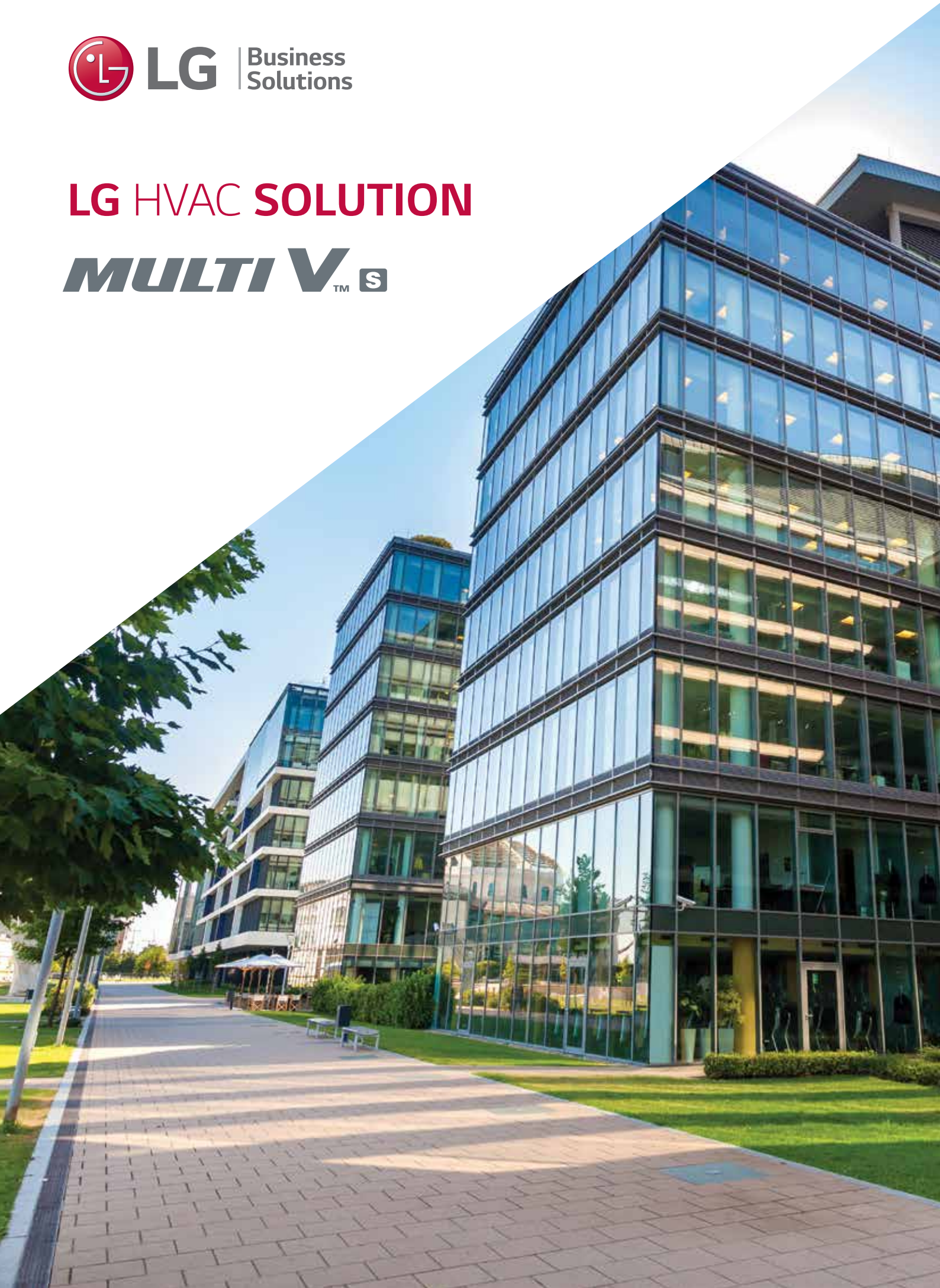
LG Business Solutions

LG HVAC SOLUTION

MULTI V™ S

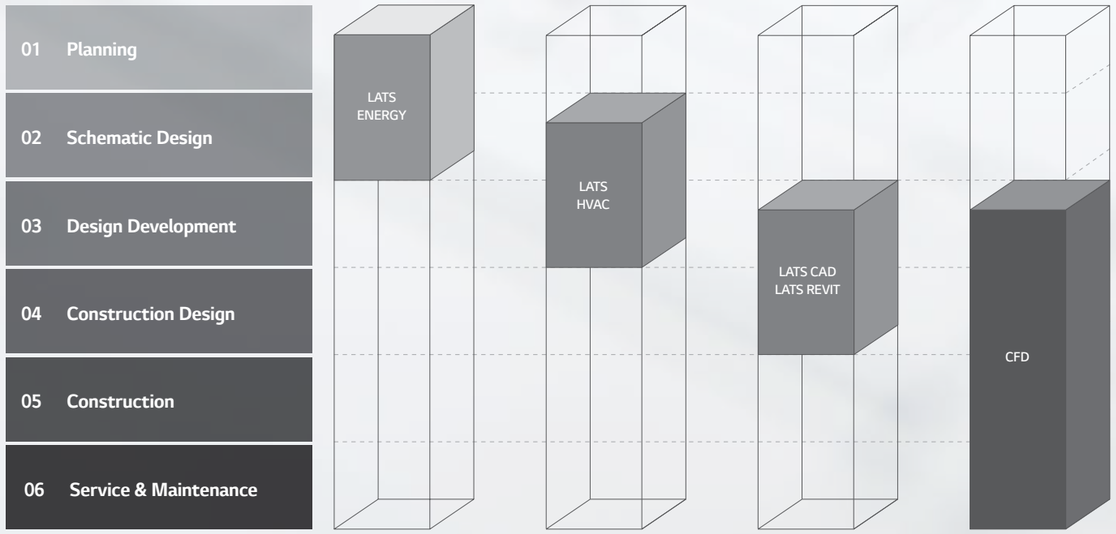


ENGINEERING CAPABILITY :HVAC TOOL & SUPPORT

From planning to service & maintenance and then to de-construction, an architectural project goes along many stages from the beginning to the end of its lifecycle. Along those stages, various engineering tools are applied to solve the diverse issues happening in each stage, with the most optimal solution possible. Due to the usage of such tools, buildings are effectively designed, built, supervised, and maintained throughout the lifecycle.
Dedicated to provide exceptional HVAC engineering support, LG Electronics Air-Solution Business Unit offers several engineering tools and solutions focused on HVAC, during the overall lifecycle of a building, related to the three categories: I. Draft Energy Estimation, II. Model Selection & Design, and III. Installation Environment Simulation. Among them, the LATS* Program series has been developed to offer optimised tool for LG HVAC systems, providing our customers a fast, easy, and accurate way in everyday duties of Model-selection, Draft Energy Estimation & Designing, and many more.

