

MULTI V™ IV

Heat Pump



Note :

1. Rated Capacities are in accordance with AHRI Standard 1230.
2. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3794.
3. Due to our policy of innovation some specifications may be changed without notification.



460V/60Hz/3Ø

Model ARUN ••• DTE4			072	096	121	144	168
Ton			6	8	10	12	14
Nominal Capacity	Cooling	Btu/h	72,000	96,000	120,000	144,000	168,000
	Heating	Btu/h	81,000	108,000	135,000	162,000	189,000
Rated Capacity	Cooling	Btu/h	69,000	92,000	114,000	138,000	160,000
	Heating	Btu/h	77,000	103,000	129,000	154,000	180,000
Power Supply		V / Hz / ø	460 / 60 / 3	460 / 60 / 3	460 / 60 / 3	460 / 60 / 3	460 / 60 / 3
Dimensions (W × H × D)		inch	36.2 × 66.1 × 29.9	48.8 × 66.1 × 29.9	48.8 × 66.1 × 29.9	48.8 × 66.1 × 29.9	48.8 × 66.1 × 29.9
Net Weight		lbs	430	540	540	628	628
Sound Pressure		dB(A)	59.0	60.0	60.0	60.0	61.0
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate	cfm	7,400	10,200	10,200	10,200	10,200
Compressor	Type		DC Scroll	DC Scroll	DC Scroll	DC Scroll	DC Scroll
	Number of Compressors		1	1	1	2	2
Heat Exchanger			GoldFin™	GoldFin™	GoldFin™	GoldFin™	GoldFin™
Refrigerant	Refrigerant Type		R410A	R410A	R410A	R410A	R410A
	Charge	lbs	16.9	23.6	23.6	23.6	23.6
	Control		EEV	EEV	EEV	EEV	EEV
Maximum Number of Indoor Units			13	16	20	23	29



460V/60Hz/3Ø

ModelARUN•••DTE4			192	216	240	264	288
			072	072	096	121	144
			121	144	144	144	144
Ton			16	18	20	22	24
Nominal Capacity	Cooling	Btu/h	192,000	216,000	240,000	264,000	288,000
	Heating	Btu/h	216,000	243,000	270,000	297,000	324,000
Rated Capacity	Cooling	Btu/h	184,000	206,000	228,000	250,000	274,000
	Heating	Btu/h	206,000	230,000	256,000	282,000	308,000
Power Supply			V / Hz / ø	460 / 60 / 3	460 / 60 / 3	460 / 60 / 3	460 / 60 / 3
Dimensions (W × H × D)		inch	(36.2 × 66.1 × 29.9) × 1 (48.8 × 66.1 × 29.9) × 1	(36.2 × 66.1 × 29.9) × 1 (48.8 × 66.1 × 29.9) × 1	(48.8 × 66.1 × 29.9) × 2	(48.8 × 66.1 × 29.9) × 2	(48.8 × 66.1 × 29.9) × 2
Net Weight		lbs	430 + 540	430 + 628	540 + 628	540 + 628	628 × 2
Sound Pressure		dB(A)	61.8	62.0	62.3	62.3	62.5
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate	cfm	7,400 + 10,200	7,400 + 10,200	10,200 + 10,200	10,200 + 10,200	10,200 + 10,200
Compressor	Type		DC Scroll	DC Scroll	DC Scroll	DC Scroll	DC Scroll
	Number of Compressors		2	3	3	3	4
Heat Exchanger			GoldFin™	GoldFin™	GoldFin™	GoldFin™	GoldFin™
Refrigerant	Refrigerant Type		R410A	R410A	R410A	R410A	R410A
	Charge	lbs	40.5	40.5	47.2	47.2	47.2
	Control		EEV	EEV	EEV	EEV	EEV
Maximum Number of Indoor Units			32	35	39	42	45



