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LG HVAC SOLUTION

MULTI V™ IV



MULTI V™ IV Development Philosophy

LG Air Conditioning and Energy Solution (AE) company's primary goal is to vitalizing every environment around the globe - from private residences to commercial buildings and shared communal spaces. To make this a reality, the company has developed a comprehensive range of innovative heating, ventilation and air conditioning (HVAC) products as well as state-of-the-art energy solutions. One such product is the advanced MULTI V [IV] variable refrigerant flow (VRF), which delivers incredible performance and energy efficiency through a number of proprietary LG technologies.

VRF solutions are widely considered to be among the most versatile and powerful system air conditioners available. Providing exceptional comfort, energy efficiency and reliability, they are highly regarded by building managers, business operators and HVAC engineers. The latest model VRF solutions boast a number of other tangible benefits too, including cost-effectiveness and easier installation.

Thanks to significant advancements in HVAC technologies the LG Multi V VRF system is now able to offer unmatched performance capabilities along with reduced energy consumption. Nevertheless, LG continues to focus on

further improving operational efficiency.

Through close observation, testing, analysis and extensive R&D, LG has been able to maximise operation efficiency. The results of this endeavor can clearly be seen in the company's finest achievement to date, new MULTI V [IV]. Going 'Beyond Your Standards', the groundbreaking VRF system possesses all of the strengths without the weaknesses in other VRF systems.

One of LG's firmly held beliefs is that in order to be the very best, one must offer the very best. Equipped with world-first technologies and offering performance, MULTI V [IV] has earned its place among the very best VRF system the market.

The Rule of 20 In 2008, the EU announced its triple goal related to energy efficiency under the '20-20-20 Policy'. With a wide range of far-reaching policies, the EU aims to cut its dependence on primary energy sources by 20%, reduce CO₂ emissions by 20%, and also increase renewable energy production by 20% before 2020. To help lower electricity consumption by raising consumer awareness, all appliances released in the European market must display a label, which indicates the energy efficiency rating, annual energy consumption, and other energy-related information. In addition to helping consumers choose more efficient products, the labeling system encourages manufacturers to develop technologies, which require less energy to operate.

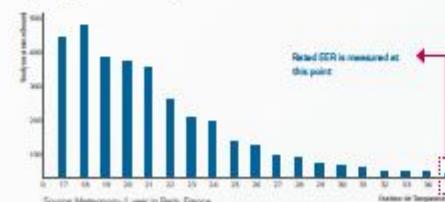


Importance of Seasonal Efficiency

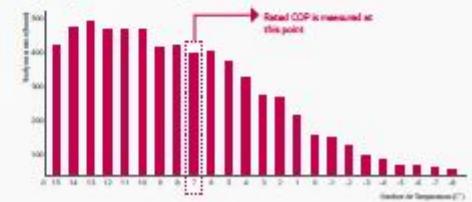
As a measurement index, rated EER or rated COP is limited in value, as it only measures power input in comparison with power output and is tested under European conditions. However, seasonal efficiency, which is based on EUROVENT standards, provides a more realistic determination of performance. This system measures the ratio of cooling output to energy consumption over the course of a given season, taking varying temperatures into account for greater accuracy. One reason that VRF system is able to

achieve a higher seasonal efficiency than conventional system is that it is more efficient in part load conditions. HVAC systems generally operate in part load 98% of the time, typically situated between 40-80% of maximum output. This is what has made improving part load efficiency such a high priority for the air conditioning industry.

Operating Hour for Cooling



Operating Hour for Heating



World's First Class Seasonal Efficiency

MULTI V [IV] is up to 40% more efficient in part load conditions than previous model. The operational benefits of LG's MULTI V IV have been proven through rigorous testing. When connected with our wide variety of types and sizes of indoor units, MULTI V [IV] scored higher energy efficiency marks than conventional systems.



4th Generation

MULTI V™ IV

The operational efficiency of VRF system is determined by its compressor, heat exchanger, oil and refrigerant technologies, sometimes referred to as the 'four key elements'. LG is dedicated to maximising the energy efficiency of its MULTI V solutions by locating and minimising 'hidden loss'. The result of heavy investment and extensive R&D, LGE's own technologies, including High Pressure Oil Return (HiPOR™), Active Refrigerant Control, Smart Oil Return and the Variable Heat Exchanger Circuit, maximises operating efficiency of the product and reduces the occurrence of energy loss.

The fourth generation Inverter compressor which places MULTI V [IV] as the fourth generation LGE VRF system. And with breakthroughs in the

four key areas of VRF technology, MULTI V [IV]. Providing more than just an impressive energy efficiency ratio, the integrated part-load efficiency or the innovative functions, MULTI V [IV] is not only entirely new but far superior to its predecessor, MULTI V[III].

LG is proud to introduce to its customers all around the world to its latest system air conditioning solution, MULTI V [IV]. This groundbreaking product is the embodiment of the company's consistent commitment to excellence and technological innovation.

LG HVAC SOLUTION INDEX



OUTDOOR UNITS

004 MULTI V™



INDOOR UNITS

042 Wall Mounted

045 Ceiling Concealed Ducts

046 Ceiling Cassettes

048 Ceiling & Floor / Ceiling Suspended

049 Floor Standing

050 Fresh Air Intake Unit



ECO V

076 eco V



ACCESSORIES

086 Air conditioner Control System

124 Mechanical Accessories

131 Piping Accessories



MULTI V™ IV

OUTDOOR UNIT LINE UP

MULTI V™ IV HEAT PUMP / HEAT RECOVERY



8, 10, 12 Class



14, 16, 18, 20 Class



22, 24 Class



26, 28, 30, 32 Class



34, 36, 38, 40 Class



42, 44, 46, 48, 50, 52 Class



54, 56, 58, 60 Class

OUTDOOR UNITS

MULTI V™ series

MULTI V series offers outstanding energy savings, easy installation and connection to many different types of indoor units, making it easy to design.

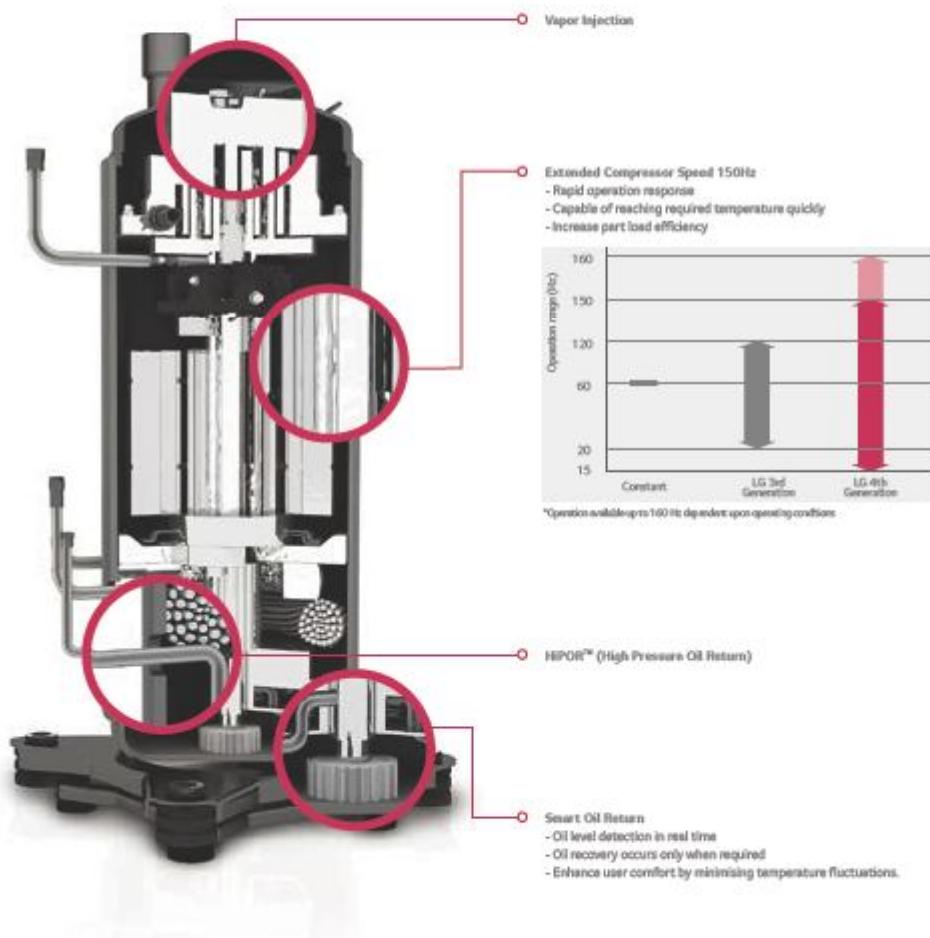
EXCEPTIONAL EFFICIENCY

World's First Class, Rated and Part Load Efficiency

HEAT PUMP SERIES

LG's 4th Generation Inverter Compressor

The new High-Side Shell (HSS) scroll inverter compressor and BLDC concentration motor coil optimizes part load efficiency with the 50% reduction in weight and increase in high-frequency operation of 120Hz to 150Hz.

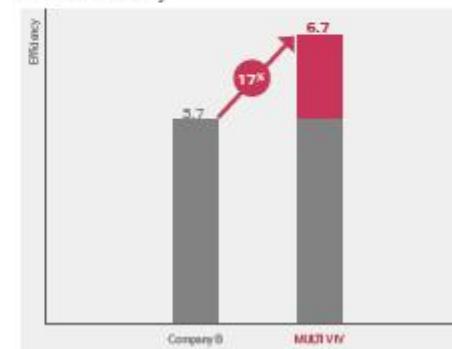


World's First Class, Rated and Part Load Efficiency

Rated Efficiency



Part Load Efficiency

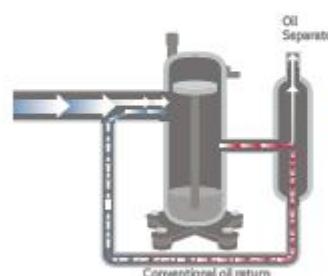


HiPOR™ (High Pressure Oil Return)

HiPOR™ technology enables oil to return directly into the compressor; instead of returning through the refrigerant circuit, minimising energy losses.

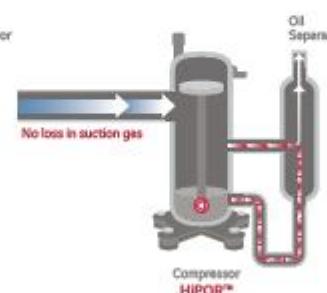
Conventional

Loss of low pressure refrigerant to the extent of the oil volume returned by the refrigerant pipe.

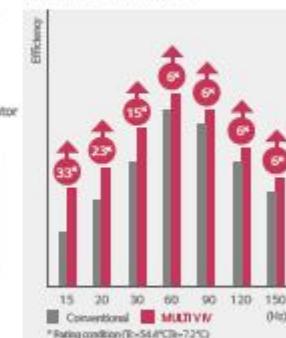


MULTI V IV

Maximizing reliability and efficiency of the compressor by reducing high pressure refrigerant loss.



Efficiency Comparison

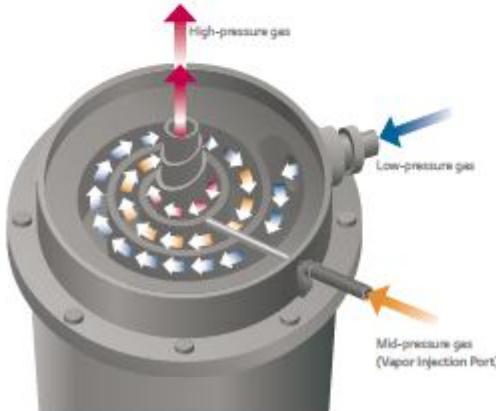


EXCEPTIONAL EFFICIENCY

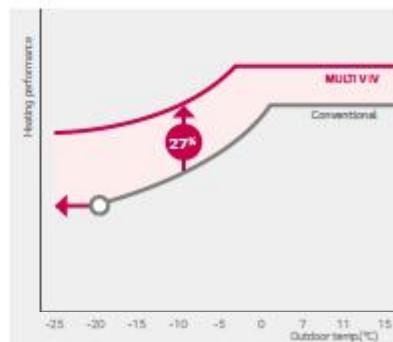
World's First Class, Rated and Part Load Efficiency

Vapor Injection

Vapor injection uses a two-stage compression effect, which is designed to provide efficient heating in extremely cold environments. Combined with HPOR™, this system boosts heating performance and enhances heating temperature range.



- Improved heating performance by 27%
- Minimum operating temperature lowered to -25°C

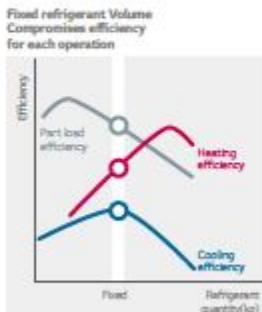


Active Refrigerant Control

Active Refrigerant Control automatically controls the level of liquid refrigerant amount to maximise efficiency.

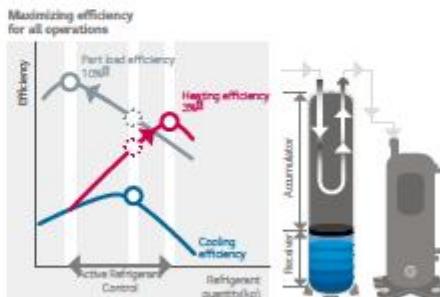
Conventional

Regardless of operation mode in a conventional VRF system a fixed amount of refrigerant is available which limits optimal efficiency of each modes operating.



MULTI V IV

In MULTI V [IV] Active Refrigerant Control automatically monitors and adjusts the volume of circulating refrigerant for each cycle cooling or heating. This precise, five-step control leads to an improvement in energy efficiency, for cooling or heating whether port on full load operation.



Variable Heat Exchanger Circuit

Variable Heat Exchanger Circuit is the world first technology which intelligently selects the optimal path for both heating and cooling.

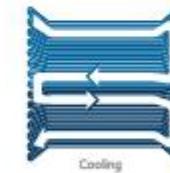
Conventional

In conventional systems the number and direction of paths are fixed independent of temperature and operation mode. A fixed path limits efficiency.

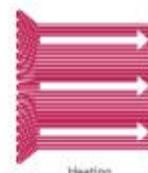
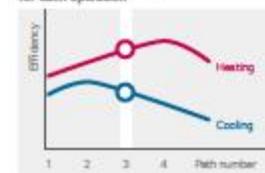


MULTI V IV

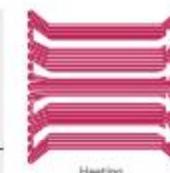
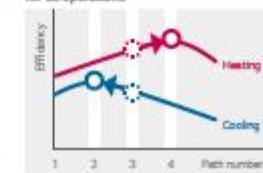
In MULTI V [IV] variable Heat Exchanger Circuit adjusts the path number to match temperatures and operation modes, thereby contributing to an increase in energy efficiency.



Fixed paths
Compromises efficiency
for each operation



Variable heat exchange circuit
Maximizes efficiency
for all operations



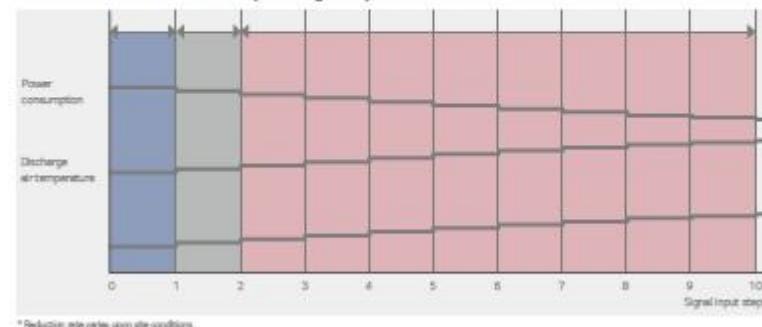
Flexible Capacity Control

It is possible for the Designer, Consultant or Buildings owner to control heating & cooling performance and save energy through outdoor capacity control.

5 Basic stage capacity control

- 10 steps control is possible with IO(Input & Output) module (option)
- Up to 40% input power reduction through energy saving operation

Demand control with IO module (In cooling mode)



* Reduction rate varies upon site conditions.

* It will be available at the end of 2013.

** IO module also provides silent operation during night time, CO2/CO alarm operation, noise alarm and low ambient control.

OUTSTANDING PERFORMANCE

On the Leading Edge of Innovation with Powerful Heating and Cooling Performance

Smart Oil Return

World first technology which enhances system and compressor reliability, optimizes efficiency by checking compressor oil level with sensor in Real Time.

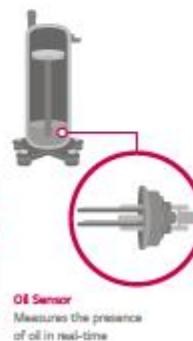
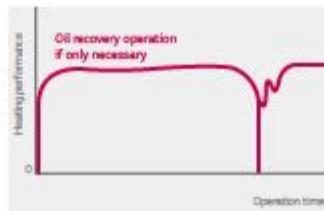
Conventional VRV

- Periodic oil recovery operation(every 8hr) is required as compressor oil level sensing technology is not present limiting continuous operation.
- During oil recovery operation, heating operation must be paused and total performance and operation is reduced. Noise caused by oil recovery operation.



MULTI V [IV]

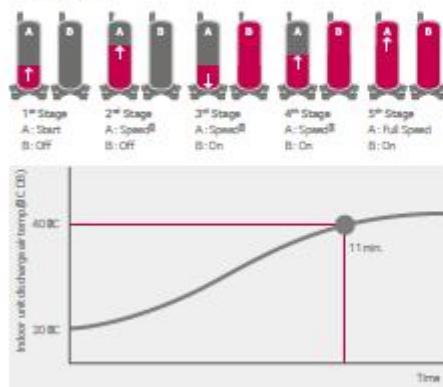
- Precise sensor monitors oil levels in Real Time performing recovery only when necessary
- An oil balancing and return algorithm works in tandem with the sensor to reduce power consumption, decrease energy wastage
- Oil recovery noise happens less often.



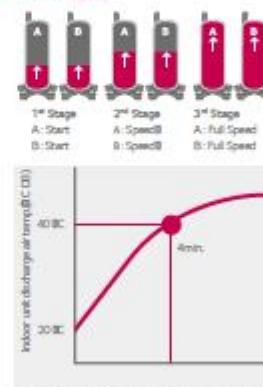
Faster Heating and Cooling via Advanced Inverter Technology

In conventional models, inverter compressor and on/off compressor operate one by one, which takes far longer to reach maximum capacity. Thanks to LG's all inverter compressor system and high performance cycle design, MULTI V [IV] delivers faster cooling or heating by operating two inverter compressors simultaneously.

Conventional



MULTI V [IV]



*Condition: Standard heating mode (Ambient air temp. 7°C, Indoor temp. 20°C)

Continuous Heating Operation in Defrost

MULTI V [IV] uses the split-defrost technology for continuous heating operation, which provides consistent heating for the indoor environment to improve both heating capacity and indoor comfort.

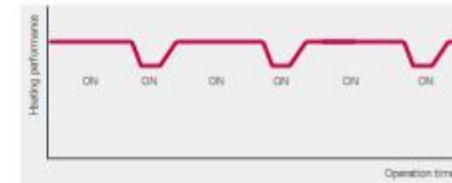
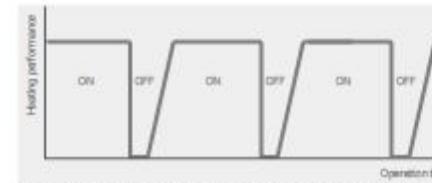
Conventional VRV

Heating stops during defrosting operation.



MULTI V [IV]

Continuous heating during part load defrosting operation.



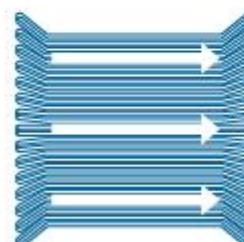
* Continuous heating operation can be switched to existing defrost mode depending on environmental conditions.

Cooling Operation Range Down to -10°C

LG has expanded the MULTI V [IV] operating temperature range for continuous cooling from -5°C (23°F) to -10°C (14°F) to provide a better solution for zones that require four seasons cooling.

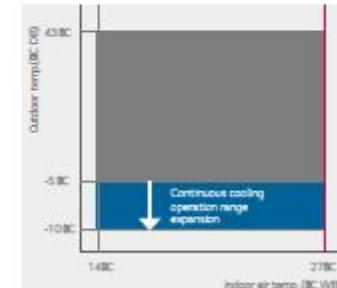
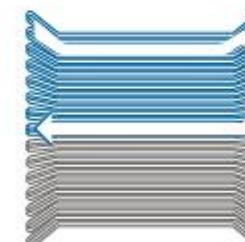
Conventional VRV

- Only allowed to use entire surface of heat exchanger which result into extremely low pressure
- Cooling operation range limited to -5°C and above



MULTI V [IV]

- Optimal low pressure by using part load surface of the heat exchanger
- Cooling operation range expanded to -10°C

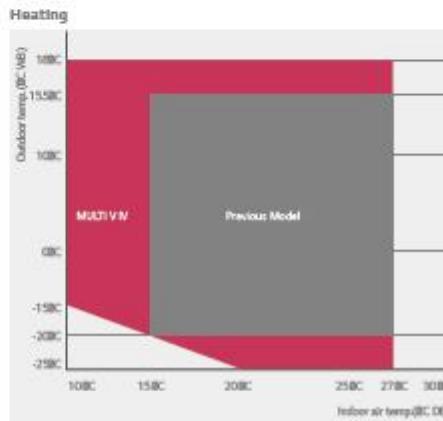
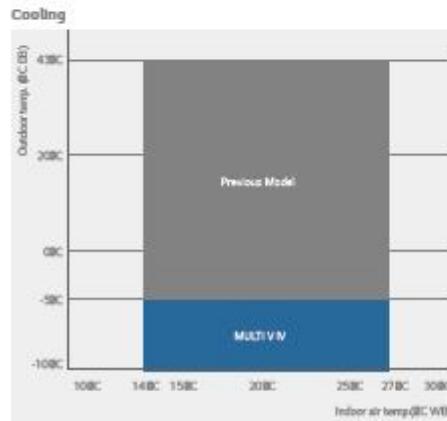


OUTSTANDING PERFORMANCE

On the Leading Edge of Innovation with Powerful Heating and Cooling Performance

Wide Operation Range

MULTI V [IV] extended range of continuous cooling and heating operation through enhanced inverter compressor and control technology.



Fan with Less Noise and Higher Air Volume

Cannon fan is applied with optimized shape of shroud, increasing air volume and decreasing noise level down to 4dB(A) compared to the previous value.

Cannon Fan

Minimized vortex and exfoliation provides high air volume, low noise level and high efficiency.



- ① Sinusoidal leading edge
Low noise level with sinusoidal chord distribution (4dB(A) decreased)
- ② Grooved suction surface
Exfoliation of surface
- ③ Tip vortex suppressor
Winglet technology applied for efficiency

DESIGN FLEXIBILITY

Easy Design with Convenient Features

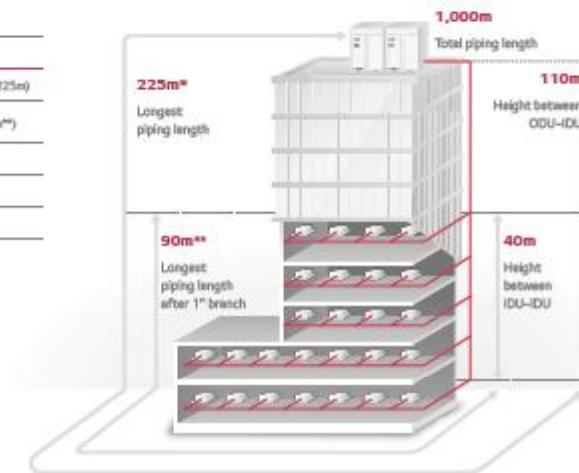
Expanded Piping Capabilities

MULTI V [IV] inverter technology and subcooling control circuit technology allows greater piping length and outstanding elevation differences. A cooling system can be implemented more flexibly in a high-rise building or complex facilities, reducing the designer's work time and providing more efficient design.

Total piping length	1,000m
Actual longest piping length** (Equivalent)	200m** (225m)
Longest piping length after 1 st branch (Conditional application)	40m (90m**)
Height between ODU-IDU	110m
Height between IDU-IDU	40m
Height between ODU-ODU	5m

ODU: Outdoor unit;
IDU: Indoor unit

** Conditional application. See product data book.



Light Weight Outdoor Units

30% lighter weight

- Less pressure on the roof
- Easier installation

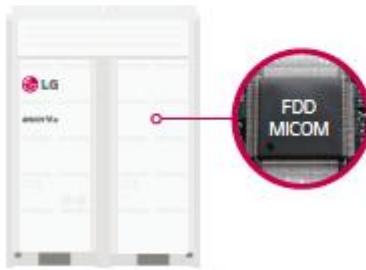


CYCLE & SERVICE OPTIMIZATION

Easy and Reliable, LG Introduces the Self-regulating Heating and Air Conditioning System.

Upgraded FDD (Fault Detection & Diagnosis)

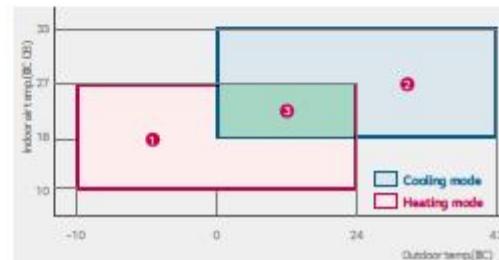
Newly upgraded FDD features provide the optimal solution for user reliability and easy maintenance.



- Start up time is reduced (60min & 45min)
- LGMV (LG Monitoring View) through a smartphone. See opposite.
- Piping & wiring error checking
- Auto start-up mode / reporting
- Black box function
- Simultaneous diagnosis
- Auto refrigerant quantity evaluation and charge
- Heating and cooling refrigerant quantity decision

New Refrigerant Quantity Decision Feature

LG MULTI V IV is the first VRF that has a Heating and Cooling mode start up function which permits whole year start up as well as refrigerant quantity evaluation

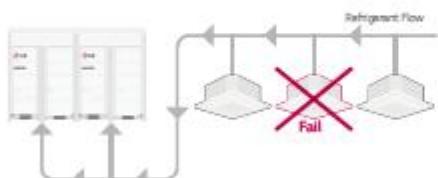


- ① Refrigerant quantity evaluation during heating Operation
- ② Refrigerant quantity evaluation during cooling Operation
- ③ Refrigerant quantity evaluation during cooling and heating Operation

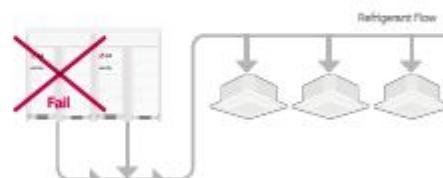
Auto Refrigerant Collection

In case of an indoor or outdoor unit replacement for service, refrigerant from entire system is transferred to the outdoor unit by pumping down and releasing back to the system by pumping out for ease of maintenance and service.

Pump down



Pump out



CYCLE & SERVICE OPTIMIZATION

Easy and Reliable, LG Introduces the Self-regulating Heating and Air Conditioning System.

Smartphone Monitoring & Control

Mobile LGMV (LG Monitoring View)

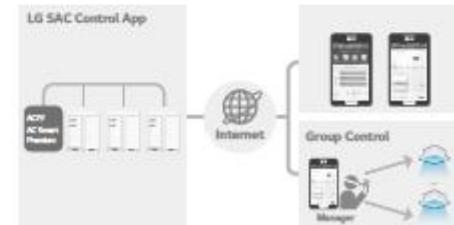
- Mobile LGMV helps technician to monitor and control the MULTI V IV system using Bluetooth connection. Technicians can check LGMV data 10m away from MULTI V IV outdoor with smartphone.