* LATS : LG Air-conditioner Technical Solution

I	II	III
Energy Estimation	Model Selection & Design	Installation Environment Simulation



01 Draft Energy Estimation

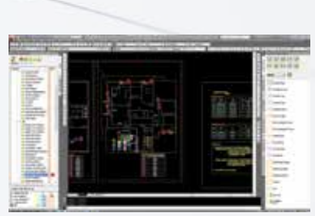
LATS Energy
LATS Energy program is a draft energy estimation program, self-developed by LG. This program helps estimate the draft energy usage and analyses the life cycle cost of LG VRF models during the early stage of a project.

02 Model Selection

LATS HVAC
LATS HVAC is an integrated model selection program of LG HVAC products, enabling an accurate and quick selection on the best model suitable to each sites. In addition to model selection, faster estimation on refrigerant piping diameter and additional refrigerant is possible, along with auto printing of reports.

03 Design

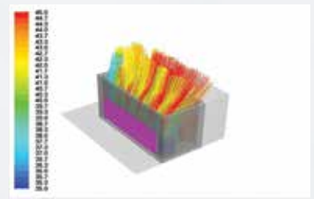
LATS CAD
LATS CAD enables faster and a more accurate design of LG HVAC products. Moreover, it offers not only designing, but also quotation and installation review in order to minimise problems during installation processes.



LATS Revit
LATS REVIT is developed to make 3D designing of LG HVAC products easier than the previous program. It enables engineers to check 3D images from designing stage and prevents possible issues of the installation stage.

04 Installation Environment Simulation

CFD Analysis
CFD Analysis is applied in areas of estimating: indoor airflow and temperature distribution while operating VRF products, outdoor airflow distribution, and noise level. By running a simulation before construction, engineers estimate possible issues and find optimal solutions of malfunction that could occur after construction.

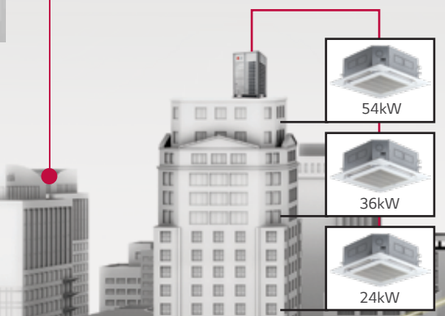


LG CONTROL SOLUTION

MULTI V S offers a diverse range of effective control solutions that satisfy specific needs of each building and its user scene. These controlling systems are equipped with user friendly interface, flexible interlocking environment, energy management and smart individual controller for optimised controlling conditions and smart building management.

HOTEL

Hotel Room Solution



Integration Solution

reddot award
User Interface Design

*2016 AC Manager 5

APARTMENT

Power Distribution Solution

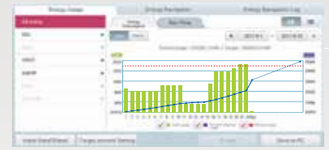
OFFICE

3rd Party BMS

Central Control Solution

Service/Maintenance

· Energy Management



· External Device

RESIDENTIAL

Smart Individual Control Solution

SMALL BUILDING

Small Central Control Solution

*Illustrative purposes only.

OUTDOOR UNIT

LINE-UP

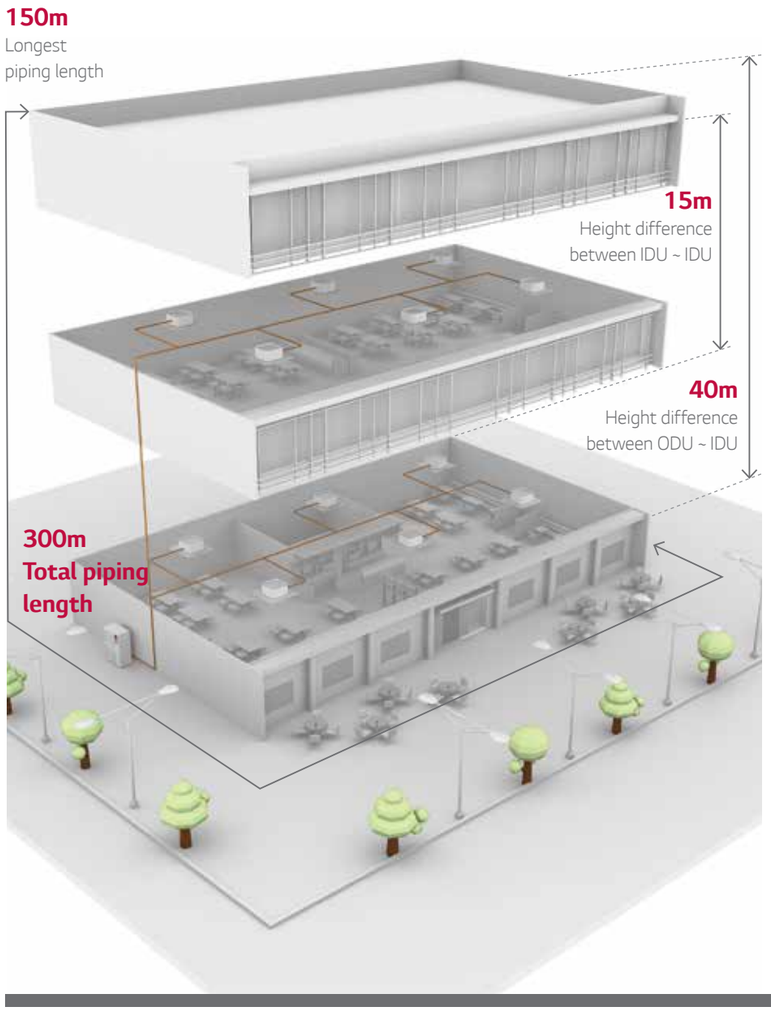
Unit : Class

Type	Features	Appearance	4	5	6	8	10	12	14	16	18	20
MULTI V S	• Saves floor space • Flexible design applications - Slim, light and wide line up (9kW ~ 33.6kW) - Combination of indoor unit (Up to 20 Units) • For Small / Medium building with up to 20 rooms		○									
				○	○							
						●	●	●				
MULTI V S Heat Recovery					○							