460V/60Hz/3Ø

ModelARUN • • • DTE4			312	336	360
			072	096	096
			096	096	121
			144	144	144
Ton			26	28	30
Nominal Capacity	Cooling	Btu/h	312,000	336,000	360,000
	Heating	Btu/h	351,000	378,000	405,000
Rated Capacity	Cooling	Btu/h	296,000	320,000	342,000
	Heating	Btu/h	334,000	361,000	387,000
Power Supply		V / Hz / ø	460 / 60 / 3	460 / 60 / 3	460 / 60 / 3
Dimensions (W × H × D)		inch	(36.2 × 66.1 × 29.9) × 1 (48.8 × 66.1 × 29.9) × 2	(48.8 × 66.1 × 29.9) × 3	(48.8 × 66.1 × 29.9) × 3
Net Weight		lbs	430 + 540 + 628	540 + 540 + 628	540 + 540 + 628
Sound Pressure		dB(A)	63.8	63.9	63.9
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate	cfm	7400+10200	(10,200×3)	(10,200×3)
Compressor	Type		DC Scroll	DC Scroll	DC Scroll
	Number of Compressors		4	4	4
Heat Exchanger			GoldFin™	GoldFin™	GoldFin™
Refrigerant	Refrigerant Type		R410A	R410A	R410A
	Charge	lbs	64.1	70.8	70.8
	Control		EEV	EEV	EEV
Maximum Number of Indoor Units			52	55	58

MULTI V™ IV

Heat Recovery



Note :

1. Rated Capacities are in accordance with AHRI Standard 1230.
2. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3794.
3. Due to our policy of innovation some specifications may be changed without notification.



208-230V/60Hz/3Ø

Model ARUB...BTE4			072	096	121	144	168
Ton			6	8	10	12	14
Nominal Capacity	Cooling	Btu/h	72,000	96,000	120,000	144,000	168,000
	Heating	Btu/h	81,000	108,000	135,000	162,000	189,000
Rated Capacity	Cooling	Btu/h	69,000	92,000	114,000	138,000	160,000
	Heating	Btu/h	77,000	103,000	129,000	154,000	180,000
Power Supply		V / Hz / Ø	208-230 / 60 / 3	208-230 / 60 / 3	208-230 / 60 / 3	208-230 / 60 / 3	208-230 / 60 / 3
Dimensions (W × H × D)		inch	36.2 × 66.1 × 29.9	48.8 × 66.1 × 29.9	48.8 × 66.1 × 29.9	48.8 × 66.1 × 29.9	48.8 × 66.1 × 29.9
Net Weight		lbs	430	540	540	628	628
Sound Pressure		dB(A)	59.0	60.0	60.0	60.0	61.0
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	cfm	7,400	10,200	10,200	10,200	10,200
Compressor	Type		DC Scroll	DC Scroll	DC Scroll	DC Scroll	DC Scroll
	Number of Compressors		1	1	1	2	2
Heat Exchanger			GoldFin™	GoldFin™	GoldFin™	GoldFin™	GoldFin™
Refrigerant	Refrigerant Type		R410A	R410A	R410A	R410A	R410A
	Charge	lbs	16.9	23.6	23.6	23.6	23.6
	Control		EEV	EEV	EEV	EEV	EEV
Maximum Number of Indoor Units			13	16	20	23	29



208-230V/60Hz/3Ø

Model			192	216	240	264	288
ARUB ••• BTE4			072	072	096	121	144
			121	144	144	144	144
Ton			16	18	20	22	24
Nominal Capacity	Cooling	Btu/h	192,000	216,000	240,000	264,000	288,000
	Heating	Btu/h	216,000	243,000	270,000	297,000	324,000
Rated Capacity	Cooling	Btu/h	184,000	206,000	228,000	250,000	274,000
	Heating	Btu/h	206,000	230,000	256,000	282,000	308,000
Power Supply		V / Hz / ø	208-230/60/3	208-230/60/3	208-230/60/3	208-230/60/3	208-230/60/3
Dimensions (W × H × D)		inch	(36.2 × 66.1 × 29.9) × 1 (48.8 × 66.1 × 29.9) × 1	(36.2 × 66.1 × 29.9) × 1 (48.8 × 66.1 × 29.9) × 1	(48.8 × 66.1 × 29.9) × 2	(48.8 × 66.1 × 29.9) × 2	(48.8 × 66.1 × 29.9) × 2
Net Weight		lbs	430 + 540	430 + 628	540 + 628	540 + 628	628 × 2
Sound Pressure		dB(A)	61.8	62.0	62.3	62.3	62.5
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate	cfm	7,400 + 10,200	7,400 + 10,200	10,200 + 10,200	10,200 + 10,200	10,200 + 10,200
Compressor	Type		DC Scroll	DC Scroll	DC Scroll	DC Scroll	DC Scroll
	Number of Compressors		2	3	3	3	4
Heat Exchanger			GoldFin™	GoldFin™	GoldFin™	GoldFin™	GoldFin™
Refrigerant	Refrigerant Type		R410A	R410A	R410A	R410A	R410A
	Charge	lbs	40.5	40.5	47.2	47.2	47.2
	Control		EEV	EEV	EEV	EEV	EEV
Maximum Number of Indoor Units			32	35	39	42	45