- * Connection type : Bluetooth
To use Mobile LGMV application, exclusive Bluetooth module is required.

LG SAC (System Air-conditioning) Control App.

- Central Controller (ACP (Advanced Control Platform) / AC Smart Premium) provides smartphone monitoring and control function for users. Group control is available via smartphone.



- * Available from Oct 2013
Bluetooth module can be installed on the main board of the outdoor unit.

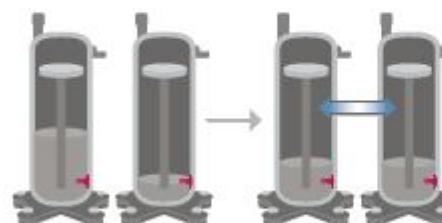
Smartphone specification

Basic specification	Recommended specification	Exception	Effective communication distance of Bluetooth
<ul style="list-style-type: none"> - Android OS 4.0(CS) or higher - CPU 1 GHz - RAM 1 GB 	<ul style="list-style-type: none"> - Android OS 4.0(CS) or higher - CPU 1 GHz Dual Core or higher - RAM 1GB or higher - 1280 x 720, 800 x 480 resolution (Optimized) 	<ul style="list-style-type: none"> - Android OS 3.x (Honeycomb) - iPhone not supported 	<ul style="list-style-type: none"> - Effective distance : 10m (Open Space) - Effective distance can be shortened based on the communication environment.

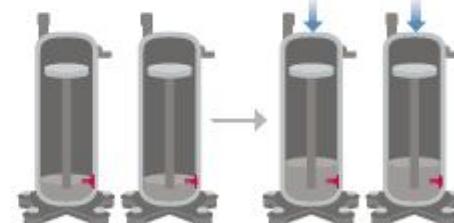
Auto Compressor Oil Management

Compressor reliability is improved with a oil level sensor that allows for oil balancing and oil return real time.

Auto Oil Balancing



Smart Oil Return



HEAT PUMP



Class		8	10	12	
Model		ARUN08LTE4	ARUN100LTE4	ARUN120LTE4	
Cooling Capacity	Cooling Heating	kW kW	22.4 25.2	29.0 31.5	33.6 37.8
Low Temperature Capacity	Heating -7°C	Max kW	25.2	31.5	37.8
Power Input	Cooling Heating	kW kW	4.38 4.58	5.30 5.49	6.85 7.00
Low Temperature Power Input	Heating -7°C	Max kW	6.54	9.13	11.52
COP	Cooling Heating		5.11 5.50	5.20 5.78	4.91 4.85
ESRER			7.90	7.58	7.48
Operation Range	Cooling Heating	Min-Max °C DB Min-Max °C WB	-10°C -43°C -25°C -18°C	-10°C -43°C -25°C -18°C	-10°C -43°C -25°C -18°C
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
Pan	Number of Compressor		1	1	1
	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Type		DC Inverter motor	DC Inverter motor	DC Inverter motor
	Max static pressure		0mmAg(0OPa)	0mmAg(0OPa)	0mmAg(0OPa)
Airflow Rate	Air Flow Rate(High)	Max m³/min l/s	210 3500	210 3500	210 3500
Sound Pressure		Max dBA	59.5	59	59
Sound Power		Max dBA	78.0	79.0	79.0
Dimensions	WxHxD mm		(920 x 1,680 x 760) x 1	(920 x 1,680 x 760) x 1	(920 x 1,680 x 760) x 1
Net Weight	kg		202 x 1	208 x 1	208 x 1
Refrigerant	Size		R410A	R410A	R410A
	Charge	kg	7.5	7.5	7.5
	Control		EEV	EEV	EEV
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Capacity	cc	2,400	2,600	2,600
Power Supply	a/r/Hz		3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50
Transmission Cable (VCTF-SB)	No x mm²		2C x 1.0 - 1.5	2C x 1.0 - 1.5	2C x 1.0 - 1.5
Total	Max m		1,000	1,000	1,000
Piping Length	Actual Longest Piping length *	Max m	200(225)	200(225)	200(225)
	After 1st Y branch **	Max m	40(90)	40(90)	40(90)
Piping Level Difference	IDU-IDU	Max m	110	110	110
	IDU-IDU	Max m	40	40	40
Piping Connection	Liquid	mm(inch)	9.52(3/8)	9.52(3/8)	12.7(1/2)
	Gas	mm(inch)	19.05(3/4)	22.2(7/8)	28.50(1-1/8)
Number of Outdoor Units			1	1	1
Number of Connectable Indoor Units ***	Max		13(20)	16(25)	20(30)
Ratio of the Connectable Indoor Units	Min-Max		50 - 200%	50 - 200%	50 - 200%
Heat exchanger	Type		Wide Louver Plus Fin	Wide Louver Plus Fin	Wide Louver Plus Fin

HEAT PUMP



Class		14	16	18	20	
Model		ARUN140LTE4	ARUN160LTE4	ARUN180LTE4	ARUN200LTE4	
Cooling Capacity	Cooling Heating	kW kW	39.2 44.1	44.8 50.4	50.4 56.7	56.0 63.0
Low Temperature Capacity	Heating -7°C	Max kW	25.2	44.1	50.4	56.7
Power Input	Cooling Heating	kW kW	9.48 9.60	10.42 11.40	9.85 11.25	11.34 13.36
Low Temperature Power Input	Heating -7°C	Max kW	12.83	15.07	16.41	17.53
COP	Cooling Heating		4.62 4.59	4.30 4.42	5.12 5.04	4.85 4.72
ESRER			7.37	7.27	7.17	6.78
Operation Range	Cooling Heating	Min-Max °C DB Min-Max °C WB	-10°C -43°C -25°C -18°C	-10°C -43°C -25°C -18°C	-10°C -43°C -25°C -18°C	-10°C -43°C -25°C -18°C
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
Pan	Number of Compressor		1	1	2	2
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Type		DC Inverter motor	DC Inverter motor	DC Inverter motor	DC Inverter motor
	Max static pressure		0mmAg(0OPa)	0mmAg(0OPa)	0mmAg(0OPa)	0mmAg(0OPa)
Airflow Rate	Air Flow Rate(High)	Max m³/min l/s	290 4833	290 4833	290 4833	290 4833
Sound Pressure		Max dBA	59	59	59.5	59.5
Sound Power		Max dBA	79.0	79.0	79.5	79.5
Dimensions	WxHxD mm		(1,240 x 1,680 x 760) x 1	(1,310 x 1,680 x 760) x 1	(1,380 x 1,680 x 760) x 1	(1,450 x 1,680 x 760) x 1
Net Weight	kg		245 x 1	245 x 1	280 x 1	280 x 1
Refrigerant	Size		R410A	R410A	R410A	R410A
	Charge	kg	10.5	10.5	10.5	10.5
	Control		EEV	EEV	EEV	EEV
Refrigerant Oil	Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Capacity	cc	2,600	3,600	3,600	3,600
Power Supply	a/r/Hz		3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50
Transmission Cable (VCTF-SB)	No x mm²		2C x 1.0 - 1.5			
Total	Max m		1,000	1,000	1,000	1,000
Piping Length	Actual Longest Piping length *	Max m	200(225)	200(225)	205(225)	200(225)
	After 1st Y branch **	Max m	40(90)	40(90)	40(90)	40(90)
Piping Level Difference	IDU-IDU	Max m	110	110	110	110
	IDU-IDU	Max m	40	40	40	40
Piping Connection	Liquid	mm(inch)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)
	Gas	mm(inch)	28.50(1-1/8)	28.50(1-1/8)	28.50(1-1/8)	28.50(1-1/8)
Number of Outdoor Units			1	1	1	1
Number of Connectable Indoor Units ***	Max		23(35)	26(40)	29(45)	32(50)
Ratio of the Connectable Indoor Units	Min-Max		50 - 200%	50 - 200%	50 - 200%	50 - 200%
Heat exchanger	Type		Wide Louver Plus Fin			



HEAT PUMP

Class		22	24
Model	Combination unit	ARUN220LTE4	ARUN240LTE4
	Independent unit	ARUN120LTE4	ARUN120LTE4
		ARUN100LTE4	ARUN120LTE4
Capacity	Cooling	kW	61.6
	Heating	kW	69.3
Low Temperature Capacity	Heating -7°C	Max kW	69.3
			75.6
Power Input	Cooling	kW	12.23
	Heating	kW	13.28
Low Temperature Power Input	Heating -7°C	Max kW	20.65
			23.04
COP	Cooling		5.04
	Heating		4.91
ESEER			5.21
			4.85
			7.51
			7.68
Operation Range	Cooling	Min-Max °C DB	-10°C ~ 43°C
	Heating	Min-Max °C WB	-25°C ~ 18°C
Compressor	Type		Hermetically Sealed Scroll
	Number of Compressor		2
	Type		Propeller fan
Fan	Motor Type	DC Inverter motor	DC Inverter motor
	Max static pressure	BarraAg(0Pa)	BarraAg(0Pa)
Airflow Rate	Air Flow Rate(High)	Max m³/min	210 x 2
		1/2	3500 x 2
Sound Pressure	Max dBA		62
Sound Power	Max dBA		82.0
Dimensions	WxHxD mm		(920 x 1,680 x 760) x 2
Net Weight	kg		208 x 2
Refrigerant	Type	R410A	R410A
	Charge	kg	7.5 x 2
	Control		EEV
Refrigerant Oil	Type	IWC680(PVE)	IWC680(PVE)
	Capacity	cc	5,200
Power Supply	Hz	3 / 380-415 / 50	3 / 380-415 / 50
Transmission Cable (VCTP-SB)	No x mm²	2C x 1.0 - 1.5	2C x 1.0 - 1.5
Piping Length	Total	m	1000
	Actual Longest Piping Length *	m	200(225)
	After 1st Y branch **	m	40(90)
Piping Level Difference	IDU-ODU	m	110
Piping Connection	ODU-IDU	m	40
	Liquid	mm(hz)	15.80(5/8)
	Gas	mm(hz)	28.98(1-1/8)
Number of Outdoor Units			2
Number of Connectable Indoor Units ***	Max		35(64)
Ratio of the Connectable Indoor Units	Min-Max		50 ~ 160%
Heat exchanger	Type		Wide Louver Plus Fin

HEAT PUMP

Class		26	28	30	32
Model	Combination unit	ARUN260LTE4	ARUN280LTE4	ARUN300LTE4	ARUN320LTE4
	Independent unit	ARUN140LTE4	ARUN160LTE4	ARUN180LTE4	ARUN200LTE4
		ARUN120LTE4	ARUN120LTE4	ARUN120LTE4	ARUN120LTE4
Capacity	Cooling	kW	72.8		
	Heating	kW	81.9		
Low Temperature Capacity	Heating -7°C	Max kW	81.9		
			88.2		
Power Input	Cooling	kW	15.33		
	Heating	kW	17.49		
Low Temperature Power Input	Heating -7°C	Max kW	24.35		
			26.59		
COP	Cooling		4.75		
	Heating		4.58		
ESEER			4.71		
			4.59		
			4.96		
			4.76		
			7.43		
Operation Range	Cooling	Min-Max °C DB	-10°C ~ 43°C		
	Heating	Min-Max °C WB	-25°C ~ 18°C		
Compressor	Type		Hermetically Sealed Scroll		
	Number of Compressor		2		
	Type		Propeller fan		
Fan	Motor Type	DC Inverter motor	DC Inverter motor		
	Max static pressure	BarraAg(0Pa)	BarraAg(0Pa)		
Airflow Rate	Air Flow Rate(High)	Max m³/min	290 x 2		
		1/2	4833 + 3500		
Sound Pressure	Max dBA		62		
Sound Power	Max dBA		82.0		
Dimensions	WxHxD mm		(1200 x 180 x 760)x1 + (1200 x 180 x 760)x1		
Net Weight	kg		245 x 1 + 208 x 1		
Refrigerant	Type	R410A	R410A		
	Charge	kg	10.5 ~ 7.5		
	Control		EEV		
Refrigerant Oil	Type	IWC680(PVE)	IWC680(PVE)		
	Capacity	cc	5,200		
Power Supply	Hz	3 / 380-415 / 50	3 / 380-415 / 50		
Transmission Cable (VCTP-SB)	No x mm²	2C x 1.0 - 1.5	2C x 1.0 - 1.5		
Piping Length	Total	m	1000		
	Actual Longest Piping Length *	m	200(225)		
	After 1st Y branch **	m	40(90)		
Piping Level Difference	IDU-ODU	m	110		
Piping Connection	ODU-IDU	m	40		
	Liquid	mm(hz)	19.05(3/8)		
	Gas	mm(hz)	34.9(1-3/8)		
Number of Outdoor Units			2		
Number of Connectable Indoor Units ***	Max		42(52)		
Ratio of the Connectable Indoor Units	Min-Max		50 ~ 160%		
Heat exchanger	Type		Wide Louver Plus Fin		



HEAT PUMP

OUTDOOR UNIT



HEAT PUMP

Class		34	36	38	40	
Model	Combination unit	ARUN340LTE4	ARUN360LTE4	ARUN380LTE4	ARUN400LTE4	
	Independent unit	ARUN200LTE4	ARUN200LTE4	ARUN180LTE4	ARUN200LTE4	
		ARUN140LTE4	ARUN160LTE4	ARUN200LTE4	ARUN200LTE4	
Capacity	Cooling	kW	95.2	100.0	106.4	112
	Heating	kW	107.1	113.6	119.7	126
Low Temperature Capacity	Heating -7°C	Max kW	107.1	113.4	119.7	126
Power Input	Cooling	kW	20.02	21.96	21.39	23.08
	Heating	kW	22.96	26.76	24.61	28.72
Low Temperature Power Input	Heating -7°C	Max kW	30.36	32.60	33.94	35.06
COP	Cooling		4.76	4.59	4.97	4.85
	Heating		4.66	4.58	4.86	4.72
ESEER			7.00	7.03	6.98	6.78
Operation Range	Cooling	Min-Max °C DB	-10°C ~ 43°C	-10°C ~ 43°C	-10°C ~ 43°C	-10°C ~ 43°C
	Heating	Min-Max °C WB	-25°C ~ 18°C	-25°C ~ 18°C	-25°C ~ 18°C	-25°C ~ 18°C
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Number of Compressor		3	3	4	4
Fan	Type	Propeller fan	Propeller fan	Propeller fan	Propeller fan	
	Motor Type	DC Inverter motor	DC Inverter motor	DC Inverter motor	DC Inverter motor	
	Max static pressure	(mmHg)(0.0Pa)	0mmHg(0.0Pa)	0mmHg(0.0Pa)	0mmHg(0.0Pa)	0mmHg(0.0Pa)
Airflow Rate	Air Flow Rate(l/h)	Max m³/min	280 ± 2	290 ± 2	290 ± 2	290 ± 2
		1/2	4833 ± 2	4833 ± 2	4833 ± 2	4833 ± 2
Sound Pressure	Max dBA	62.3	62.3	62.5	62.5	
Sound Power	Max dBA	82.3	82.3	82.5	82.5	
Dimensions	WxHxD mm	(1,340±1,880±760)±2	(1,340±1,880±760)±2	(1,340±1,880±760)±2	(1,340±1,880±760)±2	
Net Weight	kg	280 ± 1 ± 24.5 ± 1	280 ± 1 ± 24.5 ± 1	280 ± 2	280 ± 2	
Refrigerant	Type	R410A	R410A	R410A	R410A	
	Charge	kg	10.5 ± 2	10.5 ± 2	10.5 ± 2	10.5 ± 2
	Control	EEV	EEV	EEV	EEV	
Refrigerant Oil	Type	FVC600(PVE)	FVC600(PVE)	FVC600(PVE)	FVC600(PVE)	
	Capacity	cc	6,200	6,200	6,200	6,200
Power Supply	a·V/Hz	3 / 380~415 / 50	3 / 380~415 / 50	3 / 380~415 / 50	3 / 380~415 / 50	
Transmission Cable (VCTP-SB)	No.xmm²	2C x 1.0 ~ 1.5				
Total	Max m	1000	1000	1000	1000	
Piping Length	Actual Longest Piping Length*	Max m	200(225)	200(225)	200(225)	200(225)
	After 1st Y branch**	Max m	40(90)	40(90)	40(90)	40(90)
Piping Level Difference	IDU-IDU	Max m	110	110	110	110
	IDU-IDU	Max m	40	40	40	40
Piping Connection	Liquid	mm(nch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas	mm(nch)	34.9(1-3/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
Number of Outdoor Units			2	2	2	2
Number of Connectable Indoor Units***	Max	55(64)	58(64)	61(64)	64	
Ratio of the Connectable Indoor Units	Min-Max	50 ~ 160%	50 ~ 160%	50 ~ 160%	50 ~ 160%	
Heat exchanger	Type	Wide Louver Plus Fin				



HEAT PUMP

Class		42	44	46	
Model	Combination unit	ARUN420LTE4	ARUN440LTE4	ARUN460LTE4	
	Independent unit	ARUN180LTE4	ARUN200LTE4	ARUN200LTE4	
		ARUN140LTE4	ARUN140LTE4	ARUN160LTE4	
Capacity	Cooling	kW	117.6	123.2	128.8
	Heating	kW	122.3	128.6	144.9
Low Temperature Capacity	Heating -7°C	Max kW	132.3	138.6	144.9
Power Input	Cooling	kW	23.71	25.60	27.34
	Heating	kW	26.34	28.45	30.25
Low Temperature Power Input	Heating -7°C	Max kW	30.37	39.49	41.73
COP	Cooling		4.98	4.85	4.71
	Heating		5.02	4.87	4.79
ESEER			7.36	7.23	7.20
Operation Range	Cooling	Min-Max °C DB	-10°C ~ 43°C	-10°C ~ 43°C	-10°C ~ 43°C
	Heating	Min-Max °C WB	-25°C ~ 18°C	-25°C ~ 18°C	-25°C ~ 18°C
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	
	Number of Compressor		4	4	4
Fan	Type	Propeller fan	Propeller fan	Propeller fan	
	Motor Type	DC Inverter motor	DC Inverter motor	DC Inverter motor	
	Max static pressure	(mmHg)(0.0Pa)	0mmHg(0.0Pa)	0mmHg(0.0Pa)	0mmHg(0.0Pa)
Airflow Rate	Air Flow Rate(l/h)	Max m³/min	280 ± 2 ± 210	290 ± 2 ± 210	290 ± 2 ± 210
		1/2	4888 ± 2 ± 3500	4888 ± 2 ± 3500	4888 ± 2 ± 3500
Sound Pressure	Max dBA	63.9	63.9	63.9	
Sound Power	Max dBA	83.9	83.9	83.9	
Dimensions	WxHxD mm	(1,240±1,880±760)±2 + (920±1,880±760)±2	(1,240±1,880±760)±2 + (920±1,880±760)±2	(1,240±1,880±760)±2 + (920±1,880±760)±2	
Net Weight	kg	280 ± 1 ± 285 ± 1 ± 208 ± 1	280 ± 1 ± 285 ± 1 ± 208 ± 1	280 ± 1 ± 285 ± 1 ± 208 ± 1	
Refrigerant	Type	R410A	R410A	R410A	
	Charge	kg	(10.5 ± 2) ± 7.5	(10.5 ± 2) ± 7.5	(10.5 ± 2) ± 7.5
	Control	EEV	EEV	EEV	
Refrigerant Oil	Type	FVC600(PVE)	FVC600(PVE)	FVC600(PVE)	
	Capacity	cc	8,000	8,000	8,000
Power Supply	a·V/Hz	3 / 380~415 / 50	3 / 380~415 / 50	3 / 380~415 / 50	
Transmission Cable (VCTP-SB)	No.xmm²	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	
Total	Max m	1000	1000	1000	
Piping Length	Actual Longest Piping Length*	Max m	200(225)	200(225)	200(225)
	After 1st Y branch**	Max m	40(90)	40(90)	40(90)
Piping Level Difference	IDU-IDU	Max m	110	110	110
	IDU-IDU	Max m	40	40	40
Piping Connection	Liquid	mm(nch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas	mm(nch)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
Number of Outdoor Units			3	3	3
Number of Connectable Indoor Units***	Max	64	64	64	
Ratio of the Connectable Indoor Units	Min-Max	50 ~ 130%	50 ~ 130%	50 ~ 130%	
Heat exchanger	Type	Wide Louver Plus Fin	Wide Louver Plus Fin	Wide Louver Plus Fin	



HEAT PUMP

Class		48	50	52	
Model	Combination unit:	ARUN4BOLTE4	ARUN500LTE4	ARUN520LTE4	
	Independent unit:	ARUN200LTE4	ARUN200LTE4	ARUN200LTE4	
		ARUN180LTE4	ARUN200LTE4	ARUN200LTE4	
		ARUN160LTE4	ARUN160LTE4	ARUN160LTE4	
Capacity	Cooling	kW	136.4	140.0	145.6
	Heating	kW	151.2	157.5	163.8
Low Temperature Capacity	Heating -7°C	Max kW	151.2	157.5	163.8
Power Input	Cooling	kW	26.77	28.46	29.93
	Heating	kW	30.10	32.31	34.52
Low Temperature Power Input	Heating -7°C	Max kW	43.07	44.19	46.58
COP	Cooling		5.02	4.92	4.06
	Heating		5.03	4.89	4.75
ESEER			7.16	7.03	7.01
Operation Range	Cooling	Min-Max °C DB	-10°C - 43°C	-10°C - 43°C	-10°C - 43°C
	Heating	Min-Max °C WB	-25°C - 18°C	-25°C - 18°C	-25°C - 18°C
Compressor	Type		Hermaphrodite Sealed Scroll	Hermaphrodite Sealed Scroll	Hermaphrodite Sealed Scroll
	Number of Compressor		5	5	5
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Type		DC Inverter motor	DC Inverter motor	DC Inverter motor
	Max static pressure		0mmAq(10Pa)	0mmAq(10Pa)	0mmAq(10Pa)
Airflow Rate	Air Flow Rate(High)	Max m³/min	280 x 2 + 210	290 x 2 + 210	280 x 2 + 210
		l/s	4880 x 2 + 3500	4888 x 2 + 3500	4880 x 2 + 3500
Sound Pressure	Max dBA		64.1	64.1	64.1
Sound Power	Max dBA		84.1	84.1	84.1
Dimensions	WidthxD	mm	[1340x1,680x760)x2 + (100x1,680x760)x1]	[1340x1,680x760)x2 + (930x1,680x760)x1]	[1340x1,680x760)x2 + (930x1,680x760)x1]
Net Weight	kg		280 x 2 + 208 x 1	280 x 2 + 208 x 1	280 x 2 + 208 x 1
Refrigerant	Type		R410A	R410A	R410A
	Charge	kg	(10.5 x 2) + 7.5	(10.5 x 2) + 7.5	(10.5 x 2) + 7.5
	Control		EEV	EEV	EEV
Refrigerant Oil	Type		FVC680(PVE)	FVC680(PVE)	FVC680(PVE)
	Capacity	cc	9,800	9,800	9,800
Power Supply	a/V/Hz		3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50
Transmission Cable (VCTF-SB)	No x mm²		2C x 1.0 - 1.5	2C x 1.0 - 1.5	2C x 1.0 - 1.5
Piping Length	Total	m	1000	1000	1000
	Actual Longest Piping Length ^{**}	m	200(225)	200(225)	200(225)
	After 1st Y branch ^{**}	m	40(90)	40(90)	40(90)
Piping Level Difference	IDU-IDU	m	110	110	110
	IDU-DU	m	40	40	40
Piping Connection	Liquid	mm(nch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas	mm(nch)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
Number of Outdoor Units			3	3	3
Number of Connectable Indoor Units***	Max		64	64	64
Ratio of the Connectable Indoor Units	Min-Max		50 - 130%	50 - 130%	50 - 130%
Heat exchanger	Type		Wide Laser Plus Fin	Wide Laser Plus Fin	Wide Laser Plus Fin

HEAT PUMP

Class		54	56	58	60	
Model	Combination unit:	ARUN540LTE4	ARUN560LTE4	ARUN580LTE4	ARUN600LTE4	
	Independent unit:	ARUN200LTE4	ARUN200LTE4	ARUN200LTE4	ARUN200LTE4	
		ARUN180LTE4	ARUN200LTE4	ARUN200LTE4	ARUN200LTE4	
		ARUN160LTE4	ARUN160LTE4	ARUN160LTE4	ARUN160LTE4	
Capacity	Cooling	kW	151.2	156.8	162.4	168.0
	Heating	kW	170.1	176.4	182.7	189.0
Low Temperature Capacity	Heating -7°C	Max kW	170.1	176.4	182.7	189.0
Power Input	Cooling	kW	31.56	33.92	32.93	34.62
	Heating	kW	36.32	38.12	37.97	40.08
Low Temperature Power Input	Heating -7°C	Max kW	47.89	50.13	51.47	52.59
COP	Cooling		4.79	4.60	4.93	4.85
	Heating		4.68	4.63	4.81	4.72
ESEER			6.98	6.94	6.91	6.78
Operation Range	Cooling	Min-Max °C DB	-10°C - 43°C	-10°C - 43°C	-10°C - 43°C	-10°C - 43°C
	Heating	Min-Max °C WB	-25°C - 18°C	-25°C - 18°C	-25°C - 18°C	-25°C - 18°C
Compressor	Type		Hermaphrodite Sealed Scroll	Hermaphrodite Sealed Scroll	Hermaphrodite Sealed Scroll	Hermaphrodite Sealed Scroll
	Number of Compressor		5	5	5	5
Fan	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Type		DC Inverter motor	DC Inverter motor	DC Inverter motor	DC Inverter motor
	Max static pressure		0mmAq(10Pa)	0mmAq(10Pa)	0mmAq(10Pa)	0mmAq(10Pa)
Airflow Rate	Air Flow Rate(High)	Max m³/min	290 x 3	290 x 3	290 x 3	290 x 3
		l/s	4833 x 3	4833 x 3	4833 x 3	4833 x 3
Sound Pressure	Max dBA		64.1	64.1	64.3	64.3
Sound Power	Max dBA		84.1	84.1	84.3	84.3
Dimensions	WidthxD	mm	[1340x1,680x760)x3	[1340x1,680x760)x3	[1340x1,680x760)x3	[1340x1,680x760)x3
Net Weight	kg		280 x 2 + 245 x 1	280 x 2 + 245 x 1	280 x 3	280 x 3
Refrigerant	Type		R410A	R410A	R410A	R410A
	Charge	kg	(10.5 x 2) + 7.5			
	Control		EEV	EEV	EEV	EEV
Refrigerant Oil	Type		FVC680(PVE)	FVC680(PVE)	FVC680(PVE)	FVC680(PVE)
	Capacity	cc	9,800	9,800	10,800	10,800
Power Supply	a/V/Hz		3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50
Transmission Cable (VCTF-SB)	No x mm²		2C x 1.0 - 1.5			
Piping Length	Total	m	1080	1080	1000	1000
	Actual Longest Piping Length ^{**}	m	200(225)	200(225)	200(225)	200(225)
	After 1st Y branch ^{**}	m	40(90)	40(90)	40(90)	40(90)
Piping Level Difference	IDU-IDU	m	110	110	110	110
	IDU-DU	m	40	40	40	40
Piping Connection	Liquid	mm(nch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas	mm(nch)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
Number of Outdoor Units			3	3	3	3
Number of Connectable Indoor Units***	Max		64	64	64	64
Ratio of the Connectable Indoor Units	Min-Max		50 - 130%	50 - 130%	50 - 130%	50 - 130%
Heat exchanger	Type		Wide Laser Plus Fin			



OUTDOOR UNIT

HEAT PUMP

HIGH EFFICIENCY

World's First Class, Rated and Part Load Efficiency

- * (): equivalent length
- ** Conditional Application
- To make 40-90m of pipe length after first branch refer to the part of "Installation of outdoor units" in PDS
- *** (): the number of max. connectable outdoor units, for max indoor unit combination ratio (refer to the table below)

Note:

1. Capacities are based on the following conditions

Cooling - Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB
Outdoor temp. 10°C(50°F)DB / 10°C(50°F)WB
Interconnecting piping length: 7.5m
Level difference of zero

Heating - Indoor temp. 20°C(68°F)DB / 19°C(66°F)WB
Outdoor temp. 7°C(45°F)DB / 6°C(42.8°F)WB
Interconnecting piping length: 7.5m
Level difference of zero

2. Capacities are not capacities

3. Due to our policy of innovation some specifications may be changed without notification

4. EEV: Electronic Expansion Valve

5. SEER calculation corresponds with below conditions and power input of indoor units is not included.

- Indoor temperature: 27°C(80.6°F)DB / 19°C(66.2°F)WB

- Outdoor temperature conditions

Part load ratio	Outdoor Air Temp(C)(°F)	Weighing Coefficients
100%	20(68)	0.03
75%	20(68)	0.33
50%	25(77)	0.41
25%	25(77)	0.23

Formula: $0.03 \times \text{SEER}_{\text{max}} + 0.33 \times \text{SEER}_{\text{max}} + 0.41 \times \text{SEER}_{\text{max}} + 0.23 \times \text{SEER}_{\text{max}}$

CAUTION

- A combination operation over 100% causes to reduce each indoor unit capacity

- Combination ratio(50-200%)

No. of outdoor unit	Connector Capacity
Single unit	200W
Double unit	160W
Triple unit	120W

We can guarantee the capacity of the system only within 100% Combination. In combination greater than 100% connection ratio system capacity will be decreased.