● 400V, 3Ø ○ 230V, 1Ø

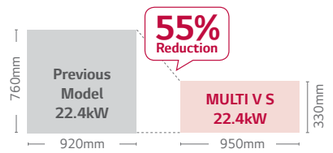
OUTDOOR UNIT KEY FEATURES

MULTI V S



MULTI V S

1. Compact Size



2. Piping Capabilities

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

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

3. Operation Range

• Heating : -20 ~ 18°C WB

• Cooling : -5 ~ 43°C DB

Benefit

• Saves valuable floor space
• Flexible design applications
- Slim, light and wide line up (9kW ~ 33.6kW)
- Combination of indoor unit

Application

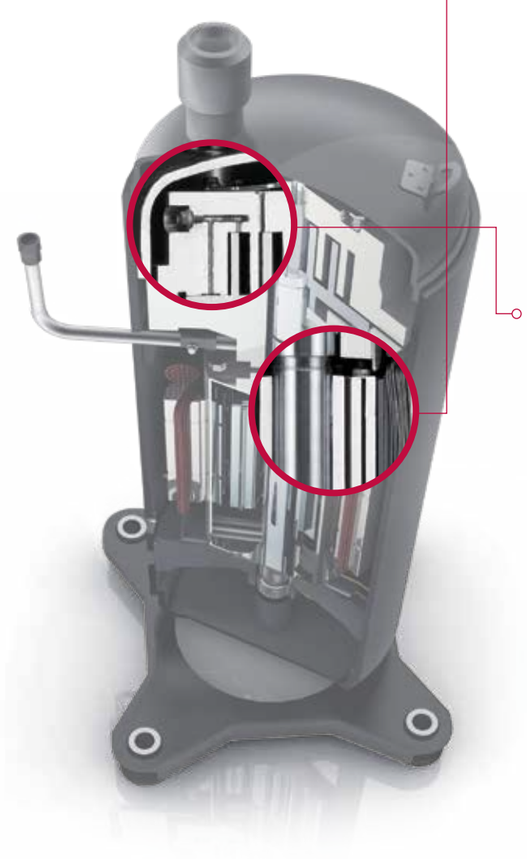
• Premium residential apartment / House (With small balcony)
• Small sized office / Restaurant / Retail shops
• Building with multiple owners

MULTI V S

EFFICIENCY

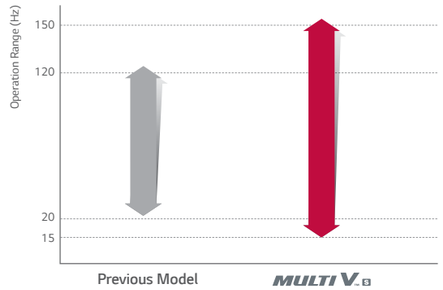
LG's 4th Generation Inverter Compressor

MULTI V S has high efficiency inverter scroll compressor with frequency range 15Hz ~ 150Hz.



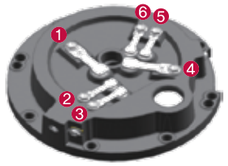
Excellent Compressor Speed

- Rapid response capability
- Compact core design (Concentrated motor)
- Down to 15Hz : Part load efficiency improvement



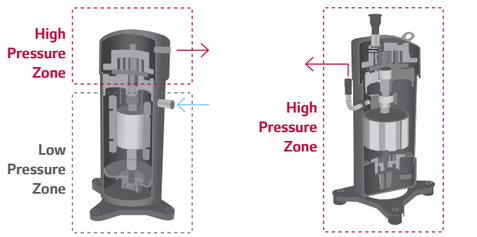
6 By-pass Valve

Compressor reliability is maximised with 6 By-pass Valves
- Prevent compressor damage due to excessively compressed refrigerant more efficiently than 4 by-pass valve



High Pressure Compressor

- Viscosity of oil is secured due to high temperature and pressure.
- Do not need oil pump. (Efficiency Increases)



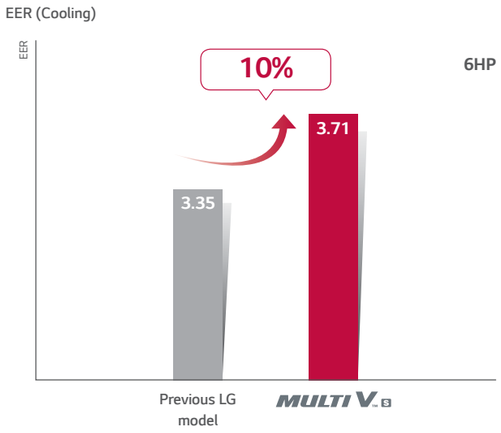
Low Pressure Compressor | **High Pressure Compressor**

Inverter Scroll Compressor

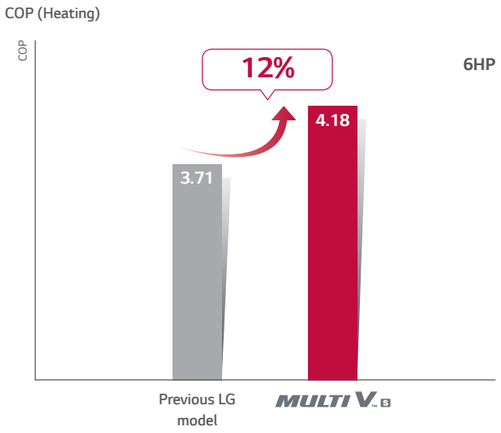
- Inverter SCROLL compressor of high efficiency
- Low vibration / Low noise

EFFICIENCY

High Efficiency



* Comparison Based on 15.5kW in cooling mode



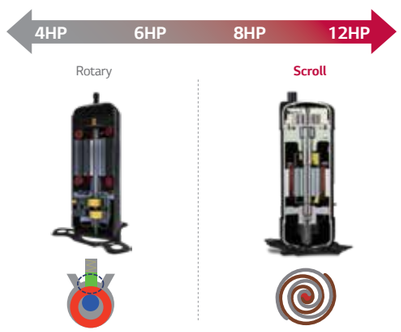
* Comparison Based on 615.5kW in heating mode

Reliable Inverter Compressor

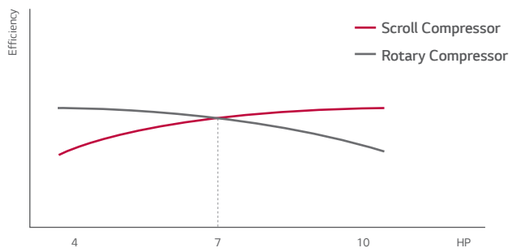
MULTI V S Inverter compressors are highly efficient and reliable for all commercial & residential applications.