208-230V/60Hz/3Ø

ModelARUB ••• BTE4			312	336	360
			072	096	096
			096	096	121
			144	144	144
Ton			26	28	30
Nominal Capacity	Cooling	Btu/h	312,000	336,000	360,000
	Heating	Btu/h	351,000	378,000	405,000
Rated Capacity	Cooling	Btu/h	296,000	320,000	342,000
	Heating	Btu/h	334,000	361,000	387,000
Power Supply		V / Hz / Ø	208-230 / 60 / 3	208-230 / 60 / 3	208-230 / 60 / 3
Dimensions (W×H×D)		inch	(36.2 × 66.1 × 29.9) × 1 (48.8 × 66.1 × 29.9) × 2	(48.8 × 66.1 × 29.9) × 3	(48.8 × 66.1 × 29.9) × 3
Net Weight		lbs	430 + 540 + 628	540 + 540 + 628	540 + 540 + 628
Sound Pressure		dB(A)	63.8	63.9	63.9
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	cfm	7,400 + 10,200	(10,200 × 3)	(10,200 × 3)
Compressor	Type		DC Scroll	DC Scroll	DC Scroll
	Number of Compressors		4	4	4
Heat Exchanger			GoldFin™	GoldFin™	GoldFin™
Refrigerant	Refrigerant Type		R410A	R410A	R410A
	Charge	lbs	64.1	70.8	70.8
	Control		EEV	EEV	EEV
Maximum Number of Indoor Units			52	55	58

MULTI V™ IV

Heat Recovery



Note :

1. Rated Capacities are in accordance with AHRI Standard 1230.
2. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3794.
3. Due to our policy of innovation some specifications may be changed without notification.



460V/60Hz/3Ø

Model	ARUB ••• DTE4		072	096	121	144	168
Ton			6	8	10	12	14
Nominal Capacity	Cooling	Btu/h	72,000	96,000	120,000	144,000	168,000
	Heating	Btu/h	81,000	108,000	135,000	162,000	189,000
Rated Capacity	Cooling	Btu/h	69,000	92,000	114,000	138,000	160,000
	Heating	Btu/h	77,000	103,000	129,000	154,000	180,000
Power Supply	V / Hz / Ø		460 / 60 / 3	460 / 60 / 3	460 / 60 / 3	460 / 60 / 3	460 / 60 / 3
Dimensions (W × H × D)	inch		36.2 × 66.1 × 29.9	48.8 × 66.1 × 29.9	48.8 × 66.1 × 29.9	48.8 × 66.1 × 29.9	48.8 × 66.1 × 29.9
Net Weight	lbs		430	540	540	628	628
Sound Pressure	dB(A)		59.0	60.0	60.0	60.0	61.0
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	cfm	7,400	10,200	10,200	10,200	10,200
Compressor	Type		DC Scroll	DC Scroll	DC Scroll	DC Scroll	DC Scroll
	Number of Compressors		1	1	1	2	2
Heat Exchanger			GoldFin™	GoldFin™	GoldFin™	GoldFin™	GoldFin™
Refrigerant	Refrigerant Type		R410A	R410A	R410A	R410A	R410A
	Charge	lbs	16.9	23.6	23.6	23.6	23.6
	Control		EEV	EEV	EEV	EEV	EEV
Maximum Number of Indoor Units			13	16	20	23	29