If you want to connect more than 100% combination, please contact us and discuss the requirement like below.

1) If the operational capacity of indoor units exceed 120%, then all the indoor units operate under low air flow step mode.

2) Over 130% capacity is same as capacity of 130%. Same remark is valid for power input.

Synchronized Heating and Cooling

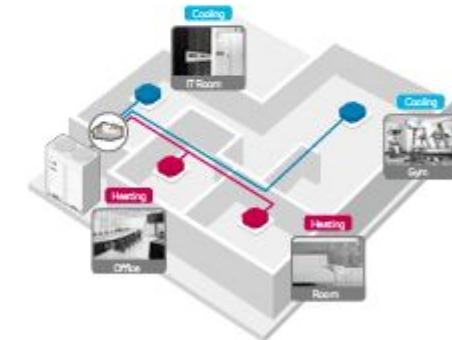
It's possible to reach COP up to 8.2 (Under condition to 40% of cooling and 60% of heating) in ideal conditions.

- Energy consumption can be decreased by 30%



* Outdoor temperature: 27°C DB / 9°C WB

** Indoor temperature: 20°C DB / 15°C WB



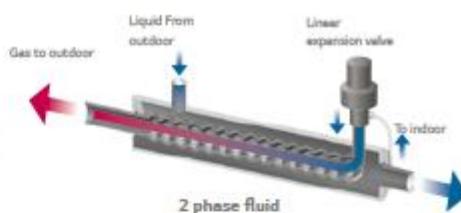
High Efficiency Heat Recovery Unit

- High efficient double spiral tube type SCI circuit

- Maximum 8 indoor units connectable per a branch
- Easy installation with auto piping detect function
- Access allowed to internal parts for Service.
- Up to 16 kW



Double spiral tube heat exchanger

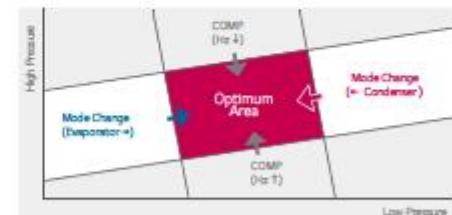


Advanced Mode Change (AMC)

AMC control provides an optimal cycle operation under any conditions.

Through this mode, system cycles can be more stable and maintain comfort for the user.

- Real time pressure control
- Optimal cycle in optimum area
- Minimise setting time after switching mode : MAX 5 min.



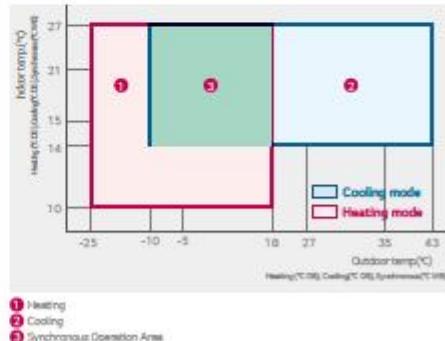
OUTSTANDING PERFORMANCE

Leading Edge of Innovation that includes Powerful Heating and Cooling Performance

Wide Operation Range

Low temperature operation range is expanded through condenser with various control.

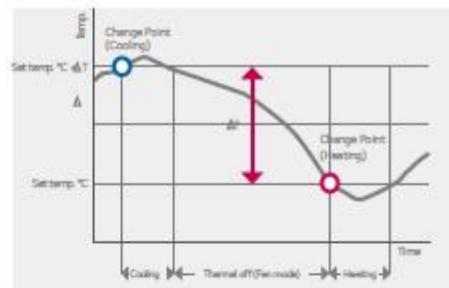
- Heating mode : -25°C WB ~ -18°C WB
- Cooling mode : -10°C DB ~ 43°C DB
- Synchronous mode : -10°C WB ~ 16°C WB



Auto Changeover

Auto Changeover function operates cooling and heating to maintain optimal room temperature and increase energy savings.

Note: This function can only be made with the use of the AC Smart Premium controller PQCSW421E&A.



Continuous Heating Operation

Improved continuous heating operation for Double, Triple and 4 outdoor unit system, defrost is performed by alternate outdoor units.

- Integrated heating capacity : 17% up

Heating mode oil return

- Continuous heating and oil return during heating mode

Conventional



MULTI V IV Heat Recovery



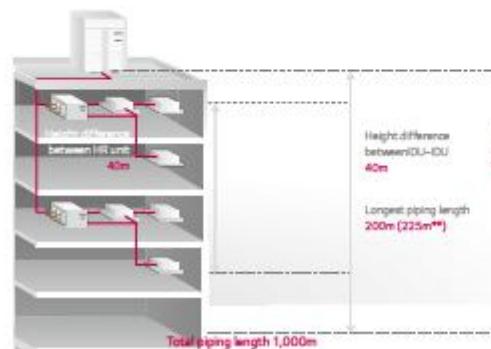
* Existing model can be operated automatically depending on the condition of application.

DESIGN FLEXIBILITY

Easy Design with Convenient Features

Long Piping Length

As MULTI V [IV] uses inverter control technology and sub-cooling control circuit technology, it is possible to design a system with longer piping lengths and world-class elevation difference.



Total piping length	1,000m
Actual longest piping length** (Equivalent)	300m(225m ²)
Longest piping length after 1st branch (Conditional application)	40m (90m**)
Height difference between ODU-IDU	110m
Height difference between IDU-IDU	40m
Height difference between ODU-ODU	5m
Height difference between IDU-HR unit	15m
Height difference between HR unit	40m

* Equivalent

** Conditional application

*** For outdoor unit above or below indoor units.

Convenient Free Zoning

MULTI V [IV] Heat recovery provides flexible control over individual zones for the user's convenience.

Individual Control

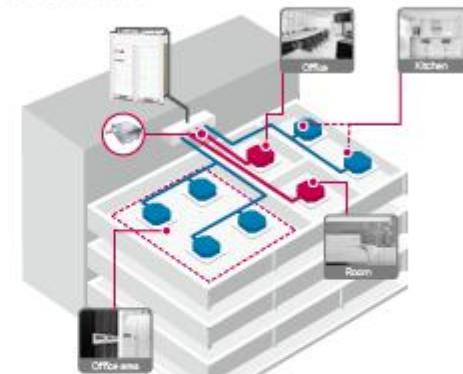
- Individual control over the spaces where ventilation is needed

Zone Control

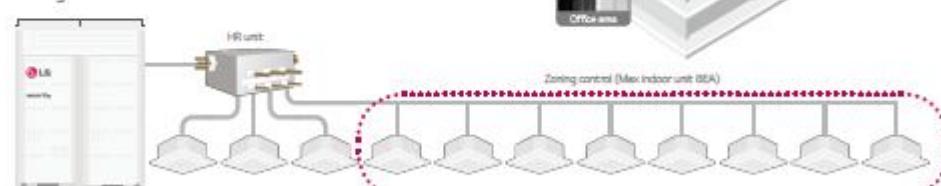
- Max. of 8 indoor units can be connected on one branch
- Max. of 32 indoor units can be connected to one HR unit
- Same operational model can be operated by indoor units with zone control function installed

Combination of Individual and Zoning Installations

- Flexible piping design
- Saves on product and installation Costs



Zoning control



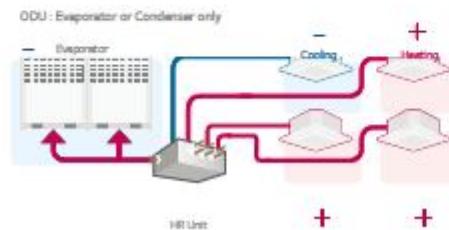


Simultaneous Operations of Outdoor Units

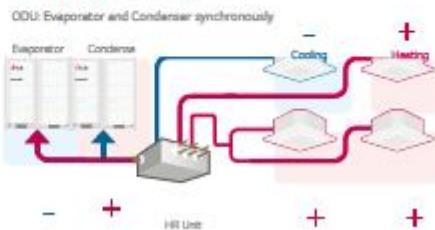
The outdoor units' heat exchanger can be operated for cooling and heating simultaneously.

- Linear loading response
- Increased efficiency with simultaneous operation
- Minimised switch mode (continuous cooling and heating)

Conventional



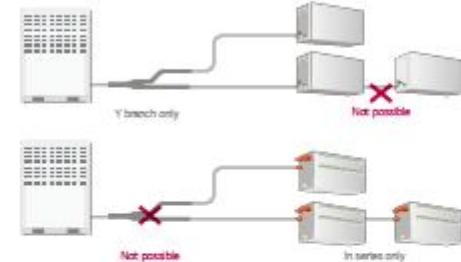
MULTI V IV Heat Recovery



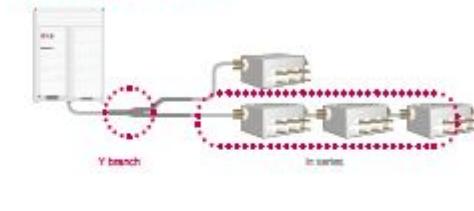
Flexible Connection of HR Unit

MULTI V [IV] heat recovery system allows flexible connection both in series and in a row.

Conventional



MULTI V IV Heat Recovery



HEAT RECOVERY

Class	B		I.O	I.2
Model		ARUB080LTE4	ARUB100LTE4	ARUB120LTE4
Capacity	Cooling kW	22.4	28.0	33.8
	Heating kW	25.2	31.5	37.8
Low Temperature Capacity	Heating -7°C Max kW	25.2	31.5	37.8
	Cooling kW	4.38	5.38	6.85
Power Input	Heating kW	4.58	5.49	7.80
	Heating -7°C Max kW	6.54	9.13	11.52
CDP	Cooling	5.11	5.20	4.91
	Heating	5.50	5.74	4.85
Operation Range	Cooling Min-Max °C DB	-10°C ~ 43°C	-10°C ~ 43°C	-10°C ~ 43°C
	Heating Min-Max °C WB	-25°C ~ 18°C	-25°C ~ 18°C	-25°C ~ 18°C
Compressor	Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Number of Compressor	1	1	1
Fan	Type	Propeller fan	Propeller fan	Propeller fan
	Motor Type	DC Inverter motor	DC Inverter motor	DC Inverter motor
	Max static pressure	8mmAg(80Pa)	8mmAg(80Pa)	8mmAg(80Pa)
Airflow Rate	Air Flow Rate(High) m³/min	210	210	210
	Vt	3500	3500	3500
Sound Pressure	Max dB(A)	58.5	59.0	59.0
Sound Power	Max dB(A)	78.0	79.0	79.0
Dimensions	WxHxD mm	(920 x 1,680 x 760) x 1	(920 x 1,680 x 760) x 1	(920 x 1,680 x 760) x 1
Net Weight	kg	202 x 1	208 x 1	208 x 1
Refrigerant	Type	R410A	R410A	R410A
	Charge kg	7.5	7.5	7.5
	Control	EEV	EEV	EEV
Refrigerant Oil	Type	PVC80D(PVE)	PVC80D(PVE)	PVC80D(PVE)
	Capacity cc	2,400	2,600	2,600
Power Supply	a/Whz	3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50
Transmission Cable (MCTF-SB)	N/mm²	2C x 1.0 - 1.5	2C x 1.0 - 1.5	2C x 1.0 - 1.5
	Total m	1,000	1,000	1,000
Piping Length	Actual Longest Piping Length * m	200(225)	200(225)	200(225)
	After 1st Y branch ** m	40(90)	40(90)	40(90)
Piping Level Difference	IDU-IDU m	110	110	110
	IDU-IDU m	40	40	40
Piping Connection	Liquid mm(inch)	9.52(3/8)	9.52(3/8)	12.7(1/2)
	Low Pressure Gas mm(inch)	19.05(3/4)	22.2(7/8)	28.58(1-1/8)
	High Pressure Gas mm(inch)	15.08(5/8)	19.05(3/4)	19.05(3/4)
Number of Outdoor Units	5	1	1	1
Number of Connectable Indoor Units ***	Max	13(20)	16(25)	20(30)
Ratio of the Connectable Indoor Units	Min-Max	50 ~ 200%	50 ~ 200%	50 ~ 200%
Heat exchanger	Type	Wide Louver Plus Fin	Wide Louver Plus Fin	Wide Louver Plus Fin

HEAT RECOVERY



Class	14	16	18	20
Model	ARUB140LTE4	ARUB160LTE4	ARUB180LTE4	ARUB200LTE4
Cooling Capacity	39.2 kW	44.8 kW	50.4 kW	56.0 kW
Heating Capacity	44.1 kW	50.4 kW	56.7 kW	63.0 kW
Low Temperature Capacity Heating -7°C	Max. kW 44.1	50.4	56.7	63.0
Power Input Cooling	0.49	10.42	9.85	11.54
Heating	9.60	11.40	11.25	13.26
Low Temperature Power Input Heating -7°C	Max. kW 12.83	15.07	16.41	17.53
COP Cooling	4.62	4.30	5.12	4.85
Heating	4.59	4.42	5.04	4.72
Operation Range Cooling	Min-Max °C DB -10°C -43°C	-10°C -43°C	-10°C -43°C	-10°C -43°C
Heating	Min-Max °C WB -25°C -10°C	-25°C -10°C	-25°C -10°C	-25°C -10°C
Compressor Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
Number of Compressor	1	1	2	2
Fan Type	Propeller fan	Propeller fan	Propeller fan	Propeller fan
Motor Type	DC Inverter motor	DC Inverter motor	DC Inverter motor	DC Inverter motor
Max static pressure @mmAg(00Pa)	290	290	290	290
Airflow Rate Air Flow Rate(l/h)	Max. m³/min 4833	4833	4833	4833
Sound Pressure Max. dBA	59.0	59.0	59.5	59.5
Sound Power Max. dBA	79.0	79.0	79.5	79.5
Dimensions WxHxD mm	(1,260 x 1,680 x 760) x 1			
Net Weight kg	245 x 1	245 x 1	280 x 1	280 x 1
Refrigerant Type	R410A	R410A	R410A	R410A
Charge kg	10.5	10.5	10.5	10.5
Control EEB	EEB	EEB	EEB	EEB
Refrigerant Oil Type	FVC600D(PVE)	FVC600D(PVE)	FVC600D(PVE)	FVC600D(PVE)
Power Supply Capacity	cc 2,600	2,600	3,600	3,600
Transmission Cable (VCTF-SB)	a/V/Hz 3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50
Total	1,000	1,000	1,000	1,000
Piping Length Actual Longest Piping Length *	m 200(225)	200(225)	200(225)	200(225)
After 1st Y branch **	m 40(90)	40(90)	40(90)	40(90)
Piping Level Difference IDU-IDU	m 110	110	110	110
IDU-IDU	m 40	40	40	40
Usual mm(inch)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)
Piping Connection Low Pressure Gas mm(inch)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)
High Pressure Gas mm(inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)	22.2(7/8)
Number of Outdoor Units	1	1	1	1
Number of Connectable Indoor Units ***	Max. 23(35)	26(40)	29(45)	32(50)
Ratio of the Connectable Indoor Units Min-Max	50 - 200%	50 - 200%	50 - 200%	50 - 200%
Heat exchanger Type	Wide Louver Plus Fin			

HEAT RECOVERY



Class	22	24	
Model	Combination unit	ARUB220LTE4	ARUB240LTE4
Independent unit	ARUB100LTE4	ARUB120LTE4	ARUB120LTE4
Capacity Cooling	kW 61.6	67.2	
Heating	kW 69.3	75.6	
Low Temperature Capacity Heating -7°C	Max. kW 69.3	75.6	
Power Input Cooling	kW 12.23	13.70	
Heating	kW 13.29	15.60	
Low Temperature Power Input Heating -7°C	Max. kW 20.65	23.04	
COP Cooling	5.06	4.91	
Heating	5.21	4.85	
Operation Range Cooling	Min-Max °C DB -10°C -43°C	-10°C -43°C	
Heating	Min-Max °C WB -25°C -10°C	-25°C -10°C	
Compressor Type	Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
Number of Compressor	2	2	2
Fan Propeller fan	Propeller fan	Propeller fan	Propeller fan
Motor Type DC Inverter motor	DC Inverter motor	DC Inverter motor	DC Inverter motor
Max static pressure @mmAg(00Pa)	210 x 2	210 x 2	210 x 2
Airflow Rate Air Flow Rate(l/h)	Max. m³/min 3500 x 2	3500 x 2	3500 x 2
Sound Pressure Max. dBA	62.0	62.0	62.0
Sound Power Max. dBA	82.0	82.0	82.0
Dimensions WxHxD mm	(920 x 1,680 x 760) x 2	(920 x 1,680 x 760) x 2	(920 x 1,680 x 760) x 2
Net Weight kg	208 x 2	208 x 2	208 x 2
Refrigerant Charge kg	R410A	R410A	R410A
Control EEB	EEB	EEB	EEB
Refrigerant Oil Type FVC600D(PVE)	FVC600D(PVE)	FVC600D(PVE)	FVC600D(PVE)
Power Supply Capacity cc 5,200	a/V/Hz 3 / 380-415 / 50	a/V/Hz 5,200	a/V/Hz 5,200
Transmission Cable (VCTF-SB) m²/mm² 2C x 1.0 - 1.5	2C x 1.0 - 1.5	2C x 1.0 - 1.5	2C x 1.0 - 1.5
Piping Length Actual Longest Piping Length *	m 200(225)	200(225)	200(225)
After 1st Y branch **	m 40(90)	40(90)	40(90)
Piping Level Difference IDU-IDU	m 110	110	110
IDU-IDU	m 40	40	40
Usual mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)
Piping Connection Low Pressure Gas mm(inch)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)
High Pressure Gas mm(inch)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)
Number of Outdoor Units	2	2	2
Number of Connectable Indoor Units ***	Max. 23(44)	30(48)	30(48)
Ratio of the Connectable Indoor Units Min-Max	50 - 160%	50 - 160%	50 - 160%
Heat exchanger Type	Wide Louver Plus Fin	Wide Louver Plus Fin	Wide Louver Plus Fin



HEAT RECOVERY

Class		26	28	30	32	
Model	Combination unit:	ARUB260LTE4	ARUB280LTE4	ARUB300LTE4	ARUB320LTE4	
	Independent unit:	ARUB120LTE4	ARUB120LTE4	ARUB120LTE4	ARUB120LTE4	
		ARUB160LTE4	ARUB160LTE4	ARUB160LTE4	ARUB160LTE4	
Capacity	Cooling	kW	72.0	78.4	84.0	89.6
	Heating	kW	81.9	88.2	94.5	100.8
Low Temperature Capacity	Heating -7°C	Max kW	81.9	88.2	94.5	100.8
Power Input	Cooling	kW	15.33	17.27	16.70	18.39
	Heating	kW	17.40	19.20	19.05	21.16
Low Temperature Power Input	Heating -7°C	Max kW	24.25	26.59	27.93	29.05
COP	Cooling		4.75	4.54	5.03	4.87
	Heating		4.71	4.59	4.96	4.76
ESER			-10°C - 43°C	-10°C - 43°C	-10°C - 43°C	-10°C - 43°C
Operation Range	Cooling	Min-Max °C DB	-29°C - 16°C	-29°C - 16°C	-29°C - 16°C	-29°C - 16°C
	Heating	Min-Max °C WB	Hermodynamically Sealed Scroll	Hermodynamically Sealed Scroll	Hermodynamically Sealed Scroll	Hermodynamically Sealed Scroll
Compressor	Type		2	2	3	3
	Number of Compressor		Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Type		DC Inverter motor	DC Inverter motor	DC Inverter motor	DC Inverter motor
Fan	Motor Type		(8mmAg(90Pa))	(8mmAg(90Pa))	(8mmAg(90Pa))	(8mmAg(90Pa))
	Max static pressure		290 ± 210	290 ± 210	290 ± 210	290 ± 210
Airflow Rate	Air Flow Rate(l/h)	Max m³/min	290 ± 210	290 ± 210	290 ± 210	290 ± 210
		Vc	4833 ± 3500	4833 ± 3500	4833 ± 3500	4833 ± 3500
Sound Pressure		Max dBA	73.0	73.0	73.3	73.3
Sound Power		Max dBA	82.0	82.0	82.3	82.3
Dimensions	WxHxD mm		(1,210×1,600×760)±1+(1,210×1,600×760)±1+(1,210×1,600×760)±1+(1,210×1,600×760)±1+(1,210×1,600×760)±1+(1,210×1,600×760)±1+(1,210×1,600×760)±1+(1,210×1,600×760)±1			
Net Weight	kg	R410A	R410A	R410A	R410A	
	Type		10.5 ± 7.5	10.5 ± 7.5	10.5 ± 7.5	10.5 ± 7.5
Refrigerant	Charge	kg	EEV	EEV	EEV	EEV
	Control		FVC680(PVE)	FVC680(PVE)	FVC680(PVE)	FVC680(PVE)
Refrigerant Oil	Type		5.200	5.200	6.200	6.200
	Capacity	cc	3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50
Power Supply	Hz/kHz		2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5	2C × 1.0 - 1.5
Transmission Cable (VCTP-SB)	No x mm²		1,000	1,000	1,000	1,000
Piping Length	Total	m	200(225)	200(225)	200(225)	200(225)
	Actual Longest Piping length*	m	40(90)	40(90)	40(90)	40(90)
	After 1st Y branch **	m	110	110	110	110
Piping Level Difference	IDU-IDU	m	40	40	40	40
	IDU-IDU	m	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Piping Connection	Liquid	mm(nch)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)
	Gas	mm(nch)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)
Number of Outdoor Units			2	2	2	2
Number of Connectable Indoor Units***	Max		43(52)	45(56)	49(60)	52(64)
Ratio of the Connectable Indoor Units	Min-Max		50 - 160%	50 - 160%	50 - 160%	50 - 160%
Heat exchanger	Type		Wide Lower Plus Fin	Wide Lower Plus Fin	Wide Lower Plus Fin	Wide Lower Plus Fin

HEAT RECOVERY

Class		34	36	38	40	
Model	Combination unit:	ARUB340LTE4	ARUB360LTE4	ARUB380LTE4	ARUB400LTE4	
	Independent unit:	ARUB140LTE4	ARUB160LTE4	ARUB180LTE4	ARUB200LTE4	
		ARUB200LTE4	ARUB200LTE4	ARUB200LTE4	ARUB200LTE4	
Capacity	Cooling	kW	95.2	100.8	112	112
	Heating	kW	107.1	113.4	126	126
Low Temperature Capacity	Heating -7°C	Max kW	107.1	113.4	126	126
Power Input	Cooling	kW	20.02	21.96	23.08	23.08
	Heating	kW	22.96	24.76	26.72	26.72
Low Temperature Power Input	Heating -7°C	Max kW	30.36	32.40	35.06	35.06
COP	Cooling		4.76	4.59	4.85	4.85
	Heating		4.66	4.58	4.72	4.72
Operation Range	Cooling	Min-Max °C DB	-10°C - 43°C	-10°C - 43°C	-10°C - 43°C	-10°C - 43°C
	Heating	Min-Max °C WB	-25°C - 16°C	-25°C - 16°C	-25°C - 16°C	-25°C - 16°C
Compressor	Type		Hermodynamically Sealed Scroll	Hermodynamically Sealed Scroll	Hermodynamically Sealed Scroll	Hermodynamically Sealed Scroll
	Number of Compressor		3	3	4	4
	Type		Propeller fan	Propeller fan	Propeller fan	Propeller fan
Fan	Motor Type		DC Inverter motor	DC Inverter motor	DC Inverter motor	DC Inverter motor
	Max static pressure		(8mmAg(90Pa))	(8mmAg(90Pa))	(8mmAg(90Pa))	(8mmAg(90Pa))
Airflow Rate	Air Flow Rate(l/h)	Max m³/min	290 ± 2	290 ± 2	290 ± 2	290 ± 2
		Vc	4833 ± 2	4833 ± 2	4833 ± 2	4833 ± 2
Sound Pressure		Max dBA	62.3	62.3	62.5	62.5
Sound Power		Max dBA	62.3	62.3	62.5	62.5
Dimensions	WxHxD mm		(1,210×1,600×760)±2	(1,210×1,600×760)±2	(1,210×1,600×760)±2	(1,210×1,600×760)±2
Net Weight	kg		280 ± 1 + 245 ± 1	280 ± 1 + 245 ± 1	280 ± 2	280 ± 2
	Type		R410A	R410A	R410A	R410A
Refrigerant	Charge	kg	10.5 ± 2	10.5 ± 2	10.5 ± 2	10.5 ± 2
	Control		EEV	EEV	EEV	EEV
Refrigerant Oil	Type		FVC680(PVE)	FVC680(PVE)	FVC680(PVE)	FVC680(PVE)
	Capacity	cc	6,200	6,200	6,200	6,200
Power Supply	Hz/kHz		3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50
Transmission Cable (VCTP-SB)	No x mm²		3C × 1.0 - 1.5			
Piping Length	Total	m	1,000	1,000	1,000	1,000
	Actual Longest Piping Length**	m	200(225)	200(225)	200(225)	200(225)
	After 1st Y branch **	m	40(90)	40(90)	40(90)	40(90)
Piping Level Difference	IDU-IDU	m	110	110	110	110
	IDU-IDU	m	40	40	40	40
	Up/Up	mm(nch)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Piping Connection	Low Pressure Gas	mm(nch)	34.9(1-3/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
	High Pressure Gas	mm(nch)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)	28.58(1-1/8)
Number of Outdoor Units			2	2	2	2
Number of Connectable Indoor Units***	Max		55(64)	56(64)	61(64)	64
Ratio of the Connectable Indoor Units	Min-Max		50 - 160%	50 - 160%	50 - 160%	50 - 160%
Heat exchanger	Type		Wide Lower Plus Fin			