MULTI V S

High reliability and efficiency at all capacity
- Below 7HP : Rotary compressor
- Upper 7HP : Scroll compressor



Compressor Efficiency Comparison



* Based on internal test data

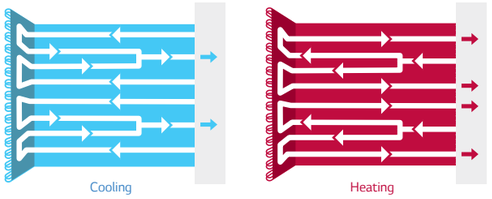
MULTI V S

Optimal Heat Exchanger Circuit

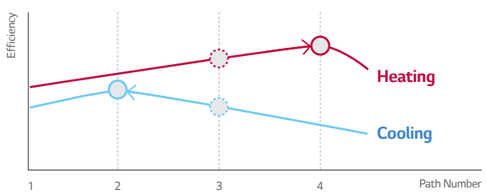
Variable Heat Exchanger Circuit is among the world first technology which intelligently selects the optimal path for both heating and cooling (Efficiency increased up to 5%).

MULTI V S

Variable Heat Exchanger Circuit adjusts the path number to match temperatures and operation modes, thereby contributing to an increase in energy efficiency

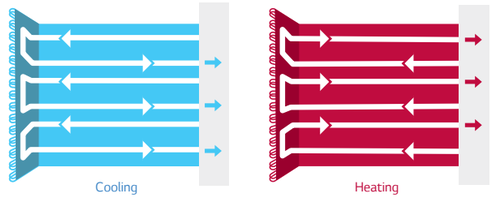


Maximizing efficiency for all operations

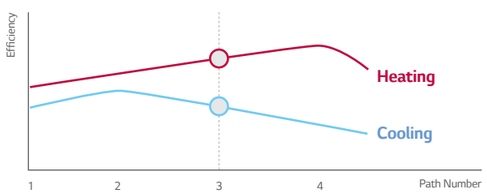


Previous LG model

The number and direction of path are fixed independent of temperature and operation mode. A fixed path limits efficiency



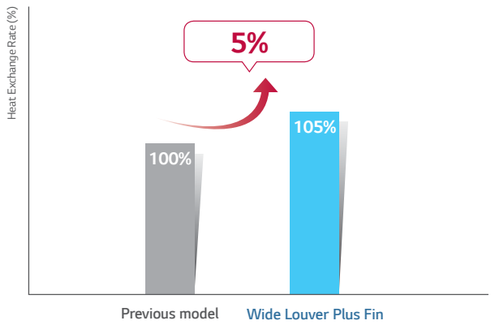
Compromising efficiency for each operation



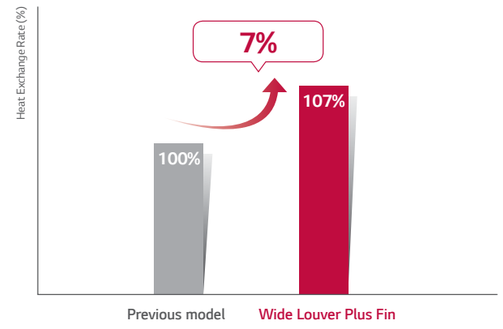
Heat Exchanger with Wide Louver Plus Fin

Improved heat exchanger efficiency of up to 7%.

Cooling



Heating



EFFICIENCY

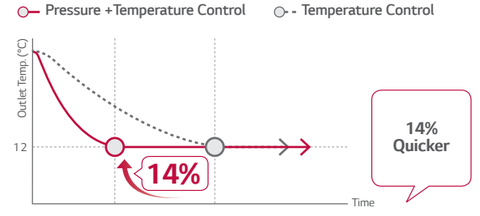
Pressure Sensor

Temperature + Pressure Control

Senses and controls pressure directly using pressure sensor for faster and more exact response to load variation

Quick Operating Response

Pressure control takes up to 14% less time in cooling mode, to reach the desired temperature.



The indoor environment can be made more comfortable, faster and more accurately.

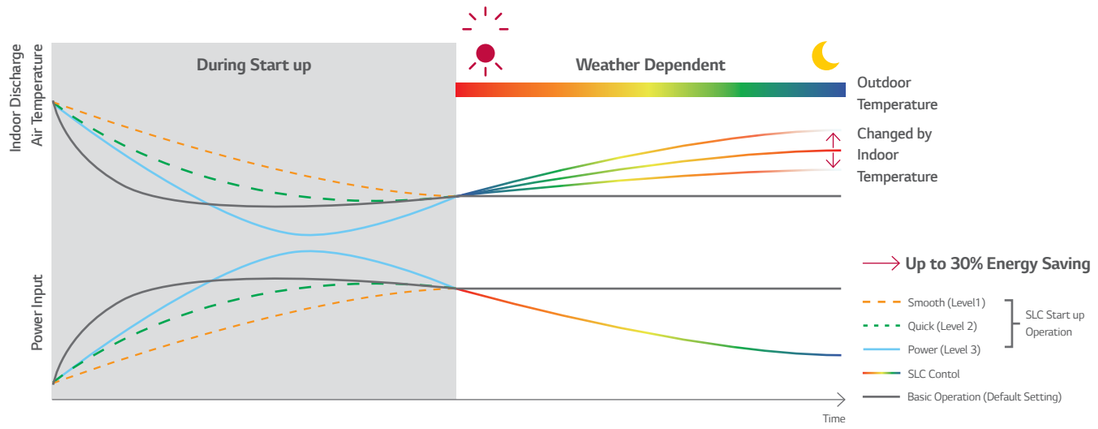
*** Based on internal test data**

Smart Load Control

MULTI V S changes indoor discharge air temperature continuously according to load, to save energy.