460V/60Hz/3Ø

ModelARUB***DTE4			192	216	240	264	288
			072	072	096	121	144
			121	144	144	144	144
Ton			16	18	20	22	24
Nominal Capacity	Cooling	Btu/h	192,000	216,000	240,000	264,000	288,000
	Heating	Btu/h	216,000	243,000	270,000	297,000	324,000
Rated Capacity	Cooling	Btu/h	184,000	206,000	228,000	250,000	274,000
	Heating	Btu/h	206,000	230,000	256,000	282,000	308,000
Power Supply		V / Hz / Ø	460/60/3	460/60/3	460/60/3	460/60/3	460/60/3
Dimensions (W × H × D)		inch	(36.2 × 66.1 × 29.9) × 1 (48.8 × 66.1 × 29.9) × 1	(36.2 × 66.1 × 29.9) × 1 (48.8 × 66.1 × 29.9) × 1	(48.8 × 66.1 × 29.9) × 2	(48.8 × 66.1 × 29.9) × 2	(48.8 × 66.1 × 29.9) × 2
Net Weight		lbs	430 + 540	430 + 628	540 + 628	540 + 628	628 × 2
Sound Pressure		dB(A)	61.8	62.0	62.3	62.3	62.5
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate	cfm	7,400 + 10,200	7,400 + 10,200	10,200 + 10,200	10,200 + 10,200	10,200 + 10,200
Compressor	Type		DC Scroll	DC Scroll	DC Scroll	DC Scroll	DC Scroll
	Number of Compressors		2	3	3	3	4
Heat Exchanger			GoldFin™	GoldFin™	GoldFin™	GoldFin™	GoldFin™
Refrigerant	Refrigerant Type		R410A	R410A	R410A	R410A	R410A
	Charge	lbs	40.5	40.5	47.2	47.2	47.2
	Control		EEV	EEV	EEV	EEV	EEV
Maximum Number of Indoor Units			32	35	39	42	45



460V/60Hz/3Ø

ModelARUB***DTE4			312	336	360
			072	096	096
			096	096	121
			144	144	144
Ton			26	28	30
Nominal Capacity	Cooling	Btu/h	312,000	336,000	360,000
	Heating	Btu/h	351,000	378,000	405,000
Rated Capacity	Cooling	Btu/h	296,000	320,000	342,000
	Heating	Btu/h	334,000	361,000	387,000
Power Supply			V / Hz / ø	460 / 60 / 3	460 / 60 / 3
Dimensions (W × H × D)		inch	(36.2 × 66.1 × 29.9) × 1 (48.8 × 66.1 × 29.9) × 2	(48.8 × 66.1 × 29.9) × 3	(48.8 × 66.1 × 29.9) × 3
Net Weight		lbs	430 + 540 + 628	540 + 540 + 628	540 + 540 + 628
Sound Pressure			dB(A)	63.8	63.9
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Air Flow Rate (High)	cfm	7,200 + 10,200	(10,200 × 3)	(10,200 × 3)
Compressor	Type		DC Scroll	DC Scroll	DC Scroll
	Number of Compressors		4	4	4
Heat Exchanger			GoldFin™	GoldFin™	GoldFin™
Refrigerant	Refrigerant Type		R410A	R410A	R410A
	Charge	lbs	64.1	70.8	70.8
	Control		EEV	EEV	EEV
Maximum Number of Indoor Units			52	55	58

Accessories

Air Guide

(PRAGX2S0 & PRAGX3S0)

An optional air guide is available for Multi V outdoor units to change the discharge direction from vertical to horizontal.



Use PRAGX2S0 air guides with the following models : ARUN072BTE4, ARUN072DTE4, ARUB072BTE4, ARUB072DTE4.

Use PRAGX3S0 air guides with the following models : ARUN096BTE4, ARUN121BTE4, ARUN144BTE4, ARUN168BTE4, ARUN096DTE4, ARUN121DTE4, ARUN144DTE4, ARUN168DTE4, ARUB096BTE4, ARUB121BTE4, ARUB144BTE4, ARUB168BTE4, ARUB096DTE4, ARUB121DTE4, ARUB144DTE4, ARUB168DTE4.

Headers and Y-Branches

Headers and Y-Branches are specially designed and manufactured under tight quality control for low pressure drop to ensure the Multi V system operates at peak performance with the longest piping runs in the industry.



LGMV Software

(PRCTSL1, PRCTFE1)

LGMV software is a service tool that allows users to view the operating conditions of the Multi V system. Software + Cables - PRCTSL1 + PRCTFE1



Note: For detailed indoor unit and controls information, see separate Indoor Unit and Controls Catalogs.

The LG Air Conditioning Support System



For support with VRF Multi V systems, contractors can contact LG at 1-888-865-3026.

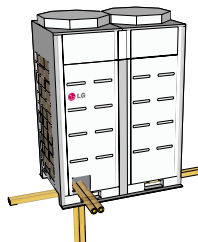


For continual product development, LG reserves the right to change specifications without notice.
©LG Electronics Inc.

Compact Design



Contractor-Friendly 4-Way Piping



Space Saver Advantage



LG
Life's Good

LG Electronics USA, Inc.
11405 Old Roswell Road
Alpharetta, GA 30009
www.lg-vrf.com



With LG, it's all possible.™