HEAT RECOVERY

Class		42	44	46	
Model	Combination unit	ARUB420LTE4	ARUB440LTE4	ARUB460LTE4	
	Independent unit	ARUB100LTE4	ARUB100LTE4	ARUB100LTE4	
		ARUB140LTE4	ARUB140LTE4	ARUB160LTE4	
		ARUB180LTE4	ARUB200LTE4	ARUB200LTE4	
Capacity	Cooling	kW	17.6	129.2	129.8
	Heating	kW	132.3	138.6	144.9
Low Temperature Capacity	Heating -7°C	Max kW	132.3	138.6	144.9
Power Input	Cooling	kW	23.71	25.40	27.34
	Heating	kW	26.34	28.45	30.25
Low Temperature Power Input	Heating -7°C	Max kW	38.37	39.49	41.73
COP	Cooling		0.74	4.85	4.71
	Heating		5.02	4.97	4.79
Operation Range	Cooling	Min-Max °C DB	-10°C - 43°C	-10°C - 43°C	-10°C - 43°C
	Heating	Min-Max °C WB	-25°C - 18°C	-25°C - 18°C	-25°C - 18°C
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Number of Compressor		4	4	4
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Type		DC Inverter motor	DC Inverter motor	DC Inverter motor
	Max static pressure		8mmAq(80Pa)	8mmAq(80Pa)	8mmAq(80Pa)
Airflow Rate	Air Flow Rate(High)	Max l/s	290 x 2 + 210	290 x 2 + 210	290 x 2 + 210
		m³/min	48000 x 2 + 3500	48000 x 2 + 3500	48000 x 2 + 3500
Sound Pressure	Max dBA		63.9	63.9	63.9
Sound Power	Max dBA		83.9	83.9	83.9
Dimensions	WxDxH mm		(1,240 x 1,680 x 760) x 2 + (920 x 1,680 x 760) x 1	(1,240 x 1,680 x 760) x 2 + (920 x 1,680 x 760) x 1	(1,240 x 1,680 x 760) x 2 + (920 x 1,680 x 760) x 1
Net Weight	kg		200 x 1 + 245 x 1 + 200 x 1	200 x 1 + 245 x 1 + 200 x 1	200 x 1 + 245 x 1 + 200 x 1
Refrigerant	Type		R410A	R410A	R410A
	Charge	kg	(10.5 x 2) + 7.5	(10.5 x 2) + 7.5	(10.5 x 2) + 7.5
	Control		EEV	EEV	EEV
Refrigerant Oil	Type		PVC680D(PVE)	PVC680D(PVE)	PVC680D(PVE)
	Capacity	cc	9,800	9,800	9,800
Power Supply	a/Whz		3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50
Transmission Cable (VCTF-SB)	No.xm ²		2C x 1.0 - 1.5	2C x 1.0 - 1.5	2C x 1.0 - 1.5
Piping Length	Total	m	1,000	1,000	1,000
	Actual Longest Piping Length *	m	200(225)	200(225)	200(225)
	After 1st Y branch **	m	40(90)	40(90)	40(90)
Piping Level Difference	IDU-IDU	m	110	110	110
	IDU-IDU	m	40	40	40
	Liquid	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Piping Connection	Low Pressure Gas	mm(inch)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
	High Pressure Gas	mm(inch)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)
Number of Outdoor Units			3	3	3
Number of Connectable Indoor Units ***	Max		64	64	64
Ratio of the Connectable Indoor Units	Min-Max		50 - 130%	50 - 130%	50 - 130%
Heat exchanger	Type		Wide Louver Plus Fin	Wide Louver Plus Fin	Wide Louver Plus Fin

HEAT RECOVERY

Class		48	50	52	
Model	Combination unit	ARUB480LTE4	ARUB500LTE4	ARUB520LTE4	
	Independent unit	ARUB100LTE4	ARUB100LTE4	ARUB120LTE4	
		ARUB180LTE4	ARUB200LTE4	ARUB200LTE4	
		ARUB200LTE4	ARUB200LTE4	ARUB200LTE4	
Capacity	Cooling	kW	134.4	140.0	145.6
	Heating	kW	151.2	157.5	163.8
Low Temperature Capacity	Heating -7°C	Max kW	151.2	157.5	163.8
Power Input	Cooling	kW	26.77	28.46	29.93
	Heating	kW	30.10	32.21	34.52
Low Temperature Power Input	Heating -7°C	Max kW	43.07	44.19	46.58
COP	Cooling		5.82	4.92	4.86
	Heating		5.03	4.89	4.75
Operation Range	Cooling	Min-Max °C DB	-10°C - 43°C	-10°C - 43°C	-10°C - 43°C
	Heating	Min-Max °C WB	-25°C - 18°C	-25°C - 18°C	-25°C - 18°C
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Number of Compressor		5	5	5
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Type		DC Inverter motor	DC Inverter motor	DC Inverter motor
	Max static pressure		8mmAq(80Pa)	8mmAq(80Pa)	8mmAq(80Pa)
Airflow Rate	Air Flow Rate(High)	Max l/s	290 x 2 + 210	290 x 2 + 210	290 x 2 + 210
		m³/min	48000 x 2 + 3500	48000 x 2 + 3500	48000 x 2 + 3500
Sound Pressure	Max dBA		64.1	64.1	64.1
Sound Power	Max dBA		84.1	84.1	84.1
Dimensions	WxDxH mm		(1,240 x 1,680 x 760) x 2 + (920 x 1,680 x 760) x 1	(1,240 x 1,680 x 760) x 2 + (920 x 1,680 x 760) x 1	(1,240 x 1,680 x 760) x 2 + (920 x 1,680 x 760) x 1
Net Weight	kg		200 x 2 + 208 x 1	200 x 2 + 208 x 1	200 x 2 + 208 x 1
Refrigerant	Type		R410A	R410A	R410A
	Charge	kg	(10.5 x 2) + 7.5	(10.5 x 2) + 7.5	(10.5 x 2) + 7.5
	Control		EEV	EEV	EEV
Refrigerant Oil	Type		PVC680D(PVE)	PVC680D(PVE)	PVC680D(PVE)
	Capacity	cc	9,800	9,800	9,800
Power Supply	a/Whz		3 / 380-415 / 50	3 / 380-415 / 50	3 / 380-415 / 50
Transmission Cable (VCTF-SB)	No.xm ²		2C x 1.0 - 1.5	2C x 1.0 - 1.5	2C x 1.0 - 1.5
Piping Length	Total	m	1,000	1,000	1,000
	Actual Longest Piping Length *	m	200(225)	200(225)	200(225)
	After 1st Y branch **	m	40(90)	40(90)	40(90)
Piping Level Difference	IDU-IDU	m	110	110	110
	IDU-IDU	m	40	40	40
	Liquid	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Piping Connection	Low Pressure Gas	mm(inch)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
	High Pressure Gas	mm(inch)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)
Number of Outdoor Units			3	3	3
Number of Connectable Indoor Units ***	Max		64	64	64
Ratio of the Connectable Indoor Units	Min-Max		50 - 130%	50 - 130%	50 - 130%
Heat exchanger	Type		Wide Louver Plus Fin	Wide Louver Plus Fin	Wide Louver Plus Fin





HEAT RECOVERY

Class		34	36	38	60
Model	Combination unit:	ARUB540LTE4	ARUB560LTE4	ARUB580LTE4	ARUB600LTE5
	Independent unit:	ARUB140LTE4	ARUB160LTE4	ARUB180LTE4	ARUB200LTE4
		ARUB200LTE4	ARUB200LTE4	ARUB200LTE4	ARUB200LTE4
		ARUB200LTE4	ARUB200LTE4	ARUB200LTE4	ARUB200LTE4
Capacity	Cooling kW	151.2	156.8	162.4	168.0
	Heating kW	170.1	176.6	182.7	189.0
Low Temperature Capacity	Heating -7°C Max kW	170.1	176.6	182.7	189.0
Power Input	Cooling kW	31.56	33.90	32.93	34.62
	Heating kW	36.32	38.12	37.97	40.08
Low Temperature Power Input	Heating -7°C Max kW	47.89	50.13	51.47	52.59
COP	Cooling	4.79	4.69	4.93	4.85
	Heating	4.68	4.63	4.81	4.72
Operation Range	Cooling Min-Max °C DB	-10°C -43°C	-10°C -43°C	-10°C -43°C	-10°C -43°C
	Heating Min-Max °C WB	-25°C -18°C	-25°C -18°C	-25°C -18°C	-25°C -18°C
Compressor	Type	Hermically Sealed Scroll	Hermically Sealed Scroll	Hermically Sealed Scroll	Hermically Sealed Scroll
	Number of Compressor	5	5	5	5
Fan	Type	Propeller fan	Propeller fan	Propeller fan	Propeller fan
	Motor Type	DC Inverter motor	DC Inverter motor	DC Inverter motor	DC Inverter motor
	Max static pressure	0mmHg (0Pa)	0mmHg (0Pa)	0mmHg (0Pa)	0mmHg (0Pa)
Airflow Rate	Air Flow Rate(High) Max m³/min	280 x 3	280 x 3	280 x 3	280 x 3
	Vc 4933 x 3	4933 x 3	4933 x 3	4933 x 3	4933 x 3
Sound Pressure	Max dBA	64.1	64.1	64.3	64.3
Sound Power	Max dBA	64.1	64.1	64.3	64.3
Dimensions	WxHxD mm	(1,140 x 1,680 x 760) x 3			
Net Weight	kg	280 x 2 + 245 x 1	280 x 2 + 245 x 1	280 x 3	280 x 3
	Type	R410A	R410A	R410A	R410A
Refrigerant	Charge kg	10.5 x 3	10.5 x 3	10.5 x 3	10.5 x 3
	Control	EEV	EEV	EEV	EEV
Refrigerant Oil	Type	FVC680D(PVE)	FVC680D(PVE)	FVC680D(PVE)	FVC680D(PVE)
	Capacity cc	9,800	9,800	10,800	10,800
Power Supply	φ100V/Hz	3 / 300-415 / 50	3 / 300-415 / 50	3 / 300-415 / 50	3 / 300-415 / 50
Transmission Cable (VCTF-SB)	No x mm ²	2C x 1.0 - 1.5			
Piping Length	Total m	1,000	1,000	1,000	1,000
	Actual Longest Piping Length * m	209(225)	209(225)	209(225)	209(225)
	After 1st Y branch ** m	40(90)	40(90)	40(90)	40(90)
Piping Level Difference	IDU-IDU m	110	110	110	110
	Liquid mm(hz)	19.05(3/4)	19.05(3/4)	19.05(3/4)	19.05(3/4)
Piping Connection	Low Pressure Gas mm(hz)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)	41.3(1-5/8)
	High Pressure Gas mm(hz)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)	34.9(1-3/8)
Number of Outdoor Units		3	3	3	3
Number of Connectable Indoor Units ***	Max	64	64	64	64
Ratio of the Connectable Indoor Units	Min-Max	50 - 130%	50 - 130%	50 - 130%	50 - 130%
Heat exchanger	Type	Wide Louver Plus Fin			

* : (): equivalent length

** : Conditional Application

To make 40-90m of pipe length after first branch refer to the part of "Installation of outdoor units" in PDB

*** : (): the number of max. connectable outdoor units, for max indoor unit combination ratio (refer to the table below)

Note :

1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C(B60/69)DB / 19°C(59°F)WB

Outdoor temp. 30°C(86°F)DB / 24°C(75°F)WB

Interconnecting piping length 7.5m

Level difference of zero

Heating - Indoor temp. 20°C(B60/69)DB / 15°C(59°F)WB

Outdoor temp. 7°C(44.6°F)DB / 6°C(42.6°F)WB

Interconnecting piping length 7.5m

Level difference of zero

2. Capacities are net capacities.

3. Due to our policy of innovation some specifications may be changed without notification.

4. EEV : Electronic Expansion Valve

CAUTION

- A combination operation over 100% cause to reduce each indoor unit capacity.

- Combination ratio(50-200%)

No. of outdoor units	Conversion Capacity
Single-unit	200%
Double-unit	140%
Triple-unit	120%

We can guarantee the capacity of the system only within 120% Combination. In combinations greater than 120% connection ratio system capacity will be diversified.

If you want to connect more than 120% combination, please contact us and discuss the requirement like below.

1) If the operational capacity of indoor units exceed 120%, then all the indoor units operates under low air flow step mode.

2) Over 120% capacity is same as capacity of 120%. Some remarks is valid for power input.



INDOOR UNIT

If you need a highly efficient air conditioning system in your building,
MULTI V is the right choice for you

- 042 Wall Mounted
- 045 Ceiling Concealed Ducts
- 046 Ceiling Cassettes
- 048 Ceiling & Floor / Ceiling Suspended
- 049 Floor Standing
- 050 Fresh Air Intake Unit



INDOOR UNIT LINE UP

If you need a highly efficient air conditioning system in your building, MULTI V is the right choice for you.

	kW	1.5	2.2	2.8	3.6	4.5	5.6	7.1	8.2	10.6	12.3	14.1	16.0	18.0	20.0	22.4	28.0
	Btu / h	5k	7k	9k	12k	15k	18k	24k	28k	36k	42k	48k	54k	62k	68k	76k	96k
SRAC	Wall Mounted																
	Gallery																
Ceiling Cassette	Mirror																
	4 Way Cassette (570x570)																
	4 Way Cassette (840x840)																
	2 Way Cassette																
Ceiling Concealed Duct	1 Way Cassette																
	Low Static																
	Built-in																
	High Static																
Ceiling & Floor																	
Ceiling Suspended																	
Floor Standing	With Case																
	Without Case																
French Air Intake Unit																	
Eco V II																	

WALL MOUNTED

Gallery / Panel / Mirror

Aesthetic Design

You no longer need to be told what your air conditioner should look like. With LG's revolutionary ARTCOOL Gallery, you can change the look of your air conditioner to whatever you want, whenever you want. The ARTCOOL series have outstanding designs and have been awarded the International Forum Design Award, the Reddot Design Award and the G Mark.

How to Change the Picture



Mirror



Mirror
07/09/12/15GSEB2
18/24GSBR2



Silver
07/09/12/15GSEV2
18/24GSBV2

Panel Type



Silver
07/09/12GSBV2



Gold
07/09/12GSFG2

Red
07/09/12GSFE2



White silver
07/09/12GSPH2

Digital Air Flow Control

The air flow can be controlled to ensure maximum comfort and convenience.

Normal



Jet cool



Sleep mode



Fast, wide and even

Speedy and powerful

Indirect and low noise

WALL MOUNTED

Gallery / Panel / Mirror

Low Noise Level*

The indoor unit operates quietly in sleep mode for peace and quiet for in bedroom or office. For example, LG model ARNU09GSBL2, ARNU12GSBL2 in sleep mode is only 19dB. In addition, the outdoor units have reduced vibration and noise thanks to a super quiet fan and motor.

Conventional Fan

When the fan rotates, the stabilizer and the fan blade are in parallel.
(= the contact of lines)
Instantaneous pressure change is great.



Skew Fan

When the fan rotates, the stabilizer and the fan blade are not in parallel.
(= the contact of points)
Instantaneous pressure change is small.

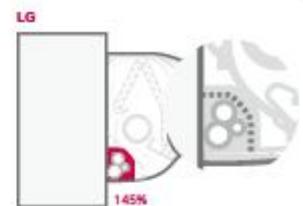
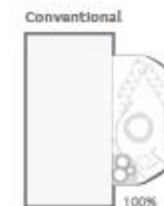


*In heating mode and oil recovery mode some refrigerant noise may occasionally be noticeable.

Wider Piping Space

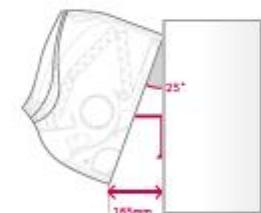
The tubing space is up to 45% wider than previous models for easier installation.

The tubing space is wider than many products currently on the market.



Installation Support Clip

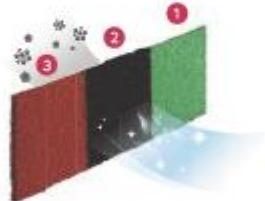
A support clip creates adequate space between the wall and the unit for easier installation.



WALL MOUNTED

Triple filter

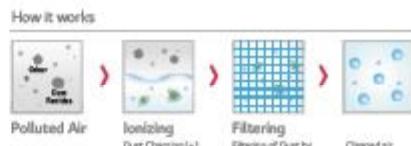
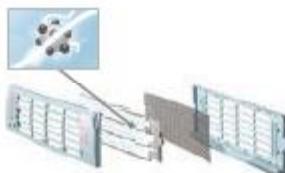
Removes chemical particles and other odour emanating from different sources including tobacco.



- ① VOC Filter
removes odour and hazardous VOCs that are discharged from household materials made out of chemical substances (carpet, paint, cleaners, furniture, etc.)
(VOC=Volatile Organic Chemical)
- ② Formaldehyde filter
blocks formaldehyde.
- ③ Common odour filter
removes ordinary odours.

Plasmaster® Filter

Tiny dust particles are burnt and eliminated when captured by the electric field. The plasma air purifying system can reduce microscopic contaminants and dust. This filter removes house mites, micro dust, and pet fur.



NCB Filter

Nano-size carbon filters catch fine odorous particles doubly and completely, and removes odours from the household, thus offering a pleasant environment.

What is a NCB(Nano Carbon Ball) Filter?

Nano Carbon Ball consists of a vast system of pores of Ultra Nano size. These pores are highly adsorbent, forming a strong chemical bond / attraction to odorous gaseous, and liquid contaminant. Nano carbon, was used for the first time in the world as a deodorizing material.

Pre Filter

The pre filter enables easier cleaning of the air conditioner unit.

Easy to Open

Ez-Detachable Grille : The simple bottom to top cover makes cleaning of the air conditioner a lot easier.

Easy to Clean

Ez-Cleaning Filter : The filter is designed for easier handling and cleaning which thus enables longer use.

Auto Cleaning with odour prevention

The Odour Prevention function reduces unwanted odours and mould build up on the heat exchanger.



Drying

By reducing humidity and bacteria left in the air conditioner, the Odour Prevention function removes substances that might be harmful to human body.

Deodorizing

The indoor environment remains odourless with the advanced deodorizing function.

High Performing

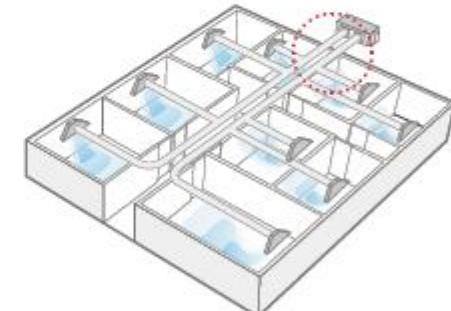
By preventing the pollution of the heat exchanger by various germs and bacteria, the cooling performance and longevity of the air conditioner is maintained.

MULTI V™

CEILING CONCEALED DUCT

Operation for Multiple Rooms

Using a spiral duct (embedded or flexible type) and stream chamber, it is possible to operate cooling/heating for several rooms simultaneously.

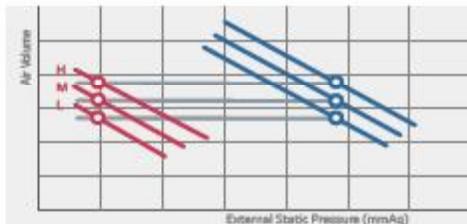


E.S.P Control

The BLDC motor and low noise fan means that air volume can be easily controlled by using the wired remote controller.

The BLDC motor can control the fan speed and air volume regardless of the external static pressure(E.S.P)

With E.S.P control no additional accessories are needed to adjust the air flow and the energy consumption of the fan is also reduced.



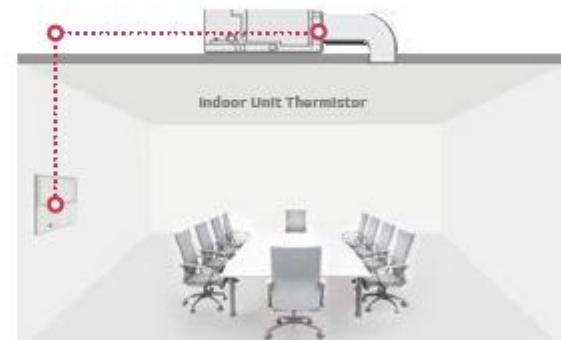
Two Thermistors Control

The indoor temperature can be checked using the thermistors in the remote controller as well as from the indoor unit. There may be a significant difference between ceiling and floor air temperature. Two thermistors can optimise indoor air temperature for a more comfortable environment.

Remote Controller Thermistor



Compares temperatures sensed from different positions, and automatically selects the optimum temperature for users

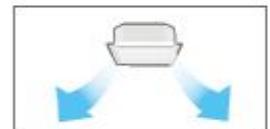


CEILING CASSETTE

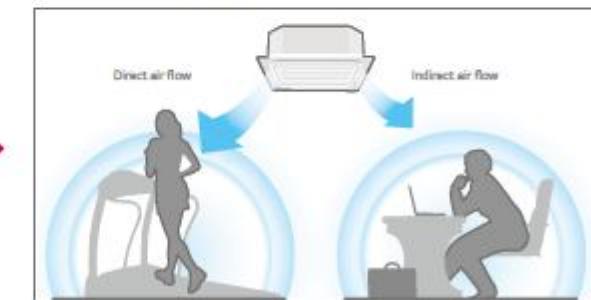
Independent Vane Control

It is possible to control each of the 4 vanes individually as the motors are connected separately to each vane.

All vane operation



Independent Vane Control



Auto Elevation Grille

Easy filter cleaning with elevation grill

- Installation inside main body
- 4 points support structure
- Max: 4.5m length

- Auto horizontal control
- Memory for user's level
- Model : PTEGM0



*Smart ARNEGSTC0, ARNEGSTC1, ARNEGSTC2, ARNEGSTC3, ARNEGSTC4, ARNEGSTC5, ARNEGSTC6

*Operating with serial remote controller PRCVCL0/00 and wireless remote controller included in PRS05.

High Ceiling Mode

High ceiling mode provides powerful cooling and heating up to 4.2m in height, from ceiling to floor.



Reduced Height

The indoor unit with slim and compact dimensions has reduced the restriction which enables successful installation in various spaces.

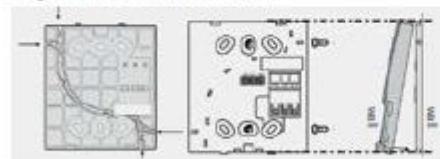
	6.0-7.3 kW	8.3-11.0 kW
conventional	218mm	288mm
LG	204mm	246mm

Flexible Connection

Flexible connection of remote controller

- Group control : 1 remote controller up to 16 indoor units.
- Second remote control : 2 remote controllers to 1 indoor unit.

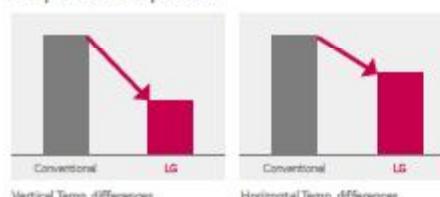
Easy & solid attachment to the wall



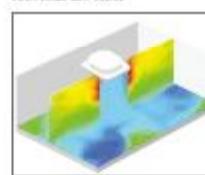
Swirl Swing

Swirl swing distributes air evenly throughout the room to ensure a more comfortable environment by adjusting the movement of the vane.

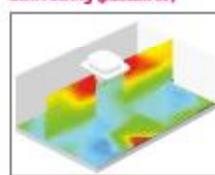
Comparison of temperatures



Normal air flow



Swirl swing (pleasant air)



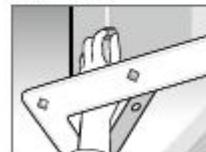
Convenient Panel Installation

The detachable corner design makes it easy to adjust the hanger during installation and to check for leakages in the drain connection pipe.

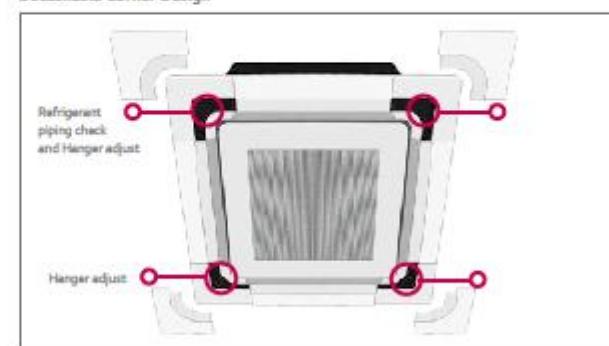
Drain leakage check



Hanger adjust



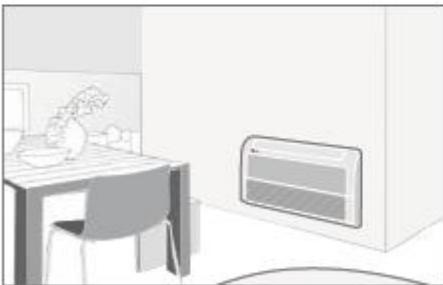
Detachable Corner Design



CEILING & FLOOR CEILING SUSPENDED

Flexible Installation

The ceiling and floor models can be installed either on the ceiling or on the floor. This saves space when installed in shops or offices.



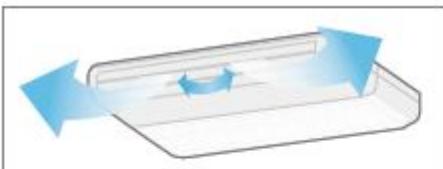
* Ceiling & Floor : ARNU09G/VEA2, ARNU12G/VEA2



Airflow Direction Control

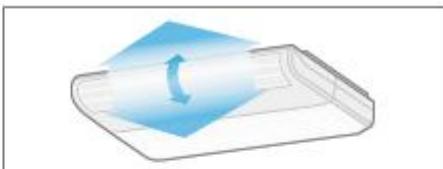
Horizontal Airflow Direction Control

Adjust the horizontal airflow direction by manually moving the horizontal airflow direction louvre by hand.



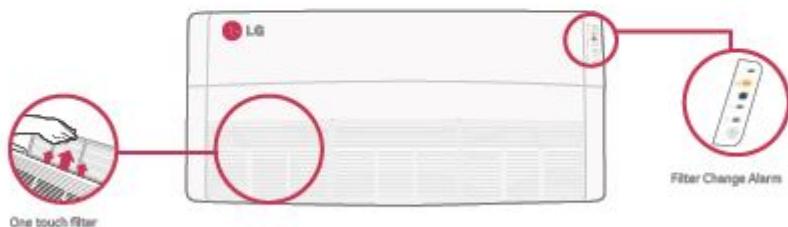
Vertical Airflow Direction Control

The airflow direction can be adjusted as desired by using the remote control.



One Touch Filter

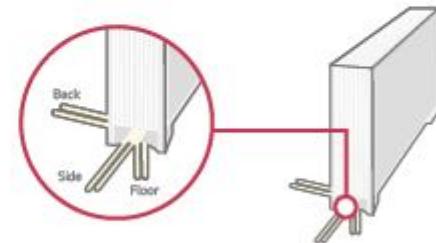
The filter change alarm informs you when the unit has been operating for 2,400 hours. It is very easy to clean or change the filter.



FLOOR STANDING

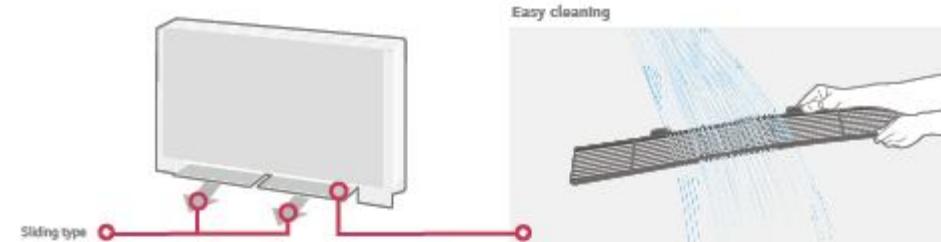
3 way Flexible Installation

It is possible to install and connect the outdoor unit in 3 different ways (side; back; floor).