Benefits :

- Energy efficiency increased by 3-step Smart Load Control during start-up phase
- Discharge air temperature adjusted according to outdoor and indoor temperature
- Comfort level in cooling / heating operations ensured



MULTI V S

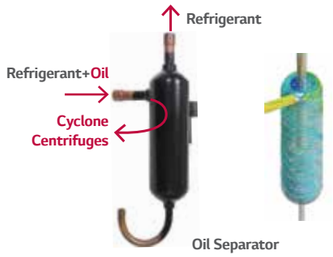
PERFORMANCE

High Reliability of Refrigerant Cycle

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

1. Cyclone Centrifuges Oil Separator

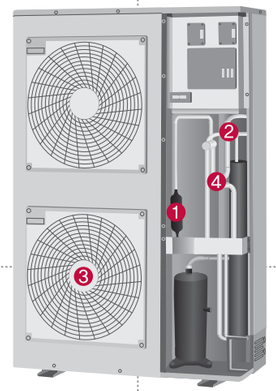
- Highly reliable and efficient oil separation by centrifugal separation using cyclone methods
- High collection efficiency as well as outstanding resistance to high temperature and pressure



2. Large Volume Accumulator

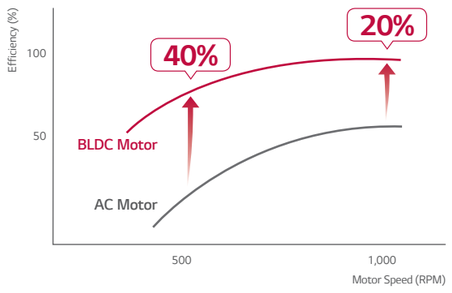
- Improved reliability by adopting the large volume accumulator (138% volume up compared to previous model)
- Prevents the liquid refrigerant entering the compressor suction

Accumulator



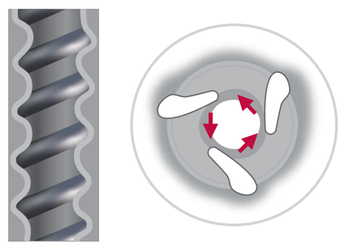
3. BLDC Fan Motor

- The BLDC Fan motor is more efficient than a conventional AC motor, offering 40% energy savings at low speeds and 20% at high speeds



4. Double Sub-cool Interchanger

- Reliability is enhanced by minimising pressure drop due to high efficiency spiral structure and 2 times larger size
  - → Long pipe is possible (up to 150m) and high elevation (up to 50m)
  - → Reduction of indoor refrigerant noise level



Double Sub-cool Interchanger

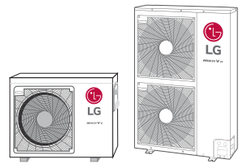
PERFORMANCE

Fan Technology and E.S.P. Control

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

Fan Technology

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



(1Ø) 4 / 5HP

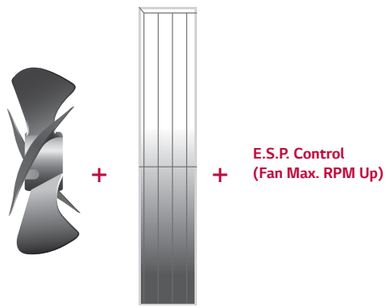
(1Ø) 5 / 6HP
(3Ø) 4 / 5 / 6 / 8HP

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

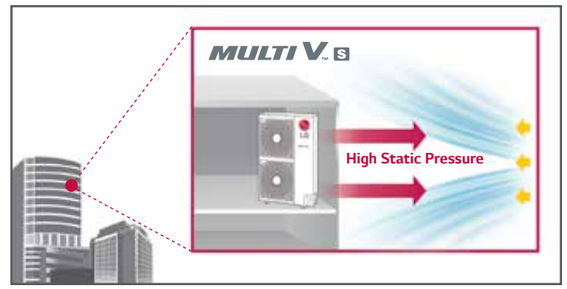
(3Ø) 10 / 12HP

High E.S.P. Technology

Flow of air has straightness due to fan shroud and E.S.P. control even in high-rise building.



Fan Shroud



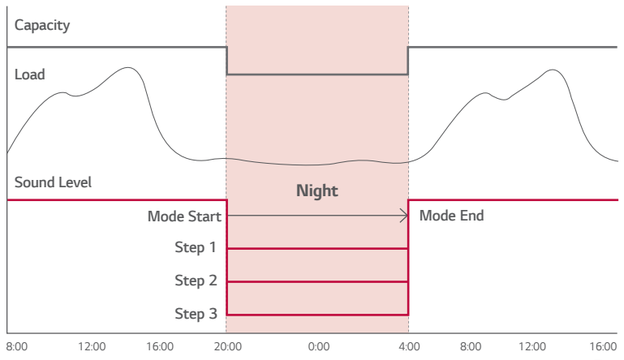
• Straight air flow
- New shroud adopted
- Performs high static pressure

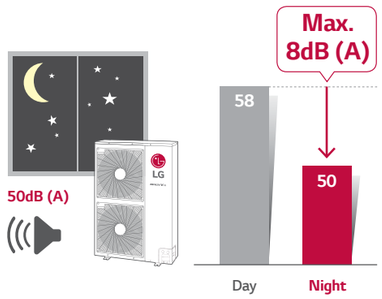
* E.S.P : External Static Pressure

MULTI V S

Night Silent Operation

At night mode, noise reduced up to 14% compared to normal mode.



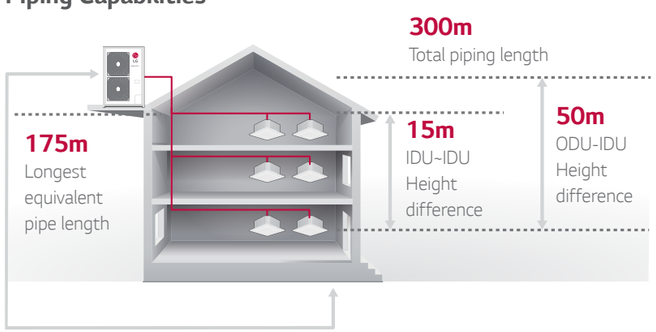


* Normal mode noise level (28kW) : 58dB(A)
* Night 3 step noise level (28kW) : 56dB(A), 53dB(A), 50dB(A)
* Sound pressure tested by following conditions :
  1m distance / 1.5m height

Expanded Piping Capabilities

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

Piping Capabilities



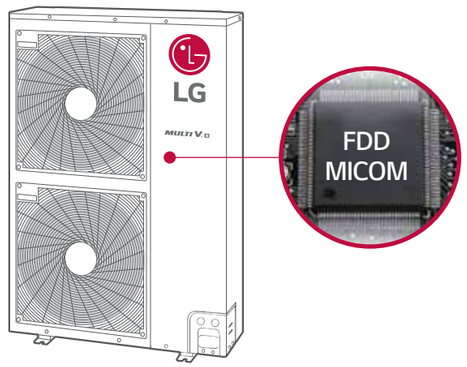
4 Way Piping

- Free design and installation by 4 way piping.

CONVENIENCE

Upgraded Fault Detection and Diagnosis

The inclusion of FDD elements - Auto start-up, auto refrigerant check, black box functionality, simultaneous evaluation, and auto refrigerant collection provides the optimal solution for user reliability and ease of maintenance.



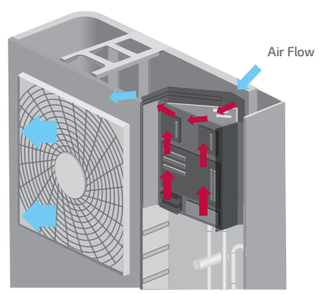
- Auto commissioning Mode
- Auto Refrigerant Collection
- Auto evaluation of refrigerant amount and charging
- Able to access LGMV (LG Monitoring View) by smartphone
- Black box function
- Piping & wiring error check-up

Self Cooled Control

MULTI V S has heat exchanger structure and diagonal shape of control box. (Efficiency increased up to 3%)

Control Box Cooling System

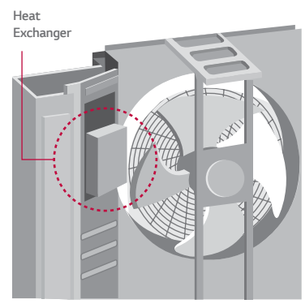
- Feature of control box is diagonal shape, it makes naturally air flowing (Directly pulling air back of the fan)
- Reduced heating / cooling efficiency loss



Front View

Heat Exchanger Technology

- Heat exchanger structure
- Optimal air flow by aluminum heat exchanger on control box.

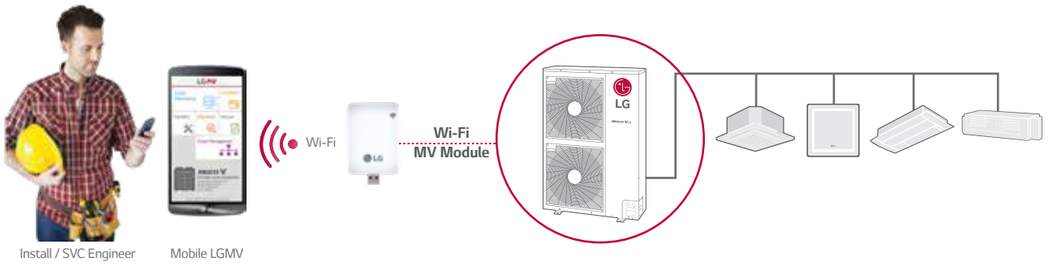


Rear View

MULTI V S

Smartphone Monitoring & Control

Mobile LGMV helps technicians to monitor the MULTI V S system cycle using the Wi-Fi MV Module.
Technicians can check LGMV data 10m away from the MULTI V S outdoor unit with a smartphone. (iPad only for IOS).



Connection type : Wi-Fi / To use Mobile LGMV Application, exclusive Wi-Fi MV Module is required

Smart Phone Specification

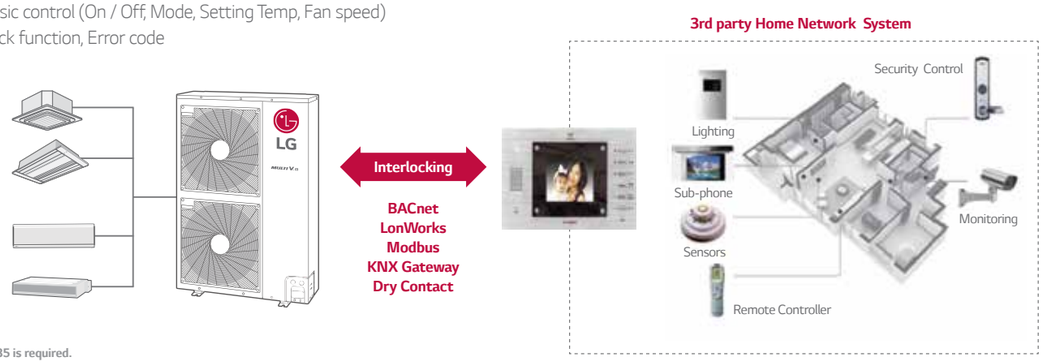
App. Name	OS	Recommended Specification	Resolution	Wireless Communication Effective Distance
Mobile LGMV	iOS (iPad Only)	AppiOS 8.0 / 8.1	2,048 x 1,536 (Optimization) / 1,024 x 768	• Effective distance : 10m (Open Area) • The effective distance may be reduced by the communication environment
	Android	Android 4.4 (Android 3.x, Honeycomb not Supported)	480 x 800 / 720 x 1,280, 768 x 1,280 / 768 x 1,024 / 1,080 x 1,920	

With Home Network System*

Interlocking with home network system enables various application.
Depending on building size and usage, various communication method can be given.

Compatibility to Home Network System

- Basic control (On / Off, Mode, Setting Temp, Fan speed)
- Lock function, Error code



* PI485 is required.

PERFORMANCE

Heat Exchanger with Ocean Black Fin for Corrosion Resistance

The LG exclusive Ocean Black Fin is applied on the heat exchanger of MULTI V S in order to perform even in corrosive environments. The strong protection from various corrosive external environments such as seaside with high salt contamination and industrial cities with severe air pollution caused by fumes from factories keeps MULTI V S operating without breakdown. This improvement in durability prolongs the product's lifespan and lowers both the operational and maintenance costs.


Previous Model

Ocean Black Fin

Corrosion Resistance Proven by Certified Tests

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

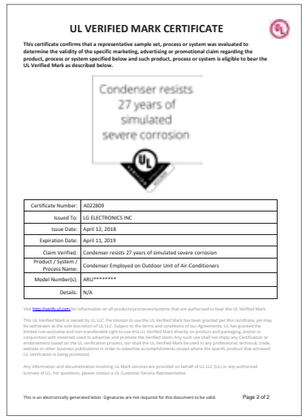
Certified protection

Condition of salt spray test

Temperature	35°C
Mist of 5% sodium chloride solution	

Condition of gas exposure test

R.H.	NO_2	SO_2
95%	10×10^{-5}	5×10^{-6}



UL VERIFIED MARK CERTIFICATE

This certificate confirms that a representative sample set, process or system was evaluated to determine the validity of the specific marketing, advertising or promotional claim regarding the product, process or system specified below and such product, process or system is eligible to bear the UL Verified Mark as described below.