Sliding Type Filter

Easy maintenance and extended product life with sliding type filter



FRESH AIR INTAKE UNIT

Fresh Air Intake Unit

ARNU48GBRZ2 ARNU76GBRZ2 ARNU96GBRZ2



ARNU48GBRZ2



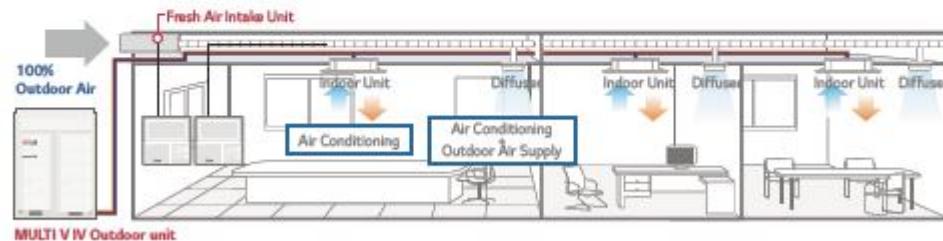
ARNU76GBRZ2



ARNU96GBRZ2

Fresh Air Supply

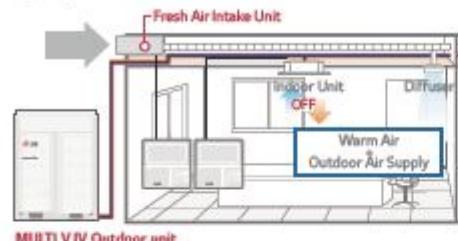
The MULTI V™ Fresh Air Unit (FAU) is the alternative solution for ventilation, which supplies the fresh air indoors as well as being able to cool and heat air. It means the indoor space can have positive air pressure consistently.



Economic Operation

Using the free cooling and heating can save costs by blowing the natural outdoor air inside when the season changes.

Spring Season



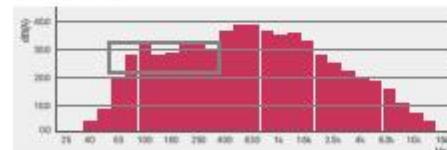
Autumn Season



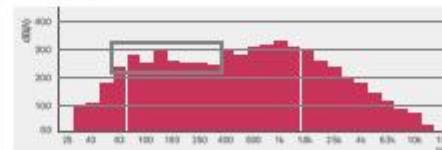
BLDC Fan Motor

BLDC Fan Motor reduces noise at low frequency operation as well as give infinite control of fan speed, air quality and ESP.

AC Tap Motor



BLDC motor

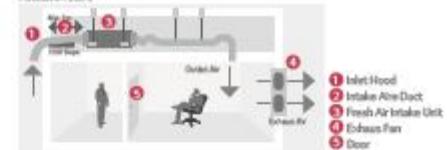


Model	ARNU48GBRZ2	ARNU76GBRZ2	ARNU96GBRZ2
Capacity	Cooling kW Heating kW	14.3 13.5	23.4 21.4
Power Input	Cooling W Heating W	169 169	230 230
Power Supply	~V/Hz	1 / 220~240 / 50	1 / 220~240 / 50
Airflow Rate (High mode)	NM/H	108/14.7/14.7	23.7/32.2/32.2
(High mode)	V/s	131 / 245 / 245	395 / 230 / 230
External Static Pressure	High Mode - Factory Set mm(H2O)	100(0.7)	220(0.6)
High Mode - Factory Set	NM/L	44 / 42 / 42	49 / 47 / 47
Dimensions	Body WxHxD mm	1,230 x 300 x 590	1,562 x 460 x 688
Net Weight	kg (lb)	45(99)	73(161)
Liquid	mm(inch)	9.52(3/8)	9.52(3/8)
Piping Connection	Gas mm(inch)	15.88(5/8)	15.88(5/8)
Drain	ID. mm(inch)	25(1.12)	25(1.12)
Fan motor output x Number	W	195 x 1	375 x 1

Notes:

1. Capacities are based on the following conditions:
Cooling: Outdoor temp: 22°C(71.6°F)/ 30°C(86°F)/W
IOU-OUU piping length: 7.5m
Level difference of 2m
Heating: Outdoor temp: 0°C(32°F)/08 / -5°C(26.7°F)/W
Interconnecting piping length: 7.5m
Level difference of 2m
2. Capacities are net capacities
3. Noise level is under standard mode (for actual High Mode (factory set) condition)
Noise Level may exceed the standard level by 1.5dB(A)
4. Due to our policy of innovation some specifications may be changed without prior notification

Installation Scene



Caution

1. Operation range (Cooling: 5°C ~ 40°C; Heating: -5°C ~ 40°C)
2. Installation of exhaust fan is recommended for a rated race.
3. Indoor Unit Connection

No.	Connection Condition	Combination
1	Fresh Air Intake Units only are connected with indoor units.	1) The total capacity of Fresh Air Intake Unit should be 50-100% of outdoor unit. 2) The max capacity of Fresh Air Intake is 2 units.
2	Mixture connection with general indoor units and Fresh Air Intake units	1) The mixture capacity of indoor unit (general indoor unit + Fresh Air Intake Unit) should be 50-100% of outdoor unit. 2) The total capacity of Fresh Air Intake Unit should be less than 20% of the total capacity of indoor units.

Wired Remote Controller

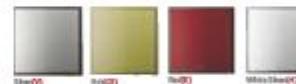
Standard Type



PQCVSLOW



*1: Photo changeable
- V : Silver
- E : Red
- G : Gold
- H : White Silver



Model	ARNU07GSF*2	ARNU09GSF*2	ARNU12GSF*2
Capacity	Cooling kW	2.2	2.8
	Heating kW	2.5	3.2
Power Input	Cooling W	35	35
	Heating W	35	35
Power Supply	mV/Hz	1 / 220 - 240 / 50	1 / 220 - 240 / 50
	mV/min	81 / 6.3 / 4.2	81 / 6.3 / 4.2
Airflow Rate	H/M/L	125 / 105 / 70	125 / 105 / 70
	l/s	125 / 105 / 70	125 / 105 / 70
Sound Pressure	H/M/L dBA	38 / 32 / 27	38 / 32 / 27
	dBA	44 / 38 / 32	44 / 38 / 32
Dimensions	Body WxHxD mm	600 x 600 x 146	600 x 600 x 146
	kg/(kg)	19(33.1)	19(33.1)
Net Weight	Liquid mm/(inch)	6.38(1/4)	6.38(1/4)
Piping Connection	Gas mm/(inch)	12.7(1/2)	12.7(1/2)
	Drain I.D. mm/(inch)	12.2(15/32)	12.2(15/32)

Note : 1. Capacities are based on the following conditions

Cooling - Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95°F)DB / 24°C(75.7°F)WB

Interconnecting piping length: 7.5m / Level difference of zero

Heating - Indoor temp. 30°C(86°F)DB / 15°C(59°F)WB

Outdoor temp. 7°C(44.6°F)DB / 6°C(43.9°F)WB

Interconnecting piping length: 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification

Accessories

Model	ARNU07GSF*2	ARNU09GSF*2	ARNU12GSF*2
Without Case (1 Contact Point)		PQD5A	
Dry Contact:			
With Case (1 Contact Point)		PQDSB / PQDSB1	
With Case (2 Contact Point)		PQDSBC	

Wired Remote Controller			Wireless Remote Controller
Standard Type	Simple Type	Simple Type for Hotel	
PQRCVSLQW	PQRCVCLQW (white)	PQRCICAQW (White)	
		PQWRHQDF08	

Accessories

Model	ARNU07GSE*2	ARNU09GSE*2	ARNU12GSE*2	ARNU15GSE*2	ARNU18GSE*2	ARNU24GSE*2
Without Case (1 Contact Point)		PQD5A				
Dry Contact:					PQDSB / PQDSB1	
With Case (2 Contact Point)				PQDSBC		

Wired Remote Controller			Wireless Remote Controller
Standard Type	Simple Type	Simple Type for Hotel	
PQRCVSLQW	PQRCVCLQW (white)	PQRCICAQW (White)	
		PQWRHQDF08	



- R : Mirror
- V : Silver

Wall Mounted

ARNU07GSBL2 ARNU09GSBL2 ARNU12GSBL2 ARNU15GSBL2



Model	ARNU07GSBL2	ARNU09GSBL2	ARNU12GSBL2	ARNU15GSBL2
Capacity	Cooling kW	2.2	2.8	3.6
	Heating kW	2.5	3.2	4.0
Power Input	Cooling W	21.0	21.0	21.0
	Heating W	21.0	21.0	21.0
Power Supply	mV/Hz	1 / 220-240 / 50	1 / 220-240 / 50	1 / 220-240 / 50
	mV/min	7.0 / 6.5 / 5.5	8.2 / 7.0 / 5.5	9.5 / 8.2 / 6.5
Airflow Rate	H/M/L	117 / 108 / 92	137 / 117 / 92	158 / 137 / 108
	l/s	117 / 108 / 92	137 / 117 / 92	175 / 150 / 117
Sound Pressure	H/M/L dBA	32 / 30 / 28	34 / 32 / 28	37 / 34 / 30
	dBA	32 / 30 / 28	34 / 32 / 28	40 / 36 / 32
Dimensions	Body WxDxH mm	895 x 289 x 215	895 x 289 x 215	895 x 289 x 215
	WxDxH mm	895 x 289 x 215	895 x 289 x 215	895 x 289 x 215
Net Weight	kg(lbs)	10.0 (22.0)	10.0 (22.0)	10.0 (22.0)
	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)
Piping Connection	Liquid mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)
	Gas mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)
Drain	I.D. mm(inch)	16(5/8)	16(5/8)	16(5/8)

Note: 1. Capacities are based on the following conditions.

Cooling - Indoor temp: 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp: 35°C(95°F)DB / 24°C(75.7°F)WB

Interconnecting piping length: 7.5m / Level difference of zero

Heating - Indoor temp: 20°C(68°F)DB / 15°C(59°F)WB

Outdoor temp: 7°C(44.6°F)DB / 6°C(43°F)WB

Interconnecting piping length: 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification.

Accessories

Model	ARNU07GSBL2	ARNU09GSBL2	ARNU12GSBL2	ARNU15GSBL2
Without Case (1 Contact Point)		PQDSA		
Dry Contact	With Case (1 Contact Point)		PQDSB / PQDSB1	
	With Case (2 Contact Point)		PQDSBC	

Wired Remote Controller			Wireless Remote Controller
Standard Type	Simple Type	Simple Type for Hotel	
PQRCVSLQW	PQRCVCLQW (white)	PQRCHCA0QW(White)	PQWTHQDFD8

Wall Mounted

ARNU18GSCL2 ARNU24GSCL2



Model	ARNU18GSCL2	ARNU24GSCL2
Capacity	Cooling kW	5.6
	Heating kW	6.3
Power Input	Cooling W	39.5
	Heating W	39.5
Power Supply	mV/Hz	1 / 220-240 / 50
	mV/min	12.5 / 12.0 / 11.3
Airflow Rate	H/M/L	208 / 200 / 188
	l/s	233 / 212 / 192
Sound Pressure	H/M/L dBA	38 / 35 / 33
	dBA	43 / 39 / 35
Dimensions	Body WxDxH mm	1,030 x 325 x 255
	WxDxH mm	1,030 x 325 x 255
Net Weight	kg(lbs)	14.0 (30.9)
	mm(inch)	9.32(3/8)
Piping Connection	Liquid mm(inch)	12.7(1/2)
	Gas mm(inch)	15.00(5/8)
Drain	I.D. mm(inch)	16(5/8)

Note: 1. Capacities are based on the following conditions.

Cooling - Indoor temp: 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp: 35°C(95°F)DB / 24°C(75.7°F)WB

Interconnecting piping length: 7.5m / Level difference of zero

Heating - Indoor temp: 20°C(68°F)DB / 15°C(59°F)WB

Outdoor temp: 7°C(44.6°F)DB / 6°C(43°F)WB

Interconnecting piping length: 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification.

Accessories

Model	ARNU18GSCL2	ARNU24GSCL2
Without Case (1 Contact Point)		PQDSA
Dry Contact	With Case (1 Contact Point)	PQDSB / PQDSB1
	With Case (2 Contact Point)	PQDSBC

Wired Remote Controller			Wireless Remote Controller
Standard Type	Simple Type	Simple Type for Hotel	
PQRCVSLQW	PQRCVCLQW (white)	PQRCHCA0QW(White)	PQWTHQDFD8

4 Way Cassette (570x570)

ARNU05GTRA2 / ARNU07GTRA2 / ARNU09GTRA2
ARNU12GTRA2 ARNU15GTQA2 / ARNU18GTQA2



Model		ARNU05GTRA2	ARNU07GTRA2	ARNU09GTRA2	ARNU12GTRA2	ARNU15GTQA2	ARNU18GTQA2
Capacity	Cooling	kW	1.6	2.2	2.8	3.6	4.5
	Heating	kW	1.8	2.5	3.2	4.0	5.0
Power Input	Cooling	W	30	30	30	30	30
	Heating	W	30	30	30	30	30
Power Supply	a/V/Hz	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50
Airflow Rate	H/M/L	m³/min	7.5 / 7.0 / 6.6	7.5 / 7.0 / 6.6	8.0 / 7.5 / 7.1	8.7 / 8.0 / 7.0	11.0 / 10.0 / 9.3
	V/s	125 / 117 / 110	125 / 117 / 110	133 / 125 / 118	145 / 133 / 117	183 / 167 / 135	187 / 183 / 167
Sound Pressure	H/M/L	dBA	29 / 27 / 26	29 / 27 / 26	30 / 29 / 27	32 / 30 / 27	36 / 34 / 32
Dimensions	Body	WxHxD mm	570 x 214 x 570	570 x 214 x 570	570 x 214 x 570	570 x 256 x 570	570 x 256 x 570
Net Weight		kg/(set)	13.1(28.9)	13.1(28.9)	14.3(31.3)	14.3(31.3)	15.5(34.2)
Neoplasma Purifying Filter		PTPKM0	PTPKM0	PTPKM0	PTPKM0	PTPKM0	PTPKM0
	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)
Piping Connection	Gas	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)	12.7(1/2)	12.7(1/2)
	Drain	I.D. mm(inch)	25(1/32)	25(1/32)	25(1/32)	25(1/32)	25(1/32)
Model		PT-UOC	PT-UOC	PT-UOC	PT-UOC	PT-UOC	PT-UOC
Decoration Panel	Colour	Morning fog					
	Dimensions	WxHxD mm	700 x 22 x 700				
	Weight	kg	3	3	3	3	3

Note: 1 Capacities are based on the following conditions

Cooling - Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95°F)DB / 24°C(75.2°F)WB

Interconnecting piping length 7.5m / Level difference of zero

Heating - Indoor temp. 20°C(68.9°F)DB / 15°C(59.5°F)WB

Outdoor temp. 7°C(46.6°F)DB / 6°C(43.9°F)WB

Interconnecting piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification

Accessories

Model	ARNU05GTRA2	ARNU07GTRA2	ARNU09GTRA2	ARNU12GTRA2	ARNU15GTQA2	ARNU18GTQA2
Dry Contact:	Without Case (1 Contact Point) PQDSA					
	With Case (1 Contact Point) PQDSB / PQDSB1					
Front Panel	With Case (2 Contact Point) PQDSBC					

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCUD50 (white)	PQRCVSD0W	PQRCVCL00W (white)	PQRCHCA00W (white)	POWRHQ0F08

4 Way Cassette (840x840)

ARNU24GTPA2 / ARNU28GTPA2
ARNU36GTNA2 / ARNU42GTM2 / ARNU48GTM2



Model		ARNU24GTPA2	ARNU28GTPA2	ARNU36GTNA2	ARNU42GTM2	ARNU48GTM2
Capacity	Cooling	kW	7.1	8.2	10.6	12.3
	Heating	kW	8.0	9.2	11.9	13.8
Power Input	Cooling	W	33	33	144	144
	Heating	W	33	33	144	144
Power Supply	a/V/Hz	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50
Airflow Rate	H/M/L	m³/min	17 / 15 / 13	19 / 16 / 14	25 / 21 / 19	30 / 27 / 27
	V/s	283 / 250 / 217	317 / 267 / 233	417 / 330 / 317	500 / 450 / 400	517 / 483 / 450
Sound Pressure	H/M/L	dBA	36 / 34 / 31	39 / 35 / 33	43 / 40 / 37	44 / 41 / 38
Dimensions	Body	WxHxD mm	840 x 204 x 840	840 x 246 x 840	840 x 288 x 840	840 x 308 x 840
Net Weight		kg/(set)	20.0(45.8)	20.0(45.8)	23.5(51.0)	25.6(56.4)
Neoplasma Purifying Filter		PTPKM0	PTPKM0	PTPKM0	PTPKM0	PTPKM0
	Liquid	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	9.52(3/8)
Piping Connection	Gas	mm(inch)	15.08(5/8)	15.08(5/8)	15.08(5/8)	15.08(5/8)
	Drain	I.D. mm(inch)	25(31/32)	25(31/32)	25(31/32)	25(31/32)
Model		PT-UMC1	PT-UMC1	PT-UMC1	PT-UMC1	PT-UMC1
Decoration Panel	Colour	Morning fog				
	Dimensions	WxHxD mm	950 x 25 x 950			
	Weight	kg	5.6	5.6	5.6	5.6

Note: 1 Capacities are based on the following conditions

Cooling - Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95°F)DB / 24°C(75.2°F)WB

Interconnecting piping length 7.5m / Level difference of zero

Heating - Indoor temp. 20°C(68.9°F)DB / 15°C(59.5°F)WB

Outdoor temp. 7°C(46.6°F)DB / 6°C(43.9°F)WB

Interconnecting piping length 7.5m / Level difference of zero

3. Due to our policy of innovation some specifications may be changed without notification

Accessories

Model	ARNU24GTPA2	ARNU28GTPA2	ARNU36GTNA2	ARNU42GTM2	ARNU48GTM2
Dry Contact:	Without Case (1 Contact Point) PQDSA				
	With Case (1 Contact Point) PQDSB / PQDSB1				
Front Panel	With Case (2 Contact Point) PQDSBC				
Auto Elevation Grille				PTEGM0	
Ventilation Kit				PTVK610 / PTVK620 / PTVK630	

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCUD50 (white)	PQRCVSD0W	PQRCVCL00W (white)	PQRCHCA00W (white)	POWRHQ0F08

2 Way Cassette

ARNU18GTLA2 ARNU24GTLA2



Model		ARNU18GTLA2	ARNU24GTLA2
Capacity	Cooling kW	5.6	7.1
	Heating kW	6.3	8.0
Power Input	Cooling W	70	70
	Heating W	70	70
Power Supply	~V/Hz	1 / 220 - 240 / 50	1 / 220 - 240 / 50
Airflow Rate	m³/min	13 / 12 / 10	17 / 15 / 13
H/M/L	Vs	217 / 200 / 167	283 / 290 / 217
Sound Pressure	H/M/L dB(A)	40 / 36 / 32	42 / 38 / 34
Dimensions	Body WxHxD mm	830 x 225 x 550	830 x 225 x 550
Net Weight	kg (lb)	22(48.5)	22(48.5)
Piping Connection	Liquid mm(inch)	6.35(1/4)	9.52(3/8)
	Gas mm(inch)	12.7(1/2)	15.88(5/8)
Drain	I.D. mm(inch)	25(31/32)	25(31/32)
Model		PT-HLC	PT-HLC
Decoration Panel	Colour	Morning fog	Morning fog
Dimensions	WxHxD mm	1,050 x 20 x 640	1,050 x 20 x 640
Weight	kg	4.0	4.0

Note: 1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C/80.6°F/80 / 19°C/66.2°F/68

Outdoor temp. 20°C/68°F/50 / 24°C/75.2°F/58

Interconnecting piping length 7.5m / Level difference of zero

Heating - Indoor temp. 20°C/68°F/50 / 15°C/59°F/68

Outdoor temp. 7°C/44.6°F/50 / 6°C/42.5°F/58

Interconnecting piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification

Accessories

Model	ARNU18GTLA2	ARNU24GTLA2
Dry Contact:	Without Case (1 Contact Point) PQDS4	
	With Case (1 Contact Point) PQDSB / PQDSB1	
	With Case (2 Contact Point) PQDSBC	
Front Panel		PT-HLA

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCDU50(white)	PQRCVS100W	PQRCV100W (white)	PQRCHCA100W(White)	PWRH100FDB

1 Way Cassette

ARNU07GTLA2 ARNU09GTLA2 ARNU12GTLA2
ARNU18GTTA2 ARNU24GTTA2



Model		ARNU07GTLA2	ARNU09GTLA2	ARNU12GTLA2	ARNU18GTTA2	ARNU24GTTA2
Capacity	Cooling kW	2.2	2.8	3.6	5.6	7.1
	Heating kW	2.5	3.2	4.0	6.3	7.1
Power Input	Cooling W	40	40	40	70	70
	Heating W	40	40	40	70	70
Power Supply	~V/Hz	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50
Airflow Rate	m³/min	8.2 / 7.3 / 6.4	9.2 / 8.6 / 8.2	10 / 9.2 / 8.2	13.3 / 12.1 / 10.9	14.6 / 13.3 / 11.5
H/M/L	Vs	137 / 122 / 107	153 / 143 / 137	167 / 153 / 137	222 / 202 / 182	243 / 222 / 192
Sound Pressure	dBA	32 / 29 / 25	35 / 34 / 32	38 / 35 / 32	40 / 37 / 35	43 / 40 / 36
Dimensions	Body WxHxD mm	860 x 132 x 450	860 x 132 x 450	860 x 132 x 450	1,180 x 132 x 450	1,180 x 132 x 450
Net Weight	kg (lb)	14.7(32.4)	14.7(32.4)	14.7(32.4)	18.7(41.23)	18.7(41.23)
Piping Connection	Liquid mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)
	Gas mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)
Drain	I.D. mm(inch)	25(31/32)	25(31/32)	25(31/32)	25(31/32)	25(31/32)
Model		PF-UUC(0) PF-UUD(0)Pend	PF-UUC(0) PF-UUD(0)Pend	PF-UUC(0) PF-UUD(0)Pend	PF-UUD(0)Pend	PF-UUD(0)Pend
Decoration Panel	Colour	White	White	White	White	White
Dimensions	WxHxD mm	1,100 x 34 x 500	1,100 x 34 x 500	1,100 x 34 x 500	1,420 x 34 x 500	1,420 x 34 x 500
Weight	kg	4.6	4.6	4.6	5.5	5.5

Note: 1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C/80.6°F/80 / 19°C/66.2°F/68

Outdoor temp. 20°C/68°F/50 / 24°C/75.2°F/58

Interconnecting piping length 7.5m / Level difference of zero

Heating - Indoor temp. 20°C/68°F/50 / 15°C/59°F/68

Outdoor temp. 7°C/44.6°F/50 / 6°C/42.5°F/58

Interconnecting piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification

Accessories

Model	ARNU07GTLA2	ARNU09GTLA2	ARNU12GTLA2	ARNU18GTTA2	ARNU24GTTA2
Dry Contact:	Without Case (1 Contact Point) PQDS4			PQDS4	
	With Case (1 Contact Point) PQDSB / PQDSB1			PQDSB / PQDSB1	
	With Case (2 Contact Point) PQDSBC			PQDSBC	
Front Panel				PT-UIC	

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCDU50(white)	PQRCVS100W	PQRCV100W (white)	PQRCHCA100W(White)	PWRH100FDB

Low Static Duct

ARNU05GL1G2 ARNU07GL1G2 ARNU09GL1G2



Model		ARNU05GL1G2	ARNU07GL1G2	ARNU09GL1G2
Capacity	Cooling	kW	1.7	2.2
	Heating	kW	1.9	2.5
Power Input	Cooling	W	40	40
	Heating	W	40	40
Power Supply	~V/Hz	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50
Airflow Rate (High mode)	H/M/L	m³/min	6.7 / 6.2 / 5.5	7.5 / 6.5 / 5.5
	Vs	Vs	112 / 109 / 92	125 / 109 / 92
External Static Pressure	High mode-factory mode	mmHg(Pa)	2.54(25)	2.54(25)
Sound Pressure	H/M/L	dBA	25 / 24 / 22	26 / 24 / 22
Dimensions	Body	WxHxD mm	700 x 190 x 700	700 x 190 x 700
Net Weight	Liquid	kg (lb)	17.5(38.6)	17.5(38.6)
	Gas	mm(inch)	6.35(1/4)	6.35(1/4)
Piping Connection	Gas	mm(inch)	12.7(1/2)	12.7(1/2)
	Drain I.D.	mm(inch)	25.4(1)	25.4(1)
Fan motor output x Number	W		19 x 1	19 x 1

Note : 1. Capacities are based on the following conditions

Cooling - indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95°F)DB / 24°C(75.7°F)WB

Interconnecting piping length 7.5m / Level difference of zero

Heating - indoor temp. 20°C(68°F)DB / 15°C(59°F)WB

Outdoor temp. 7°C(44.6°F)DB / 6°C(43.8°F)WB

Interconnecting piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification

Accessories

Model	ARNU05GL1G2	ARNU07GL1G2	ARNU09GL1G2
Dry Contact:	Without Case (1 Contact Point)	PQDSA	
	With Case (1 Contact Point)	PQDSB / PQDSB1	
	With Case (2 Contact Point)	PQDSBC	

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCU050(wht)	PQRCU050WH	PQRCUCL01WH (white)	PQRCUCA02WH (white)	PWRNHC0F08

Low Static Duct

ARNU12GL2G2 ARNU15GL2G2 ARNU18GL2G2 ARNU24GL3G2



Model		ARNU12GL2G2	ARNU15GL2G2	ARNU18GL2G2	ARNU24GL3G2
Capacity	Cooling	kW	3.6	4.5	5.6
	Heating	kW	4.0	5.0	6.3
Power Input	Cooling	W	85	85	115
	Heating	W	85	85	115
Power Supply	~V/Hz	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50	1 / 220 - 240 / 50
Airflow Rate (High mode)	H/M/L	m³/min	10.0 / 8.5 / 7.0	12.5 / 10.0 / 8.5	15.0 / 12.5 / 10.0
	Vs	Vs	167 / 142 / 117	208 / 167 / 142	250 / 208 / 167
External Static Pressure	High mode-factory mode	mmHg(Pa)	2.54(25)	2.54(25)	2.54(25)
Sound Pressure	H/M/L	dBA	30 / 27 / 25	33 / 30 / 28	35 / 32 / 29
Dimensions	Body	WxHxD mm	900 x 190 x 700	900 x 190 x 700	1,100 x 190 x 700
Net Weight	Liquid	kg (lb)	23(50.7)	23(50.7)	27(59.5)
	Gas	mm(inch)	6.35(1/4)	6.35(1/4)	9.52(3/8)
Piping Connection	Gas	mm(inch)	12.7(1/2)	12.7(1/2)	15.88(5/8)
	Drain I.D.	mm(inch)	25.4(1)	25.4(1)	25.4(1)
Fan motor output x Number	W		19 x 1, 5 x 1	19 x 1, 5 x 1	19 x 2

Note : 1. Capacities are based on the following conditions

Cooling - indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95°F)DB / 24°C(75.7°F)WB

Interconnecting piping length 7.5m / Level difference of zero

Heating - indoor temp. 20°C(68°F)DB / 15°C(59°F)WB

Outdoor temp. 7°C(44.6°F)DB / 6°C(43.8°F)WB

Interconnecting piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification

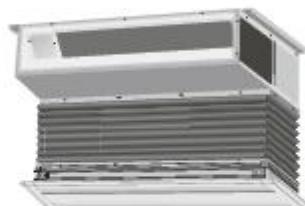
Accessories

Model	ARNU12GL2G2	ARNU15GL2G2	ARNU18GL2G2	ARNU24GL3G2
Dry Contact:	Without Case (1 Contact Point)	PQDSA		
	With Case (1 Contact Point)	PQDSB / PQDSB1	PQDSB	PQDSB1
	With Case (2 Contact Point)	PQDSBC	PQDSBC	

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCU050(wht)	PQRCU050WH	PQRCUCL01WH (white)	PQRCUCA02WH (white)	PWRNHC0F08

Built-in Duct

ARNU07GB3G2 ARNU09GB3G2 ARNU12GB3G2 ARNU15GB3G2



Model	ARNU07GB3G2	ARNU09GB3G2	ARNU12GB3G2	ARNU15GB3G2
Capacity	Cooling kW Heating kW	2.2 2.5	2.8 3.2	3.6 4.0
Power Input	W W	30 30	30 30	30 30
Power Supply	a/Hz	1 / 220~240 / 50	1 / 220~240 / 50	1 / 220~240 / 50
Airflow Rate	H/M/L m³/min	8.0 / 6.5 / 5.5	9.0 / 7.0 / 6.0	10.0 / 8.0 / 6.5
External Static Pressure	High mode/Factory mode mmHg(Pa)	2(20)	2(20)	2(20)
Sound Pressure	H/M/L dBA	33 / 32 / 29	34 / 33 / 32	35 / 34 / 33
Dimensions	Body WxHxD mm	820 x 190 x 575	820 x 190 x 575	820 x 190 x 575
	Suction Grille WxHxD mm	910 x 56 x 359	910 x 56 x 359	910 x 56 x 359
	Section Canvaes WxHxD mm	821 x 42~250 x 274	821 x 42~250 x 274	821 x 42~250 x 274
Net Weight	kg(lbs)	21(46.3)	21(46.3)	21(46.3)
Piping Connection	Liquid mm(inch) Gas mm(inch)	6.35(1/4) 12.7(1/2)	6.35(1/4) 12.7(1/2)	6.35(1/4) 12.7(1/2)
Drain	ID. mm(inch)	25.4(1)	25.4(1)	25.4(1)
Fan motor output x Number	W	30 x 1	30 x 1	30 x 1

Note: 1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95.9°F)DB / 24°C(75.2°F)WB

Indoor humidity 60%RH / outdoor humidity 30%RH / difference of zero

Heating - Indoor temp. 20°C(68.9°F)DB / 15°C(59.7°F)WB

Outdoor temp. 7°C(44.6°F)DB / 6°C(42.8°F)WB

Interconnecting piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification.

Accessories

Model	ARNU07GB3G2	ARNU09GB3G2	ARNU12GB3G2	ARNU15GB3G2
Dry Contact	Without Case (1 Contact Point) PQDS4	With Case (1 Contact Point) PQDS8 / PQDS81	With Case (2 Contact Point) PQDS8C	

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCLUD50(white)	PQRCVSLS0W	PQRCLC0QW (white)	PQRCHCA0QW(White)	PQWRHQ0F08

Built-in Duct

ARNU18GB4G2 ARNU24GB4G2



Model	ARNU18GB4G2	ARNU24GB4G2
Capacity	Cooling kW Heating kW	5.6 6.3
Power Input	W W	80 80
Power Supply	a/Hz	1 / 220~240 / 50
Airflow Rate	H/M/L m³/min	14.0 / 12.0 / 10.0
External Static Pressure	High mode/Factory mode mmHg(Pa)	2(20)
Sound Pressure	H/M/L dBA	43 / 40 / 37
Dimensions	Body WxHxD mm	1,100 x 190 x 575
	Suction Grille WxHxD mm	1,180 x 56 x 359
	Section Canvaes WxHxD mm	1,100 x 42~250 x 274
Net Weight	kg(lbs)	26(57.3)
Piping Connection	Liquid mm(inch) Gas mm(inch)	6.35(1/4) 12.7(1/2)
Drain	ID. mm(inch)	25.4(1)
Fan motor output x Number	W	80 x 1

Note: 1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95.9°F)DB / 24°C(75.2°F)WB

Indoor humidity 60%RH / outdoor humidity 30%RH / difference of zero

Heating - Indoor temp. 20°C(68.9°F)DB / 15°C(59.7°F)WB

Outdoor temp. 7°C(44.6°F)DB / 6°C(42.8°F)WB

Interconnecting piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification.

Accessories

Model	ARNU18GB4G2	ARNU24GB4G2
Dry Contact	Without Case (1 Contact Point) PQDS4	With Case (1 Contact Point) PQDS8 / PQDS81
		With Case (2 Contact Point) PQDS8C
Suction Grille		PBSG830
Suction Canvaes		PBSC30

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCLUD50(white)	PQRCVSLS0W	PQRCLC0QW (white)	PQRCHCA0QW(White)	PQWRHQ0F08

High Static Duct

ARNU07GBHA2 ARNU09GBHA2 ARNU12GBHA2
ARNU15GBHA2 ARNU18GBHA2 ARNU24GBHA2



Model		ARNU07GBHA2	ARNU09GBHA2	ARNU12GBHA2	ARNU15GBHA2	ARNU18GBHA2	ARNU24GBHA2	
Capacity	Cooling	kW	2.2	3.0	4.5	5.6	7.1	
	Heating	kW	2.5	3.2	4.0	5.0	6.0	
Power Input	Cooling	W	150	150	150	150	150	
	Heating	W	150	150	150	150	150	
Power Supply	a/Hz	1/220~240/50	1/220~240/50	1/220~240/50	1/220~240/50	1/220~240/50	1/220~240/50	
Airflow Rate	H/M/L	m³/min	65/150/154	81/163/158	96/181/165	112/196/165	130/213/165	160/244/130
	V/s	168/377/390	126/308/397	160/325/399	188/360/398	217/380/399	267/420/317	
External Static Pressure	High mode-factory mode	mm(HgPa)	8(76)	8(76)	8(76)	8(76)	8(76)	
Sound Pressure	H/M/L	dBA	26/25/23	27/26/23	28/27/25	29/28/26	30/31/28	
Dimensions	Body	WxHxD mm	882x360x450	882x360x450	882x360x450	882x360x450	882x360x450	
Net Weight	Liquid	kg(lbs)	26(57.4)	28(57.4)	30(57.4)	26(59.4)	26(59.4)	
Piping Connection	Liquid	mm(inch)	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.53(3/8)	
	Gas	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.88(5/8)	
	Drain	I.D.	mm(inch)	28(11/32)	28(11/32)	28(11/32)	28(11/32)	
Fan motor output x Number		W	118x1	118x1	118x1	118x1	118x1	

Note: 1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95°F)DB / 24°C(75.7°F)WB

Indoor relative humidity: 70% ± 10% difference of zero

Heating - Indoor temp. 20°C(68°F)DB / 15°C(59°F)WB

Outdoor temp. 7°C(44.6°F)DB / 6°C(43°F)WB

Indoor connecting piping length: 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification.

Accessories

Model	ARNU07GBHA2	ARNU09GBHA2	ARNU12GBHA2	ARNU15GBHA2	ARNU18GBHA2	ARNU24GBHA2
Dry Contact	Without Case (1 Contact Point)	PQDS4				
	With Case (1 Contact Point)		PQDS8 / PQDS81			
	With Case (2 Contact Point)		PQDS8C			

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCU0700 (white)	PQRCU0900W	PQRCU1200W (white)	PQRCU1500W (white)	POWERK0P08

High Static Duct

ARNU28GBGA2 ARNU36GBGA2



Model		ARNU28GBGA2	ARNU36GBGA2
Capacity	Cooling	kW	8.2
	Heating	kW	9.2
Power Input	Cooling	W	450
	Heating	W	450
Power Supply	a/Hz	1/220~240/50	1/220~240/50
Airflow Rate	H/M/L	m³/min	259/241 / 21.6
	V/s	423/402/363	539/483/422
External Static Pressure	High mode-factory mode	mm(HgPa)	10(98)
Sound Pressure	H/M/L	dBA	29/25/23
Dimensions	Body	WxHxD mm	1,182x298x403
Net Weight	Liquid	kg(lbs)	380(83.8)
Piping Connection	Liquid	mm(inch)	9.53(3/8)
	Gas	mm(inch)	15.88(5/8)
	Drain	I.D.	mm(inch)
Fan motor output x Number		W	350x1

Note: 1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95°F)DB / 24°C(75.7°F)WB

Indoor connecting piping length: 7.5m / Level difference of zero

Heating - Indoor temp. 20°C(68°F)DB / 15°C(59°F)WB

Outdoor temp. 7°C(44.6°F)DB / 6°C(43°F)WB

Indoor connecting piping length: 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification.

Accessories

Model	ARNU28GBGA2	ARNU36GBGA2
Dry Contact	Without Case (1 Contact Point)	PQDSA
	With Case (1 Contact Point)	PQDSB / PQDSB1
	With Case (2 Contact Point)	PQDSBC

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCU0700 (white)	PQRCU0900W	PQRCU1200W (white)	PQRCU1500W (white)	POWERK0P08

High Static Duct

ARNU42GBRK2 ARNU48GBRK2 ARNU54GBRK2



Model		ARNU42GBRK2	ARNU48GBRK2	ARNU54GBRK2
Capacity	Cooling W	12.3	14.1	16
	Heating W	13.0	15.9	18.1
Power Input	Cooling W	368	477	565
	Heating W	368	477	565
Power Supply	a/Hz	1/220-240/50	1/220-240/50	1/220-240/50
Airflow Rate	H/M/L m³/min	40.0 / 38.3 / 35.7	48.0 / 45.3 / 40.0	52.0 / 48.0 / 45.3
	l/s	667 / 638 / 595	800 / 735 / 687	867 / 800 / 755
External Static Pressure	High mode-factory mode mmHg(Pa)	12(118)	12(118)	12(118)
Sound Pressure	H/M/L dB(A)	41/40/39	43/42/41	46/43/42
Dimensions	Body WidthxD	1,230x590x380	1,230x590x380	1,230x590x380
Net Weight	Liquid kg(lbs)	53(117)	53(117)	53(117)
	Liquid mm(inch)	69.52(3.10)	69.52(3.10)	69.52(3.10)
Piping Connection	Gas mm(inch)	Ø15.08(5/8)	Ø15.08(5/8)	Ø15.08(5/8)
	Drain I.D. mm(inch)	25	25	25
Fan motor output Number	W	105x2	105x2	105x2

Note : 1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95°F)DB / 24°C(75.7°F)WB

Intercoupling piping length 7.5m / Level difference of zero

Heating - Indoor temp. 20°C(68°F)DB / 15°C(59°F)WB

Outdoor temp. 7°C(44.6°F)DB / 6°C(43°F)WB

Intercoupling piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification.

Accessories

Model	ARNU42GBRK2	ARNU48GBRK2	ARNU54GBRK2
Dry Contact:	Without Case (1 Contact Point) PQDSA		
	With Case (1 Contact Point) PQDSB / PQDSB1		
	With Case (2 Contact Point) PQDSB2		

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCU050(wht)	PQRCH500W	PQRCH100W (white)	PQRCHCA02WH (white)	POWERHQ050S

High Static Duct

ARNU68GBBK2 ARNU76GBBK2 ARNU96GBBK2



Model		ARNU68GBBK2	ARNU76GBBK2	ARNU96GBBK2
Capacity	Cooling kW	20	22.4	28
	Heating kW	22.5	25.2	31.5
Power Input	Cooling W	550	850	900
	Heating W	550	850	900
Power Supply	a/Hz	1/220-240/50	1/220-240/50	1/220-240/50
Airflow Rate	H/M/L m³/min	77.0 / 67.6 / 67.6	78.0 / 72.1 / 72.1	81.1 / 78.0 / 78.0
	l/s	1,283 / 1,127 / 1,127	1,300 / 1,202 / 1,202	1,352 / 1,300 / 1,300
External Static Pressure	High mode-factory mode mmHg(Pa)	15(147)	18(176)	18(176)
Sound Pressure	H/M/L dB(A)	46/43/43	46/45/45	47/46/46
Dimensions	Body WidthxD	1,562x588x460	1,562x588x460	1,562x588x460
Net Weight	Liquid kg(lbs)	87(192)	87(192)	87(192)
	Liquid mm(inch)	69.52(3.10)	69.52(3.10)	69.52(3.10)
Piping Connection	Gas mm(inch)	Ø19.05(3/4)	Ø19.05(3/4)	Ø22.2(7/8)
	Drain I.D. mm(inch)	25	25	25
Fan motor output Number	W	375x2	375x2	375x2

Note : 1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95°F)DB / 24°C(75.7°F)WB

Intercoupling piping length 7.5m / Level difference of zero

Heating - Indoor temp. 20°C(68°F)DB / 15°C(59°F)WB

Outdoor temp. 7°C(44.6°F)DB / 6°C(43°F)WB

Intercoupling piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification.

Accessories

Model	ARNU68GBBK2	ARNU76GBBK2	ARNU96GBBK2
Dry Contact:	Without Case (1 Contact Point) PQDSA		
	With Case (1 Contact Point) PQDSB / PQDSB1		
	With Case (2 Contact Point) PQDSB2		

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCU050(wht)	PQRCH500W	PQRCH100W (white)	PQRCHCA02WH (white)	POWERHQ050S

Ceiling & Floor

ARNU09GV_EA2 ARNU12GV_EA2



Model	ARNU09GV _E A2	ARNU12GV _E A2
Capacity	Cooling kW	2.0
	Heating kW	0.7
Power/Input	Cooling W	20
	Heating W	30
Power Supply	~V/Hz	1/220-240/50
Airflow Rate	H/M/L m ³ /min	7.6/6.9/6.2
	L/s	127/115/103
Sound Pressure	H/M/L dB(A)	36/32/28
Dimensions	Body WxDxH mm	900x490x200
Net Weight	kg(lbs)	13.7(30.2)
Piping Connection	Liquid mm(inch)	6.35(1/4)
	Gas mm(inch)	12.7(1/2)
	Drain I.D. mm(inch)	16(5/8)

Note: 1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95°F)DB / 24°C(75.7°F)WB

Interconnecting piping length 7.5m / Level difference of zero

Heating - Indoor temp. 20°C(68°F)DB / 15°C(59°F)WB

Outdoor temp. 7°C(46.6°F)DB / 0°C(32.9°F)WB

Interconnecting piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notice/revision.

Accessories

Model	ARNU09GV _E A2	ARNU12GV _E A2
Dry Contact	Without Case (1 Contact Point) PQDS4	
	With Case (1 Contact Point) PQDS8 / PQDS81	
	With Case (2 Contact Point) PQDS8C	

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCUD50(white)	PQRCVS50W	PQRVCUCL00W(white)	PQRCHCA00W(white)	POWERHQ0F08

Ceiling Suspended

URNU18GV_A2 URNU24GV_A2 URNU36GV_A2 URNU48GV_A2



Model	URNU18GV _A 2	URNU24GV _A 2	URNU36GV _A 2	URNU48GV _A 2
Capacity	Cooling kW	5.6	7.1	10.6
	Heating kW	6.3	8.0	11.9
Power/Input	Cooling W	63	63	140
	Heating W	63	63	190
Power Supply	~V/Hz	1/220-240/50	1/220-240/50	1/220-240/50
Airflow Rate	H/M/L m ³ /min	160/140/120	180/160/140	240/220/214
	L/s	267/239/206	300/267/233	410/363/357
Sound Pressure	H/M/L dB(A)	43/40/37	43/41/39	49/46/47
Dimensions	Body WxDxH mm	950x650x220	1250x650x220	1750x650x220
Net Weight	kg(lbs)	24.0(54.2)	24.0(54.2)	35.0(77.2)
Piping Connection	Liquid mm(inch)	6.35(1/4)	9.52(3/8)	9.52(3/8)
	Gas mm(inch)	12.3(1/2)	15.9(5/8)	15.9(5/8)
	Drain I.D. mm(inch)	16(5/8)	16(5/8)	16(5/8)

Note: 1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C(80.6°F)DB / 19°C(66.2°F)WB

Outdoor temp. 35°C(95°F)DB / 24°C(75.7°F)WB

Interconnecting piping length 7.5m / Level difference of zero

Heating - Indoor temp. 20°C(68°F)DB / 15°C(59°F)WB

Outdoor temp. 7°C(46.6°F)DB / 0°C(32.9°F)WB

Interconnecting piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notice/revision.

Accessories

Model	URNU18GV _A 2	URNU24GV _A 2	URNU36GV _A 2	URNU48GV _A 2
Dry Contact	Without Case (1 Contact Point) PQDS4		PQDS4	
	With Case (1 Contact Point) PQDS8 / PQDS81		PQDS8 / PQDS81	
	With Case (2 Contact Point) PQDS8C		PQDS8C	

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCUD50(white)	PQRCVS50W	PQRVCUCL00W(white)	PQRCHCA00W(white)	POWERHQ0F08

Floor Standing with Case

ARNU07GCEA2 ARNU09GCEA2 ARNU12GCEA2
ARNU13GCEA2 ARNU18GCFA2 ARNU24GCFA2



Model	ARNU07GCEA2	ARNU09GCEA2	ARNU12GCEA2	ARNU13GCEA2	ARNU18GCFA2	ARNU24GCFA2
Capacity	Cooling kW	2.2	2.8	3.6	4.5	5.6
	Heating kW	2.5	3.2	4.0	5.0	6.3
Power/Input	Cooling W	30	30	30	30	30
	Heating W	30	30	30	30	30
Power-Supply	a/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Airflow-Rate	H/M/L m³/min	8.5/7.5/6.5	9.5/8.5/7.5	10.5/9.5/8.5	11.5/10.0/9.5	16.0/14.0/12.0
	H/L	142/125/108	158/142/125	175/158/142	192/167/158	180/160/140
Sound Pressure	H/M/L dB(A)	35/33/31	36/34/32	37/35/33	38/37/35	40/37/34
Dimensions	Body WxDxH mm	1,057 x 635 x 203	1,057 x 635 x 203	1,067 x 635 x 203	1,245 x 635 x 203	1,245 x 635 x 203
Net Weight	kg/(set)	27(39.5)	27(39.5)	27(39.5)	26(39.0)	34(52.0)
Piping Connection	Liquid mm/inch	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)
	Gas mm/inch	12.7(1/2)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.9(5/8)
Drain	ID. mm/inch	12(15/32)	12(15/32)	12(15/32)	12(15/32)	12(15/32)

Note: 1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C/20.6°F/80 / 19°C/66.2°F/60
Outdoor temp. 35°C/95°F/80 / 24°C/75.2°F/60
Interconnecting piping length 7.5m / Level difference of zero

Heating - Indoor temp. 20°C/68°F/60 / 15°C/59°F/60

Outdoor temp. 7°C/44.6°F/30 / 6°C/42.9°F/30
Interconnecting piping length 7.5m / Level difference of zero

2. Due to our policy of innovation some specifications may be changed without notification.

Accessories

Model	ARNU07GCEA2	ARNU09GCEA2	ARNU12GCEA2	ARNU13GCEA2	ARNU18GCFA2	ARNU24GCFA2
Dry Contact	Without Case (1 Contact Point) PQDSA					
	With Case (1 Contact Point) PQDSB / PQDSB1					
	With Case (2 Contact Point) PQDSC					

Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCLD50(white)	PQRCSL00W	PQRCLC00W(white)	PQRCHCA00W(white)	PWRH00F08

Floor Standing without Case

ARNU07GCEU2 ARNU09GCEU2 ARNU12GCEU2
ARNU13GCEU2 ARNU18GCFU2 ARNU24GCFU2



Model	ARNU07GCEU2	ARNU09GCEU2	ARNU12GCEU2	ARNU13GCEU2	ARNU18GCFU2	ARNU24GCFU2
Capacity	Cooling kW	2.2	2.8	3.6	4.5	5.6
	Heating kW	2.5	3.2	4.0	5.0	6.3
Power/Input	Cooling W	30	30	30	30	30
	Heating W	30	30	30	30	30
Power-Supply	a/V/Hz	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50	1/220-240/50
Airflow-Rate	H/M/L m³/min	65/75/65	95/85/75	105/95/85	115/100/85	160/140/120
	H/L	142/125/108	158/142/125	175/158/142	192/167/158	180/160/140
Sound Pressure	H/M/L dB(A)	35/33/31	36/34/32	37/35/33	38/37/35	40/37/34
Dimensions	Body WxDxH mm	978 x 639 x 190	978 x 639 x 190	978 x 639 x 190	1,256 x 639 x 190	1,256 x 639 x 190
Net Weight	kg/(set)	20(44.1)	20(44.1)	20(44.1)	20(44.1)	27(59.5)
Piping Connection	Liquid mm/inch	6.35(1/4)	6.35(1/4)	6.35(1/4)	6.35(1/4)	9.52(3/8)
	Gas mm/inch	12.7(1/2)	12.7(1/2)	12.7(1/2)	12.7(1/2)	15.9(5/8)
Drain	ID. mm/inch	12(15/32)	12(15/32)	12(15/32)	12(15/32)	12(15/32)

Note: 1. Capacities are based on the following conditions:

Cooling - Indoor temp. 27°C/20.6°F/80 / 19°C/66.2°F/60

Outdoor temp. 35°C/95°F/80 / 24°C/75.2°F/60

Interconnecting piping length 7.5m / Level difference of zero

Heating - Indoor temp. 20°C/68°F/60 / 15°C/59°F/60

Outdoor temp. 7°C/44.6°F/30 / 6°C/42.9°F/30

3. Due to our policy of innovation some specifications may be changed without notification.

Accessories

Model	ARNU07GCEU2	ARNU09GCEU2	ARNU12GCEU2	ARNU13GCEU2	ARNU18GCFU2	ARNU24GCFU2
Dry Contact	Without Case (1 Contact Point) PQDSA					
	With Case (1 Contact Point) PQDSB / PQDSB1					
	With Case (2 Contact Point) PQDSC					

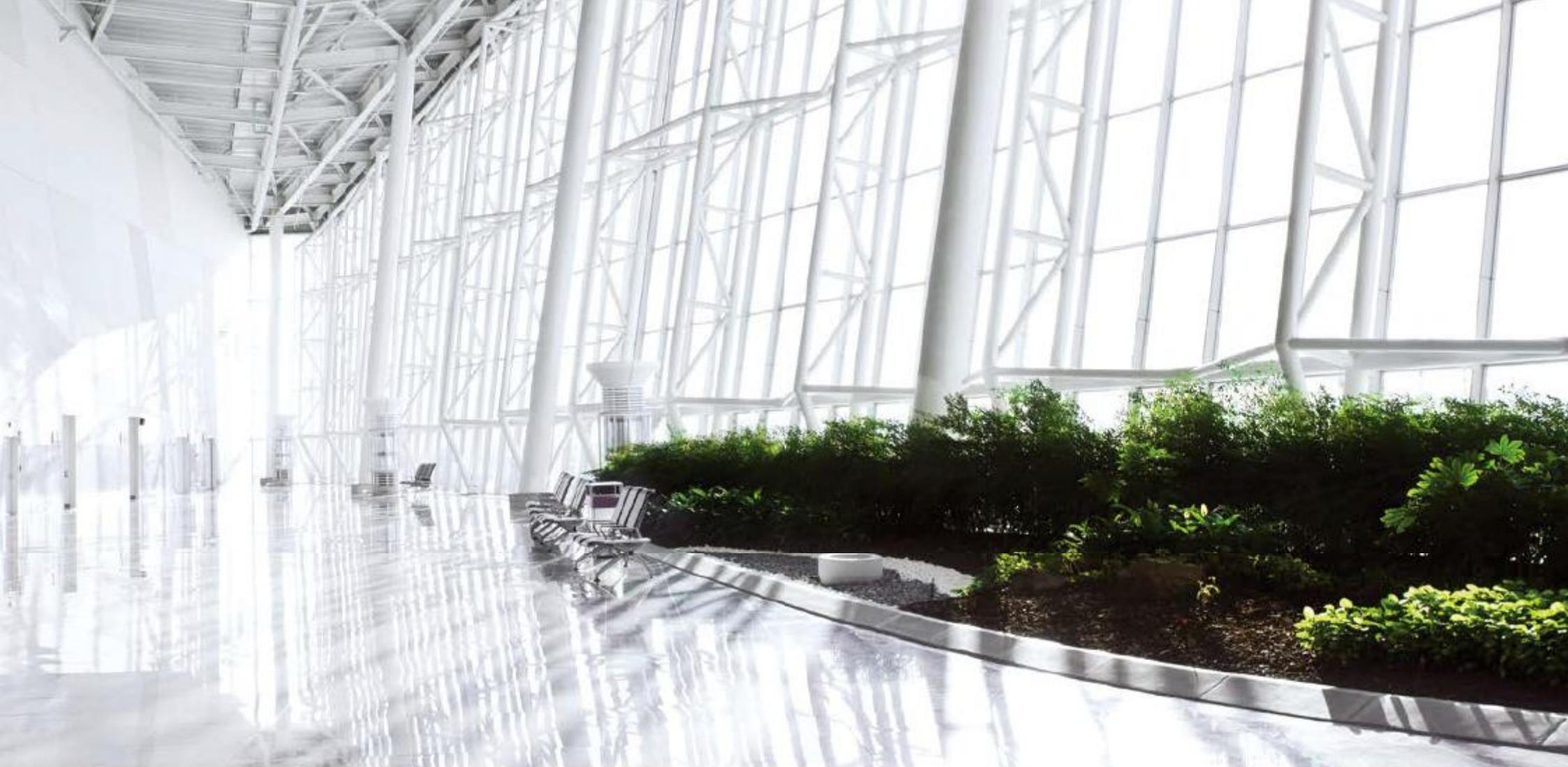
Wired Remote Controller				Wireless Remote Controller
Deluxe Type	Standard Type	Simple Type	Simple Type for Hotel	
PQRCLD50(white)	PQRCSL00W	PQRCLC00W(white)	PQRCHCA00W(white)	PWRH00F08

FUNCTIONS



	Art Cool	Mirror	Standard	4way Cassette
 				
			-	
NED Plasma Air Purifying System		-	-	-
Jet Cool		-	-	-
Dehumidification		-	-	-
Hot Start (Heat pump only)		-	-	-
Child Lock Function (Wired remote controller only)		-	-	-
Soft Dry Operation Mode			-	-
Low Standby Power		-	-	-
Group Control (Wired remote controller only)		-	-	-
Auto Changeover (MULTI V Heat Recovery only)		-	-	-
Auto Clean		-	-	-
Sleep Mode Auto Operation		-	-	-
Auto Restart		-	-	-
4-Way Air Deflection				-
Swirl Swing		-	-	-
Weekly Program (Wired remote controller only)		-	-	-
Two Thermistor Control (Wired remote controller only)		-	-	-
Changeable Panel		-	-	
Second Remote Control		-	-	-

*Requires AC Smart Premium, PQCSW421EBA, to perform this function.

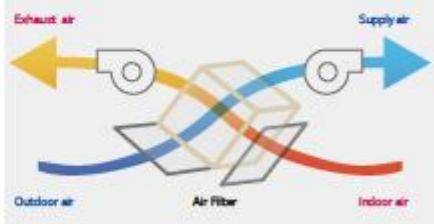


MULTI V series Offers outstanding energy savings, easy installation and connection to many different types of indoor units, making it easy to design and install.