Condenser resists 27 years of simulated severe corrosion

Certificate Number:	A022809
Issued To:	LG ELECTRONICS INC
Issue Date:	April 12, 2018
Expiration Date:	April 11, 2019
Claim Verified:	Condenser resists 27 years of simulated severe corrosion
Product / System / Process Name:	Condenser Employed on Outdoor Unit of Air-Conditioners
Model Number(s):	ABU********
Details:	N/A

Visit http://marks-of-ul.com for information on all products/processes/systems that are authorized to bear the UL Verified Mark.

This UL Verified Mark is owned by UL LLC. Permission to use the UL Verified Mark has been granted per this certificate, yet may be withdrawn at the sole discretion of UL LLC. Subject to the terms and conditions of our Agreements, UL has granted the limited non-exclusive and non-transferable right to use this UL Verified Mark directly on product and packaging, and/or in conjunction with materials used to advertise and promote the Verified claim. Any such use shall not imply any Certification or endorsement based on the UL verification process, nor shall the UL Verified Mark be used in any professional, technical, trade, website or other business publications in order to advertise accomplishments except where the specific product that achieved UL Verification is being promoted.

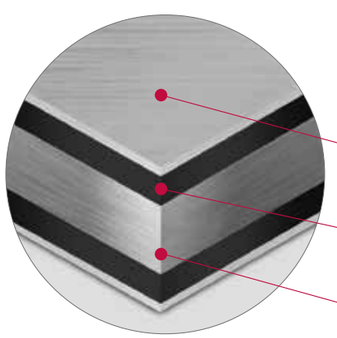
Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a UL Customer Service Representative.

This is an electronically generated letter. Signatures are not required for this document to be valid. Page 2 of 2

* Test Method B Simulation Validated
(Test condition: Salt contaminated condition + severe industrial/traffic environment(NO_2/SO_2))
* Based on 1,500 UL test hours (=62.5 days)

Enhanced Coating Layers

The black coating with enhanced epoxy resin is applied for strong protection from various corrosive external conditions such as salt contamination and air pollution including fumes from factories. Moreover, the hydrophilic film keeps water from accumulating on the heat exchanger's fin, minimising moisture buildup and eventually making it even more corrosion resistant.



Hydrophilic film (Water flow)
The Hydrophilic coating minimises moisture buildup on the fin.

Epoxy resin (Corrosion resistant)
The Black coating provides strong protection from corrosion.

Aluminum fin

ARUN040GSS0

CLASS			4
Model Name	Combination Unit		ARUN040GSS0
Capacity [1] (Rated)	Cooling	kW	12.1
		kcal/h	10,400
		Btu/h	41,300
	Heating	kW	12.5
		kcal/h	10,800
		Btu/h	42,700
Input (Rated) [1]	Cooling	kW	2.95
	Heating	kW	2.91
Power Factor	Rated	-	0.93
Casing Colour			Warm Grey
Heat Exchanger			Wide Louver Plus
Compressor	Type		Hermetic Motor Compressor
	Motor Output x Number	W x No.	4,000 x 1
Fan	Type		Axial Flow Fan
	Motor Output x Number	W	124 x 1
	Air Flow Rate (High)	m^3/min	60
		l/s	1,000
	Drive		DC INVERTER
	Discharge	Side / Top	Side
Pipe Connections	Liquid	mm (inch)	Ø 9.52(3/8)
	Gas	mm (inch)	Ø 15.88(5/8)
Dimensions (W x H x D)		mm	950 × 834 × 330
Net Weight		kg	70
Sound Pressure Level	Cooling	dB(A)	50
	Heating	dB(A)	52
Sound Power Level		dB(A)	66
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch
	Compressor / Fan	-	Over-heat protection / Fan driver overload protector
	Inverter	-	Over-heat protection / Over-current protection
Communication Cable		No. x mm^2 (VCTF-SB)	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A
	Precharged Amount	kg	1.8
	Control		Electronic Expansion Valve
Power Supply		V, Ø, Hz	220-240 , 1 , 50
Number of maxmum connectable indoor units [3]			18

Notes:
1. Capacities are based on the following conditions:
- Cooling Temperature : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
- Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
- Piping Length : Interconnected Pipe Length = 7.5m - Difference Limit of Elevation (Outdoor ~ Indoor Unit) is Zero.
2. The maximum combination ratio is 160%.
3. Wiring cable size must comply with the applicable local and national code
4. Due to our policy of innovation some specifications may be changed without notification.
5. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
6. Power factor could vary less than ±1% according to the operating conditions.

MULTI V S

ARUN050GSS0
ARUN060GSS0

CLASS			5	6
Model Name	Combination Unit		ARUN050GSS0	ARUN060GSS0
Capacity [1] (Rated)	Cooling	kW	14.0	15.5
		kcal/h	12,000	13,300
		Btu/h	47,800	52,900
	Heating	kW	16.0	18.0
		kcal/h	13,800	15,500
		Btu/h	54,600	61,400
Input (Rated) [1]	Cooling	kW	3.38	3.96
	Heating	kW	3.52	4.09
Power Factor	Rated	-	0.93	0.93
Casing Colour			Warm Grey	Warm Grey
Heat Exchanger			Wide Louver Plus	Wide Louver Plus
Compressor	Type		Hermetic Motor Compressor	Hermetic Motor Compressor
	Motor Output x Number	W x No.	4,000 x 1	4,000 x 1
Fan	Type		Axial Flow Fan	Axial Flow Fan
	Motor Output x Number	W	124 x 2	124 x 2
	Air Flow Rate (High)	m^3/min	110	110
		l/s	1,833	1,833
	Drive		DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side
Pipe Connections	Liquid	mm (inch)	Ø 9.52(3/8)	Ø 9.52(3/8)
	Gas	mm (inch)	Ø 15.88(5/8)	Ø 19.05(3/4)
Dimensions (W x H x D)		mm	950 × 1,380 × 330	950 × 1,380 × 330
Net Weight		kg	94	94
Sound Pressure Level	Cooling	dB(A)	51	52
	Heating	dB(A)	53	54
Sound Power Level		dB(A)	67	69
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor / Fan	-	Over-heat protection / Fan driver overload protector	Over-heat protection / Fan driver overload protector
	Inverter	-	Over-heat protection / Over-current protection	Over-heat protection / Over-current protection
Communication Cable		No. x mm^2 (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A
	Precharged Amount	kg	3.0	3.0
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V, Ø, Hz	220-240 , 1 , 50	220-240 , 1 , 50
Number of maxmum connectable indoor units [3]			10	13

Notes:
1. Capacities are based on the following conditions:
- Cooling Temperature : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
- Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
- Piping Length : Interconnected Pipe Length = 7.5m - Difference Limit of Elevation (Outdoor ~ Indoor Unit) is Zero.
2. The maximum combination ratio is 160%.
3. Wiring cable size must comply with the applicable local and national code
4. Due to our policy of innovation some specifications may be changed without notification.
5. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
6. Power factor could vary less than ±1% according to the operating conditions.

ARUN080LSS0
ARUN100LSS0
ARUN120LSS0

CLASS			8	10	12
Model Name	Combination Unit		ARUN080LSS0	ARUN100LSS0	ARUN120LSS0
Capacity [1] (Rated)	Cooling	kW	22.4	28.0	33.6
		kcal/h	19,300	24,100	28,900
		Btu/h	76,400	95,900	114,700
	Heating	kW	25.2	31.5	37.8
		kcal/h	21,700	27,100	32,500
		Btu/h	86,000	107,500	129,000
Input (Rated) [1]	Cooling	kW	5.89	7.09	9.08
	Heating	kW	6.00	7.41	9.95
Power Factor	Rated	-	0.93	0.93	0.93
Casing Colour			Warm Grey	Warm Grey	Warm Grey
Heat Exchanger			Wide Louver Plus	Wide Louver Plus	Wide Louver Plus
Compressor	Type		Hermetic Sealed Scroll	Hermetic Sealed Scroll	Hermetic Sealed Scroll
	Motor Output x Number	W x No.	4,200 x 1	5,300 x 1	5,300 x 1
Fan	Type		Propeller Fan	Propeller Fan	Propeller Fan
	Motor Output x Number	W	124 x 2	250 x 2	250 x 2
	Air Flow Rate (High)	m^3/min	140	190	190
		l/s	2,333	3,167	3,167
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	Side	Side	Side
Pipe Connections	Liquid	mm (inch)	Ø 9.52(3/8)	Ø 9.52(3/8)	Ø 12.7(1/2)
	Gas	mm (inch)	Ø 19.05(3/4)	Ø 22.2(7/8)	Ø 28.58(1-1/8)
Dimensions (W x H x D)		mm	950 × 1,380 × 330	1,090 × 1,625 × 380	1,090 × 1,625 × 380
Net Weight		kg	115	144	157
Sound Pressure Level	Cooling	dB(A)	57	58	60
	Heating	dB(A)	57	58	60
Sound Power Level		dB(A)	69	70	71
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor / Fan	-	Over-heat protection / Fan driver overload protector	Over-heat protection / Fan driver overload protector	Over-heat protection / Fan driver overload protector
	Inverter	-	Over-heat protection / Over-current protection	Over-heat protection / Over-current protection	Over-heat protection / Over-current protection
Communication Cable		No. x mm^2 (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	3.5	3.0	6.0
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		V, Ø, Hz	380-415 , 3 , 50	380-415 , 3 , 50	380-415 , 3 , 50
Number of maxmum connectable indoor units [3]			13	16	20

Notes:
1. Capacities are based on the following conditions:
- Cooling Temperature : Indoor 27°C(80.6°F) DB / 19°C(66.2°F) WB Outdoor 35°C(95°F) DB / 24°C(75.2°F) WB
- Heating Temperature : Indoor 20°C(68°F) DB / 15°C(59°F) WB Outdoor 7°C(44.6°F) DB / 6°C(42.8°F) WB
- Piping Length : Interconnected Pipe Length = 7.5m - Difference Limit of Elevation (Outdoor ~ Indoor Unit) is Zero.
2. The maximum combination ratio is 160%.
3. Wiring cable size must comply with the applicable local and national code
4. Due to our policy of innovation some specifications may be changed without notification.
5. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
6. Power factor could vary less than ±1% according to the operating conditions.

MULTI V S HEAT RECOVERY

ARUB060GSS4

CLASS				6
Model				ARUB060GSS4
Capacity (Rated) [1]	Cooling	Nom	kW	15.5
	Heating	Nom	kW	18.0
Power Input (Rated) [1]	Cooling	Nom	kW	3.97
	Heating	Nom	kW	4.10
EER				3.90
COP				4.39
Compressor	Type			Hermetically Sealed Scroll
	Piston Displacement		cm^3/rev	43.8
	Motor Output		W	4,200
	Starting Method			DC Inverter Starting
Fan	Type			Axial Flow Fan
	Motor Output x Number		W	124 x 2
	Air Flow Rate (High)		m^3/min	110
			ft^3/min	3,885
	Drive			DC INVERTER
	Discharge		Side / Top	Side
Pipe Connections	Liquid		mm (inch)	Ø 9.52 (3/8)
	Low Pressure Gas		mm (inch)	Ø 19.05 (3/4)
	High Pressure Gas		mm (inch)	Ø 15.88 (5/8)
Dimensions (W x H x D)			mm	950 × 1,380 × 330
Net Weight			kg	118
Sound Pressure Level	Cooling		dB(A)	56
	Heating		dB(A)	58
Sound Power Level	Cooling		dB(A)	69
	Heating		dB(A)	71
Communication Cable	(VCTF-SB)		No. x mm^2	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant Name			R410A
	Precharged Amount		kg	3.5
	t-CO_2eq			7.3
	Control			Electronic Expansion Valve
Refrigerant Oil	Type			FVC68D(PVE)
	Charge		cc	1,300
Power Supply			V, Ø, Hz	220-240 , 1 , 50
Number of maxmum connectable indoor units				13

Notes:

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

2. The maximum combination ratio is 160%.
3. Wiring cable size must comply with the applicable local and national codes.
4. Due to our policy of innovation some specifications may be changed without notification.
5. Sound Level Values are measured at Anechoic chamber. Therefore, these values can be increased owing to ambient conditions during operation.
6. Power factor could vary less than ±1% according to the operating conditions.
7. This product contains Fluorinated greenhouse gases.(R410A, GWP(Global warming potential) = 2087.5)

Find out more

lg.com/au/commercial-air-conditioning

March 2021