076 eco V

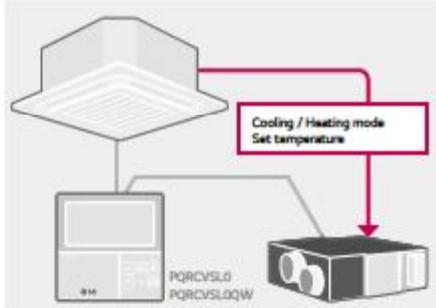
High Efficiency Heat Exchanger

Efficiency and comfort is ensured through the high-efficiency energy recovery central core which recovers energy from the indoor air and transfers it to the fresh incoming air without mixing air stream.



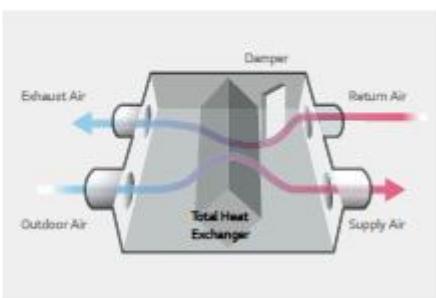
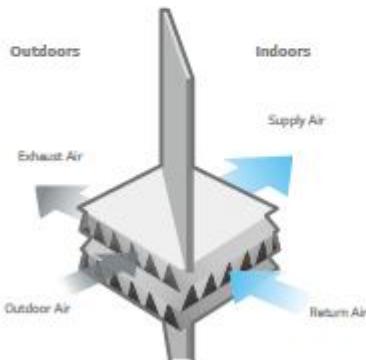
Interlocking with Air Conditioning System

- ECO V can be interlocked with air conditioners or controlled individually.
- This function can be operated when the system is connected with a remote control.



Compulsory Exhausting System

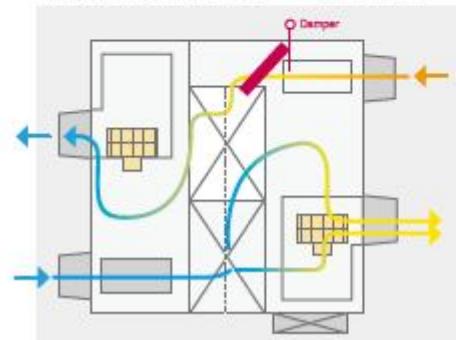
The exhausting system using high static and sirocco fan removes contaminants effectively from indoor air. Supply and exhaust air flows are completely separated in the total heat exchanger. ECO V can filter out the impurities before supplying outdoor air and make indoor air fresh and healthy.



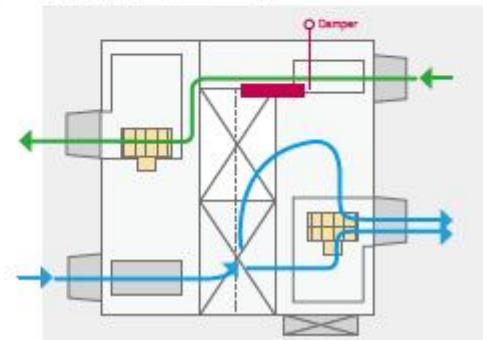
Bypass Ventilation

ECO V automatically switches the ventilation mode (Enthalpy Heat Exchange Mode / Bypass Mode) according to the indoor/outdoor temperature. (Only applied to 500 CMH models or above)

Enthalpy Heat Exchange Mode (Summer / Winter)



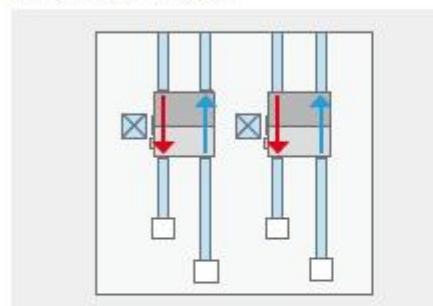
Bypass Mode (Seasonal Change)



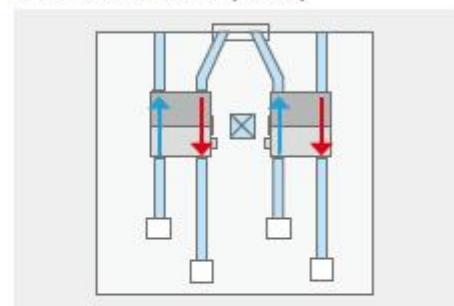
Flexibility of Installation

It's possible to install ECO V upside down when you need only one inspection hole.

Normal Installation of 2 units



Reverse Installation of 1 unit (Left unit)

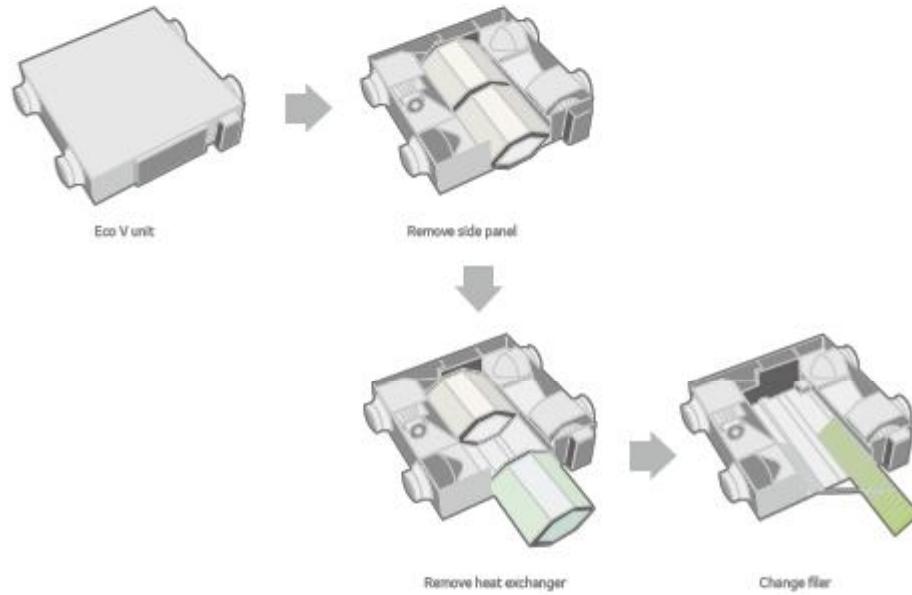


Inspection chamber



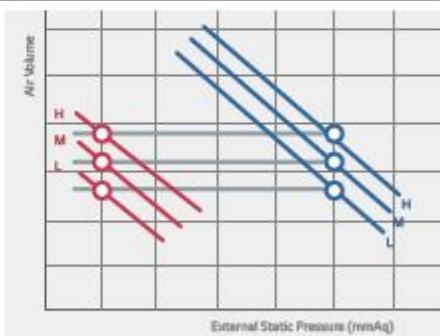
Easy Cleaning and Filter Change

It is easy and convenient to change and clean the filter. (Only applied to 500 CMH models or above)



eTuning (External Static Pressure Control)

The high static pressure fan can control the air volume depending on the length of the duct. It is also easy to control the pressure level by using the remote controller for a more flexible duct installation and easier testing.



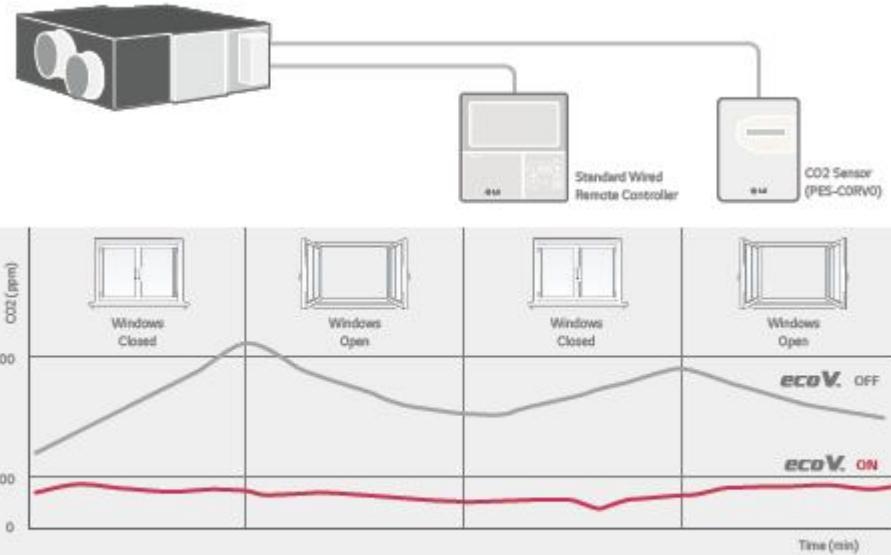
Fast Ventilation Mode

Fast ventilation mode prevents the spread of contaminants under negative indoor pressure, and makes indoor air fresh and comfortable quickly.



CO₂ Concentration Control

Using CO₂ sensor, ECO V controls exhaust air flow automatically to keep indoor air fresh under settled CO₂ concentration.





LZ-H025GBA2 / LZ-H035GBA2



LZ-H050GBA2



LZ-H080GBA2 / LZ-H100GBA2



LZ-H150GBA2 / LZ-H200GBA2

Model		LZ-H025GBA2	LZ-H035GBA2	LZ-H050GBA2
Normal Capacity	CMM(CFM)	250(147)	350(204)	500(294)
Power Supply	W/V/Hz		1,220-240, 50-60	
Step	SHAWL	-	SUPER-HIGH / HIGH / LOW	
Current	SHAWL	Amps	1.04/0.97/0.7	1.73/1.58/1.77
Power Input	SHAWL	W	110/105/75	200/190/80
Air Flow	SHAWL	CMM(CFM)	250/250/150 (147/147/88)	350/350/210 (206/206/134)
ECO V Mode	External Static Pressure	SHAWL	Pa(m²g)	130/130/110 (0.60/0.52/0.44)
	Temperature Exchange Efficiency	SHAWL	%	80/80/85
	Enthalpy Exchange Efficiency	SHAWL	%	70/70/78
	Heating(SHAWL)	%	80/80/85	73/73/77
	Cooling(SHAWL)	%	64/64/68	78/78/83
	Noise Level [Sound Level, 1.5m]	SHAWL	dBA	32/28/21
				33/28/23
	Step		-/-/-	SUPER-HIGH / HIGH / LOW
	Current		-/-/-	1.92/1.58/0.79
	Power Input		-/-/-	230/220/85
Bypass Mode	Air Flow		-/-/-	500/500/320 (294/294/134)
	External Static Pressure		-/-/-	150/100/50 (0.60/0.40/0.20)
	Noise Level [Sound Level, 1.5m]		-/-/-	34/35/25
Heat Exchanger	Type	dBA	Crossflow	
Net Weight		kg(k)	230(70.5)	
Dimension	Width(D)	mm (inch)	750x290x680(29.52x9.84x26.77)	
Duct Work	Qty	EA	4	
	Size(d)	mm (inch)	a150(a5.91)	
Supply Air Fan	Qty	EA	1	
	Type	-	Direct-Drive	
Exhaust Air Fan	Qty	EA	1	
	Type	-	Direct-Drive	
Filters	Qty	EA	2	
	Type	-	Cleanable	
	Size(WxDxH)	mm (inch)	600x10x150(23.62x0.39x5.91)	
Remote Controller	W		PQRCVSL0 / PQRCVSL0QW	
Dry Contact			PQDSB / PQDSB1	

Notes:

1. eco V Mode – Enthalpy Heat Recovery Ventilation mode

2. Noise level:

- The operating conditions are assumed to be standard.

- Sound measured at 1.5m below the center the body.

- Sound level will vary depending on a range of factors such as the construction/acoustic absorption coefficient of particular room in which the equipment is installed.

Wired Remote Controller

Standard Type



PQRCVSL0QW

Model		LZ-H080GBA2	LZ-H100GBA2	LZ-H150GBA2	LZ-H200GBA2
Normal Capacity	CMM(CFM)	800(471)	1,000(589)	1,500(883)	2,000(1,177)
Power Supply	W/V/Hz		1,220-240, 50-60		
Step	SHAWL	-	SUPER-HIGH / HIGH / LOW		
Current	SHAWL	Amps	2.77/2.16/1.44	3.41/2.91/1.76	5.6/5.4/2.9
Power Input	SHAWL	W	360/370/165	470/385/210	720/540/340
Air Flow	SHAWL	CMM(CFM)	800/800/660 (471/471/388)	1,000/1,000/800 (589/589/471)	2,000/2,000/1,600 (883/883/706)
ECO V Mode	External Static Pressure	SHAWL	Pa(m²g)	160/90/50 (0.64/0.44/0.20)	200/110/60 (0.64/0.44/0.34)
	Temperature Exchange Efficiency	SHAWL	%	79/79/82	75/75/78
	Enthalpy Exchange Efficiency	SHAWL	%	70/70/75	66/66/71
	Heating(SHAWL)	%	80/80/85	70/70/75	61/61/66
	Cooling(SHAWL)	%	65/65/70	65/65/70	61/61/66
	Noise Level [Sound Level, 1.5m]	SHAWL	dBA	36/34/30	37/35/31
					39/37/33
	Step		-/-/-	SUPER-HIGH / HIGH / LOW	
	Current		-/-/-	2.77/2.16/1.44	3.41/2.91/1.76
	Power Input		-/-/-	360/370/165	470/385/210
Bypass Mode	Air Flow		-/-/-	800/800/660 (471/471/388)	1,000/1,000/800 (589/589/471)
	External Static Pressure		-/-/-	200/110/60 (0.64/0.44/0.20)	160/90/50 (0.64/0.44/0.20)
	Noise Level [Sound Level, 1.5m]		-/-/-	36/34/30	37/35/31
Heat Exchanger	Type	dBA	Crossflow		
Net Weight		kg(k)	60(13.2)		140(30.6)
Dimension	Width(D)	mm (inch)	1,062x365x1,140(41.9x14.4x44.9)		1,313x737x1,140(51.7x29.0x44.9)
Duct Work	Qty	EA	4		4+2
	Size(d)	mm (inch)	a250(a9.84)		a250(a9.84)+a350(a13.77)
Supply Air Fan	Qty	EA	1		2
	Type	-	Direct-Drive		
Exhaust Air Fan	Qty	EA	1		2
	Type	-	Direct-Drive		
Filters	Qty	EA	2		4
	Type	-	Cleanable		
	Size(WxDxH)	mm (inch)	600x10x150(23.62x0.39x5.91)		1,056x10x212.5(41.57x0.39x8.37)
Remote Controller	W		PQRCVSL0 / PQRCVSL0QW		PQDSB / PQDSB1
Dry Contact					

Notes:

1. eco V Mode – Enthalpy Heat Recovery Ventilation mode

2. Noise level:

- The operating conditions are assumed to be standard.

- Sound measured at 1.5m below the center the body.

- Sound level will vary depending on a range of factors such as the construction/acoustic absorption coefficient of particular room in which the equipment is installed.

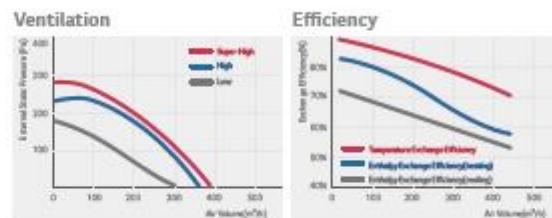
Wired Remote Controller

Standard Type

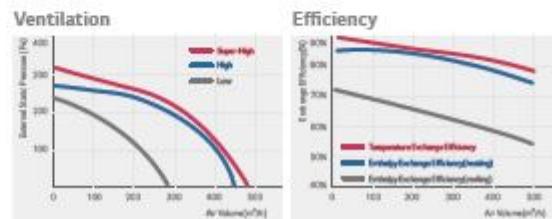


PQRCVSL0QW

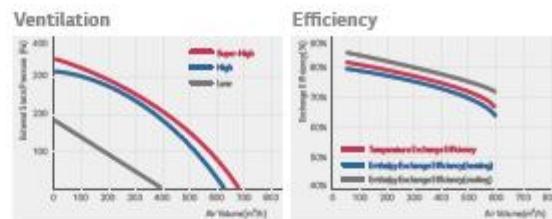
LZ-H025GBA2



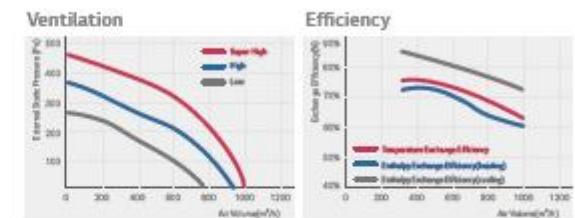
LZ-H035GBA2



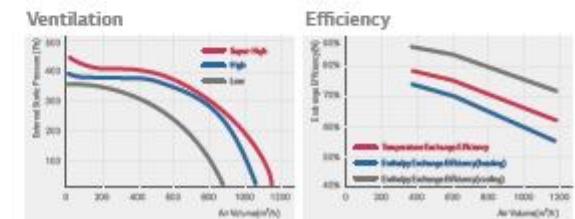
LZ-H050GBA2



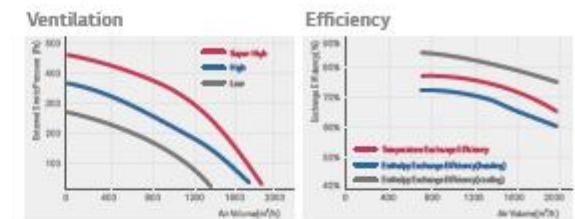
LZ-H080GBA2



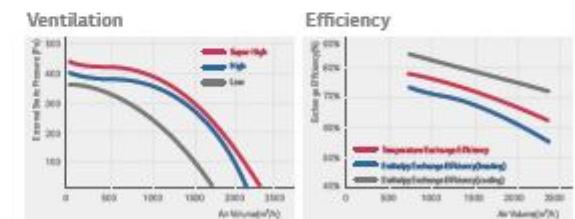
LZ-H100GBA2



LZ-H150GBA2



LZ-H200GBA2





ACCESSORIES

MULTI V series Offers outstanding energy savings, easy installation and connection to many different types of indoor units, making it easy to design and install.

086 Air Conditioner Control System

124 Mechanical Accessories

131 Piping Accessories

ACCESSORIES

Air Conditioner Control System LINE UP

Remote Controller				Central Controller	Central Controller		Gateway		Electronic Accessories
Wired Remote Controller			Wireless Remote Controller	Simple Control Controller	AC	ACP & AC Manager Plus	Building Network Unit	PI 485 & DO Kit	
Standard	Deluxe	Simple	Premium						

REMOTE CONTROLLER

Standard Wired
Remote Controller

> Page 89



Deluxe Wired
Remote Controller

> Page 90



Simple Wired
Remote Controller

> Page 91



Wireless
Remote Controller

> Page 92



Premium Wired
Remote Controller

> Page 93



Remote Controller Line Up

Categories	PQRCVSL0QW	PQRUD50	PQRCVCL0QW	PQRCHCA0QW	PQWVH09FD8 (HP)	PREMIA000
On / Off	○	○	○	○	○	○
Fan speed	○	○	○	○	○	○
Temperature setting	○	○	○	○	○	○
Mode change	○	○	○	-	○	○
Auto swing	○	○	○	○	○	○
Vane control(Lower direction)	○	○	○	-	○	○
E.S.P function	○	○	○	○	-	○
Reservation	○	○	-	-	○	○
Timer Function	○	○	-	-	○	○
Electric failure compensation	○	-	-	-	-	50 hours
Child lock	○	○	○	○	-	○

STANDARD WIRED REMOTE CONTROLLER

Providing easy control of one or a group of indoor units to various applications

PQRCVSL0QW



PQRCVSL0QW
(White)

Features

Categories	PQRCVSL0QW
Operating mode	On/Off / Fan speed / Mode / Temp.
Max. no. of indoor units	16 indoor units
On / OFF LED	○
Room temp.	○
Fan / Plasma / Swirl / Heater	○
Vane control(Lower direction) / Auto swing / Fan auto	○
E.S.P function	○
Reservation	On/Off / Weekly / Simple / Sleep / Holiday
Timer function	○
Child lock	○
Electric failure compensation	Max 3 hours
Wireless remote receiver	○
Main/Sub setting of indoor units (For override function)	Applicable for MUUT V II and IV series.
2 Controllers to 1 indoor unit	Applicable for MUUT V II and IV series.
Group and central control at the same time	Applicable for MUUT V II and IV series.
Ventilation mode setting	Applicable for ECO V II series.
Rapid ventilation	Applicable for ECO V II series.
Power saving ventilation	Applicable for ECO V II series.
Size(mm)	120 x 121 x 16
Backlight Unit	○

* Terminal block included. (Applied to models produced since '10 Nov.)

* Refer to each model PDB for applicable model's.

DELUXE WIRED REMOTE CONTROLLER

Touch screen with a premium design for high end interior designs

PQRCUDSO



PQRCUDSO
(White)

Features

Categories	PQRCUDSO
Operating mode	On/OFF / Fan speed / Mode / Temp.
Touch screen / LCD back light	□
Room temp	□
Fan / Plasma / Swing / Heater	□
Vane control(Louver direction) / Auto swing	□
E.S.P function	□
Reservation	Weekly / Simple
Timer function	□
Child lock	□

* Refer to each model PDD for applicable models.

SIMPLE WIRED REMOTE CONTROLLER

A simple way to control office or hotel systems in a compact design

Simple
PQRCVCL0QW (White)

Simple for Hotel
PQRCHCA0QW (White)



PQRCVCL0QW
PQRCHCA0QW

Features

Categories	PQRCVCL0QW	PQRCHCA0QW
Operating mode	On/Off / Fan speed / Mode / Temp.	On/Off / Fan speed / Mode / Temp.
Room temp	□	□
Child lock	□	□
Mode Change	Cooling / Heating / Fan / Dehumidify / Auto	Only changeable by central controller
Backlight	□	□

* Refer to each model PDD for applicable models.

WIRELESS REMOTE CONTROLLER

Wireless control to operate air conditioners more conveniently

PQWRHQ0FDB (H/P)



Features

Model name	PQWRHQ0FDB (H/P)
Operating mode	On/Off / Fan speed / Mode / Temperature
Room temperature checking	○
Chaos swing / Jet cool	○
On/Off timer	○
Sleep mode auto	○
Main / Sub setting of indoor units (For override function)	Applicable for MULTI V (I, II and IV series).

* Refer to each model block for applicable models.

Applicable Models

Model name	PQWRHQ0FDB (H/P)
CST, SBAC, CVT, Duct*, Floor Standing	○

* Combination with other remote controllers for various indoor units.

* All Duct products can be controlled through wireless remote controller when wired remote controller is installed.

PREMIUM WIRED REMOTE CONTROLLER

Simple full touch screen with a premium design

PREMTA000

* Available from July



Features

- 1) Self administration function for Energy saving
 - Air-conditioning saving mode / Continuous operation time limit / Electricity consumption monitoring.
 - Weekly / Monthly / Yearly Trend / Target setting alarm.
 - Temperature scope locking (cooling / heating)
- 2) User friendly design
 - Full touch type / Intuitive UI&GUI design / Display Configuration.
- 3) Enhanced schedule function
 - Yearly schedule function / Schedule pattern
- 4) Various localized function mode
 - 2 Set point / Setback / Override / 8 Zone Control / Summer Time.

Model name	PREMTA000
Operating mode	On/Off / Fan speed / Mode / Temperature
Maximum number of indoor units	16
On/Off LED	○
Room temperature	○
Fan / Plasma / Swing / Heater	○
Vane control (Lower direction) / Auto swing / Fan auto	○
E.S.P (External Static Pressure) function	○
Reservation	Timer (simple/sleep) / Daily(On/Off) / Weekdays / Weekly / Holiday
Time function	○
Child lock	○ / All / Individual (On/Off, Mode, Temperature)
Electric failure compensation	90 hours
Wireless remote receiver	○ (Only for ceiling duct type indoor unit)
Main/Sub setting of indoor units (For override function)	Applicable for MULTI V, I, II and IV series.
2 Controllers to 1 indoor unit	* Applicable for after MULTI V/I Series Indoor unit.
Group and central control at the same time	Applicable for MULTI V, I, II and IV series.
Ventilation mode setting	Applicable for ERV E series.
Rapid ventilation	Applicable for ERV E series.
Power saving ventilation	Applicable for ERV E series.
Dimensions (W X H X D, mm)	137 x 123 x 165
Display	5" TFT color LCD (480 x 272)
Touch type	RESISTIVE touch panel

* Must check compatibility between indoor unit and remote controller before installation with 2 controllers to 1 indoor unit function (see user/installer manual for this product).

CENTRAL CONTROLLER



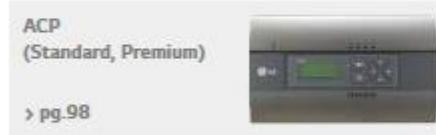
AC EZ

> pg.95



AC Smart Premium

> pg.96



ACP
(Standard, Premium)

> pg.98



AC Manager Plus

> pg.100

AC EZ

In addition to On/Off control, more functions such as operation mode, fan speed, and scheduling can be run and monitored

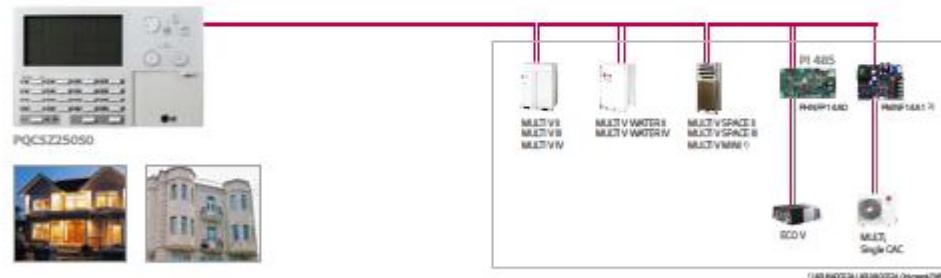
PQCSZ250S0



Features

Category	PQCSZ250S0
Max. Indoor unit to control	32 Indoor Units
Individual Control	On/Off / Operation Mode / Fan Speed / Temp
Lock function	General
Mode change	Cooling / Heating / Fan / Dehumidification / Auto
Schedule	Based schedule
Ventilation control	On/Off / Ventilation Mode / Rapid Ventilation
Display (All Indoor status indication)	Operation, Set temp, Room Temp, Schedule
Size(mm)	190x120x17
Power	DC 12V

Combination



Central Controller Line Up

Categories	PQCSZ250S0	PQCSW421EOA	PQCP22W0 PQCP22A0	PQCSA21E0
On / Off	○	○	○	○
Max. no. of indoor units	32(16/16)	128	256	8,192
Mode change	○	○	○	○
Control of each room	○	○	○	○
Total lock	○	○	○	○
Error check	LED/LCD display	Self-diagnosis	Self-diagnosis	Self-diagnosis
Fan speed /Temperature control	○	○	○	○
Schedule	Weekly	Weekly / Yearly	Weekly / Yearly	Weekly / Yearly
Ventilation control	○	○	○	○
PDI Monitoring	-	○	○	○
Web access	-	○	○	○
Set temp. range restriction	-	○	○	○
Auto Changeover	-	○	○	○
Temperature limit control	-	○	○	○
History	-	○	○	○
Interlocking function	-	○	-	○
Multi language	-	○	-	○
Visual Navigation	-	○	-	○

AC SMART PREMIUM

New AC Smart Premium provides a user-friendly GUI with 10.2 inch screen

PQCSW421E0A



Home Screen

- Visual Navigation
- User friendly GUI
- Screen size up(10.2inch) and Resolution(1024*600)
- 2 D/I and 2 D/O ports for interlocking function
- Energy bill calculation function
- 2 Point Setback
- 2 Point Auto Changeover
- E-mail of Statistics

Control / Monitoring

Controls and monitors the operation status of the air conditioner / ventilator devices.

Schedule

Operates the air conditioners, ventilators, AHU, AWHP, Hydro Kit and DO Kit connected to AC Smart Premium according to the schedule.

Automation control

- Peakpower : Sets a peak operation rate so that the air conditioner doesn't exceed the set value.
- Demand : Sets the demand power control function that monitors power consumption of the air conditioner indoor units in real time, so that the target power consumption amount is not exceeded.

Statistics

Displays power consumption or usage of the air conditioners.

Report

Displays the history of any errors that have occurred in the airconditioners.

Device Setting

Registers, modifies or deletes air conditioners, ventilators, AHU, AWHP, Hydro Kit and DO Kit connected to AC Smart Premium.

Configure

General contents, user accounts, network, E-mail account, set up TMS contents etc.

Improved web functions / Intuitive GUI design

With its user-friendly Web GUI, AC Smart Premium shows current status of air-conditioners and summary of schedule.



Energy report

AC Smart premium shows statistical data about indoor units (Operation hours / Power consumption).



Visual Navigation

Floor plan (jog format) can be edited according to the air-conditioner's location and shows the status.



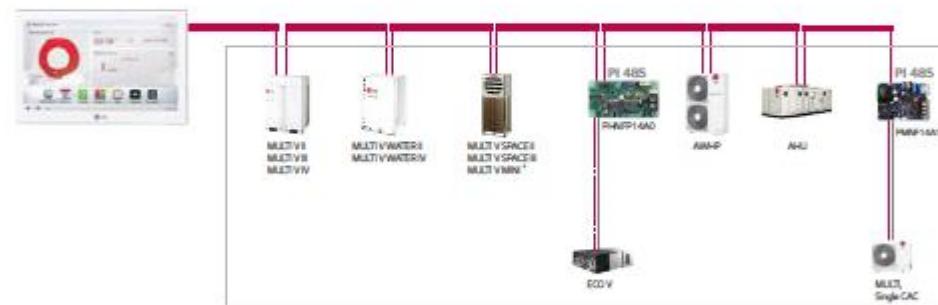
AHU Control

AC Smart Premium provides various control functions to users.



Combination

It is possible to control the unit (IDU, Ventilator, on/off, AWHP, Hydro Kit, ECO V DX, AHU) and register the units.



ACP (STANDARD / PREMIUM)

With its Linux based web server, users can control up to 256 indoor units or 128 ECO V units for functions such as temperature setting, schedule, peak, power control, etc

Standard

PQCPC22N0

Premium

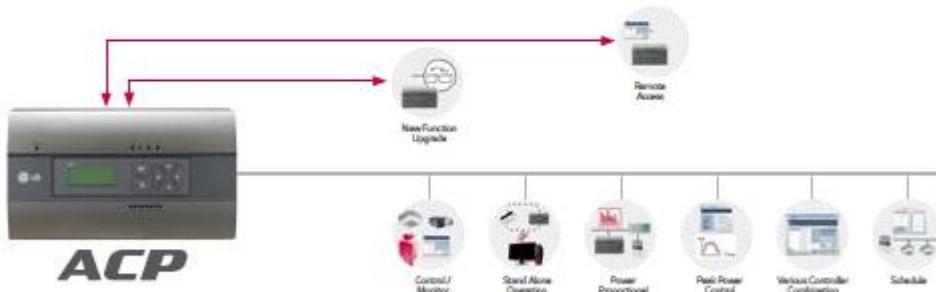
PQCPC22A0

Product Name	ACP Standard	ACP Premium
External I/O Port No.	D/I 2, D/O 2	D/I 10, D/O 4
Interfacing Products	Air conditioner/ ECO V/ECO V DX/ AHU/Hybrid kit	Air conditioner/ ECO V/ECO V DX/ AHU/Hybrid kit/AHU

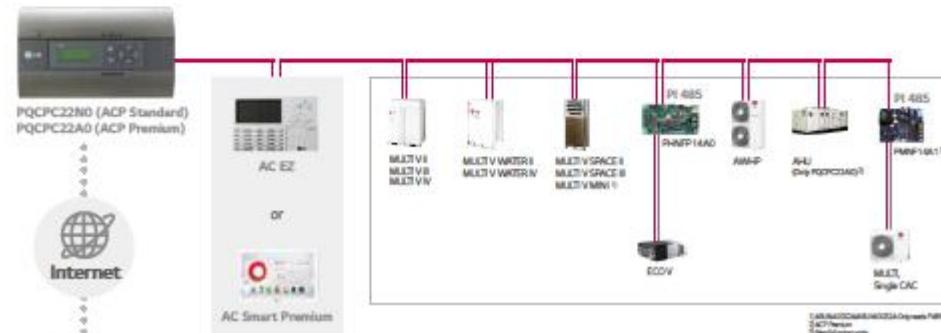


Features

Categories	PQCPC22N0 / PQCPC22A0
Max. no. of indoor units	256 indoor units
Control / Monitoring	○
Schedule management	○
Lock function	○
Temperature range restriction	Mode, Temperature, Fan 18°C ~ 30°C
Temperature limit function	○
Auto Changeover function	○
History function	Error history
Peak control	○
PDI monitoring	Need of PCI
Auto Address Setting Function	○ (With AC Manager Plus only)
Statistics function	○ (With AC Manager Plus only)
Peak Priority function	○
ECO V, ECO V DX Control	○



Combination



AC MANAGER PLUS

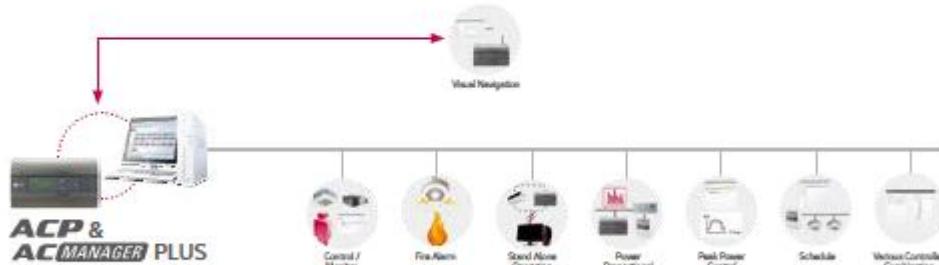
Provides efficient control and monitoring system for up to 8,192 indoor units by connecting 32 ACPs

PQCSSA21E0

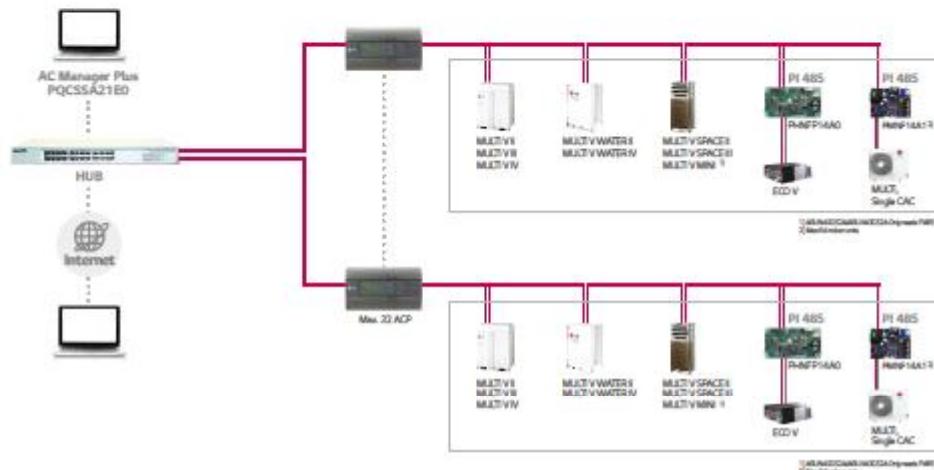


Features

Categories	PQCSSA21E0
Max.no. of indoor units	8,192 indoor units (32 ACP)
Control / Monitoring	○
Schedule management	○
Lock Function	Model/Temp/Fan speed/Total
Temperature range restriction	○
Temperature limit Function	○
Auto Changeover function	○
History function	Monitoring & Error History
Peak control	○
PCI monitoring	Need of PCI
Printing function	○
Statistics Function	○
Time limit function	○
ECO V, ECO V DX Control	○
Peak Priority function	○
Interlocking function	○
AHU Control Function	○
Hydro IIC, AWHP Control	○



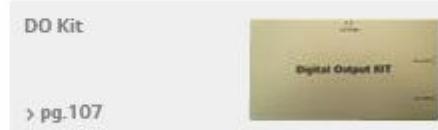
Combination



ACP & AC MANAGER Plus Application



GATEWAY



BNU-LW BMS Gateway

LONWORKS®

Interface between BMS and LG Air-Conditioners

PLNWKB000

Interface between BMS and LG Air-Conditioners

- LonMark certified : Operation system based on LNS(LonWorks® Network Service)

Control various types of equipment from the customer's own PC.

- With its Linux based web server; users can control functions such as temperature setting, schedule, peak, power control, etc.



Features

- Connect to use LonWorks® protocol and LG Air-conditioner protocol
- Process ability**
 - EHP Type : 64 unit (Indoors, ventilators and AWHP)
 - AHU Type : 16 unit (AHU)
- Self Installation verification function using Internet (Web server Included)**
 - Setting gateway
 - Diagnosis of communication status on LG Air-conditioner network
- Connection to remote total management system (LG system)
- Offers ACP Function (Central Controller) which allows the customer to efficiently control various types of equipment from the customer's own PC.

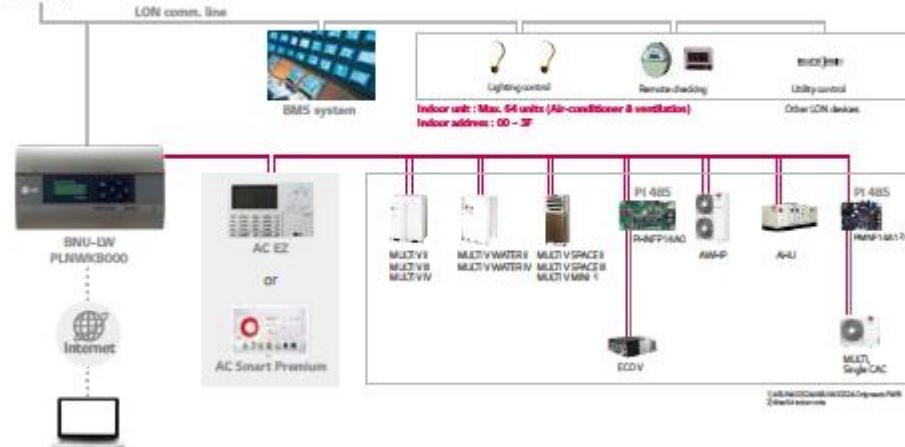
For more information, see 131 page

Controlling	Monitoring
On/Off command	On/Off status report
Operation mode setting	Operation mode status report
Fan Speed setting	Fan Speed status report
Lock setting	Lock status report
Air flow setting	Air flow status report
Set temp. setting	Set temp. status report
-	Current Space temp. status report
-	Error status report
User mode setting (for airconditioner)	User mode status report (for airconditioner)

Combination

LonWORKS®

Network



BNU-BN BMS Gateway

BACnet

Interface between BMS and LG Air-Conditioners

- BTL certified : Operation system based on BACnet Service.

PQNFB17C0

Improved BMS connection

- With its Linux based web server; users can control up to 256 indoor units or 128 ECO V units for functions such as temperature setting, schedule, peak, power control, etc.



Features

- Through embedded web control function in BAC net, one can access the air conditioner and external devices through BMS.
- ACP New platform & Smart base GUI driven
- 256 Indoor unit, 236 Eco-v unit, 256AWHP unit, 16 AHU (Max 256)
- Compatible with AC EZ and AC Smart Premium
- External devices such as fire alarm, motion detector can be connected to gateway and their function can be interlinked with air conditioner operation using BACnet.
- Compatible with MULTIV, Multi, Single system & AWHP
- Supports a 1°F control
- BTL certification (B-ASC)
- Offers ACP Function (Central Controller) which allows the customer to efficiently control various types of equipment from the customer's own PC.

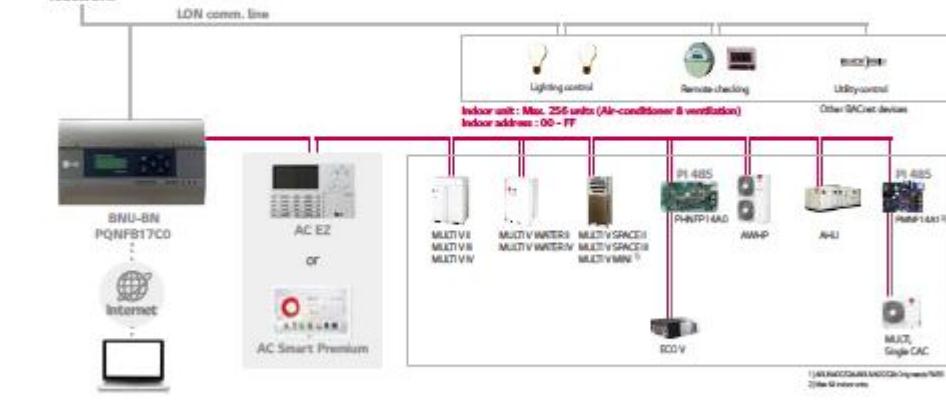
For more information, see 131 page

Controlling	Monitoring
On/Off command	On/Off status report
Operation mode setting	Operation mode status report
Fan Speed setting	Fan Speed status report
Lock setting	Lock status report
Air flow setting	Air flow status report
Set temp. setting	Set temp. status report
-	Current Space temp. status report
-	Error status report
User mode setting (for airventilator)	User mode status report (for airventilator)
-	Assumeable power distribution status report
Upper limit temp. setting	Upper limit temp. status report
Lower limit temp. setting	Lower limit temp. status report
Mode lock setting	Mode lock status report
AC operation mode setting (ECO V DR only)	AC operation mode status report (ECO V DR only)
AC On/Off command (ECO V DR only)	AC On/Off status report (ECO V DR only)

Combination

BACnet

Network



PI 485

PI 485 converts the air conditioner's protocol to the RS485 protocol for the central controller

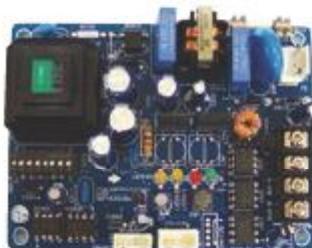
PMNFP14A1

PHNFP14AO

PSNFP14AO



Features



- Model name : PMNFP14A1
- Power : Single phase AC 220V 50/60Hz
- 1 for each outdoor unit (max 64 indoor units)
- MULTI V MINI (ARUN40GS2A/ARUV40GS2A Only needs PI485)
- SCAC
- MULTI
- AWHP



- Model name : PHNFP14AO
- Power : Connected with the indoor units
- 1 for each unit
- Eco V



- Model name : PSNFP14AO
- Power : Connected with the indoor units
- 1 for each indoor unit
- Non-inverter products

* Provided with a case to be installed on the exterior

* MULTI V & I&W Series don't need any other PI 485 because MULTI V & I&W series have PI 485 in its outdoor unit PCB

DO KIT

Connected between AC Manager Plus (or ACP, AC Smart) and external devices, which can switch On/Off devices such as light, pump, motor, etc

PQNFP00TO



Features

- When the product input is less or equal to 25A

(The device is controlled by turning On/Off the power supply line of the product.)



1. Pull out the power or shut down the breaker.
2. Connect the power line from the breaker to the additional relay cable.
3. Connect the device power line to the additional relay cable.
4. Finish the connected area with the insulating tape.

- When the product input is greater or equal to 25A

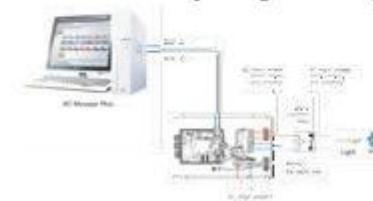
(The device is controlled by turning On/Off the indoor/outdoor communication line.)



1. Pull out the power or shut down the breaker.
2. Cut the communication line
3. Connect the cut communication line to the additional relay cable.
4. Finish the connected area with the insulating tape.

- When the product input is greater than or equal to 25A

(The device is controlled by turning On/Off the power supply line of the product through a field-supplied relay)



1. Pull out the power or shut down the breaker.
2. Connect the power line from the breaker to the additional relay cable.
3. Connect the field-supply relay power line to the additional relay cable.
4. Connect the device power line to the field-supply relay.
5. Finish the connected area with the insulating tape.

ACS ELECTRONIC ACC.

PDI

> pg.110



Dry Contact

> pg.114



Cool / Heat Selector

> pg.121



PDI Premium

> pg.112



Remote Temperature Sensor

> pg.120



Group Control Wire

> pg.122



PDI (POWER DISTRIBUTION INDICATOR)

For multi indoor units connected to an outdoor unit, the individual unit's total system power consumption can be displayed on the device. This system can also be connected to a remote metering system

PQNUD1S00



Features

- Accumulated total power consumption indicated
- Accumulated/Current power consumption of each indoor unit indicated
- Accumulated power consumption by month indicated
- Max. connectable no. of indoor units: 64 indoor units
- 1 PDI per 1 outdoor unit
- Power failure-proof function : Data back up on EEPROM even if power turns off
- Connectable to PC based central controllers
- Simple connection with the remote metering system (RS485 approach)
- Power distribution indication formula

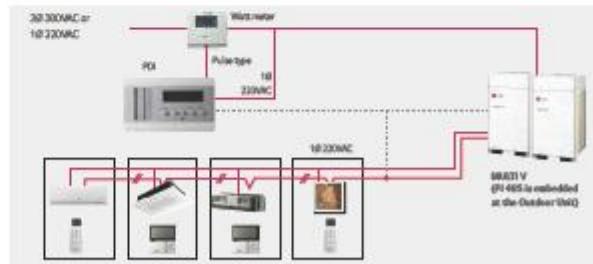
$$\text{Power used per room} = \frac{\text{Total power consumed for an external unit}}{\text{Weight by room total weight}}$$

*Weight by room: Weight calculated based on the temperature set by room mode and operating time.

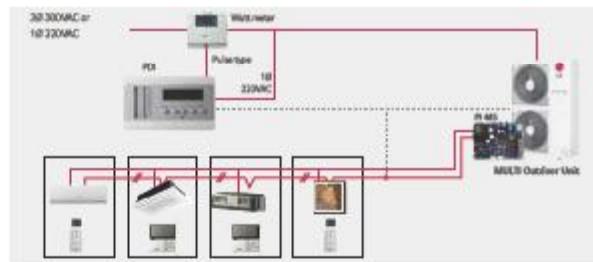
Combination

Independent operation of PDI

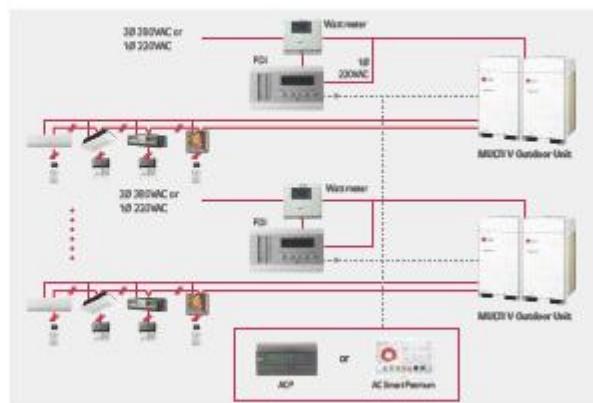
- MULTI V III / MULTI V IV /
MULTI V WATER II / MULTI V WATER IV /
MULTI V SPACE / MULTI V SPACE II /
MULTI V SPACE III / MULTI V MINI
MULTI V PLUS II / MULTI V SYNC II



MULTI



Operation with other central controllers



PDI PREMIUM

For multi indoor units connected to an outdoor unit, the individual unit's total system power consumption can be displayed on this device. This system can also be connected to a remote metering system.

PQNUD1S40



Error display

Shows accumulated power consumption of the system.

ERROR - 01
NO COMMUNICATION
WITH AIRCONDITIONER
IDU ADDRESS [00 ~ 07]

If communication with the product is not smooth

ERROR - 02
NO SIGNAL FROM WHM1

If no power detection signal is available

Features

- Connection to max 8 outdoor.
- Accumulated total power consumption of outdoor and indoor unit.
- Accumulated / Current Power Consumption of each indoor unit.
- Max 128 indoor units.
- RS-485 type wattmeter can be interlocked.
- Data Backup.

Instantaneous power screen

Shows the estimated value based on one minute power consumption.

INSTANT	P(1)	0 W	Wattmeter number
ID - 01 :	0 W	Overall instantaneous power of P(1) wattmeter	
ID - 02 :	0 W	Instantaneous power of each applicable indoor unit	
ID - 03 :	0 W		Each indoor unit number

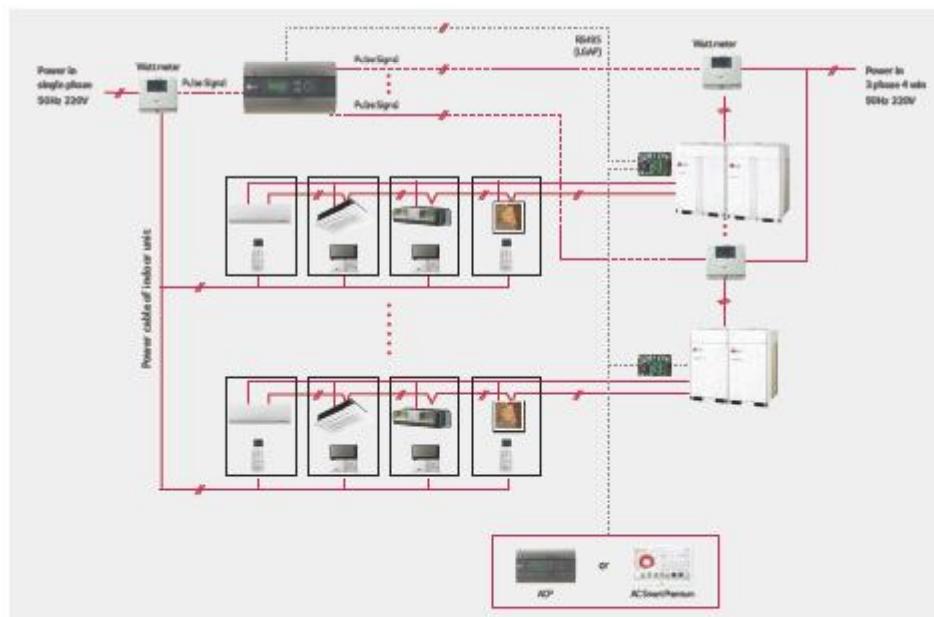
Total accumulated power consumption display

Shows accumulated power consumption of the system.

ACCUM (P1)	0 . 0kWh	Wattmeter number
ID - 01 :	0 . 0kWh	Overall accumulated power of P(1) wattmeter
ID - 02 :	0 . 0kWh	Accumulated power of each applicable indoor unit
ID - 03 :	0 . 0kWh	

Combination

Using Pulse Type Wattmeter : Independent operation of power indicator



DRY CONTACT

Connection between an indoor unit and external devices to control various functions

PQDSA(1)

PQDSB(1)

PQDSBC



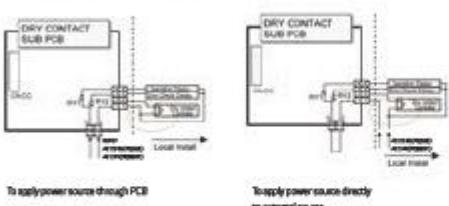
Features

Categories	PQDSA / PQDSB	PQDSA1 / PQDSB1	PQDSBC
Contact point	1 Contact point	1 Contact point	2 Contact points
Power input	AC 220V from outside power source	AC 24V from outside power source	DC 5V&12V from indoor unit PCB
Voltage / Non voltage input	-	-	-
On/Off control	○	○	○
Lock / Unlock	-	-	○
Fan speed setting	-	-	○
Thermo off	-	-	○
Energy saving	-	-	○
Temperature setting	-	-	○
Error monitoring	○	○	○
Operation monitoring	○	○	○

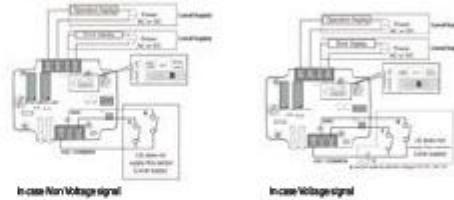
* Refer to each model PCB for applicable models.

**With case model: PQDSB(1), PQDSBC / Without case model: PQDSA(1)

PQDSA(1), PQDSB(1)



PQDSBC



Combination



DRY CONTACT

Connection between an indoor unit and external devices to control various functions

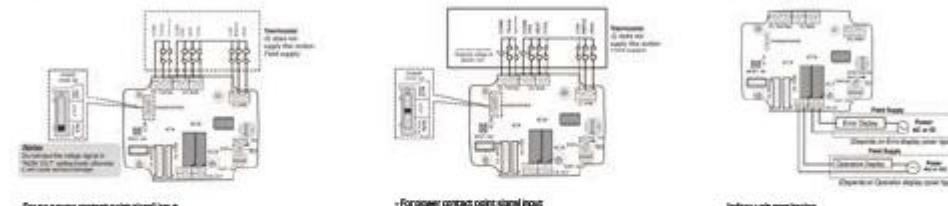
PQDSBNGCM1



Features

Categories	PQDSBNGCM1
Dimensions	103 x 70 x 35 mm
Contact Point	0 contact point
Voltage / Non voltage input	○
On/Off control	○
Mode control	○ (Cool, Heat, Fan)
Fan Speed Setting	○ (Low, Middle, High)
Thermo off	○
Error Monitoring	○
Operation monitoring	○
Contact (output)	2 contact (operating, error)
Rotary switch 1	Operating setpoint selection
Rotary switch 2	Opening (lags) selection

PQDSBNGCM1



Combination



DRY CONTACT

Connection between an indoor unit and external devices to control various functions

PQDSBCGCDO

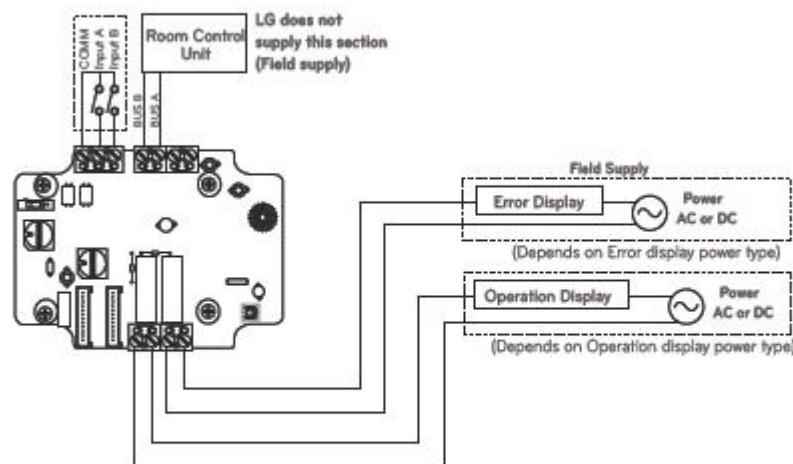


Features

- 1) Model name : PQDSBCGCDO
- 2) Specification
 - Dimensions(mm) : 105x78x35
 - Applied Model : MULTI V II, MULTI V III, MULTI V IV
- 3) Function
 - Contact Point : 2 contact point (operation depends on the Control Mode_SW setting)
 - PI 485 Communication Mode Input : LGAP 485 Communication
 - Voltage/Non Voltage Input
 - Error Monitoring Output
 - Operation Monitoring Output

- 3) Description

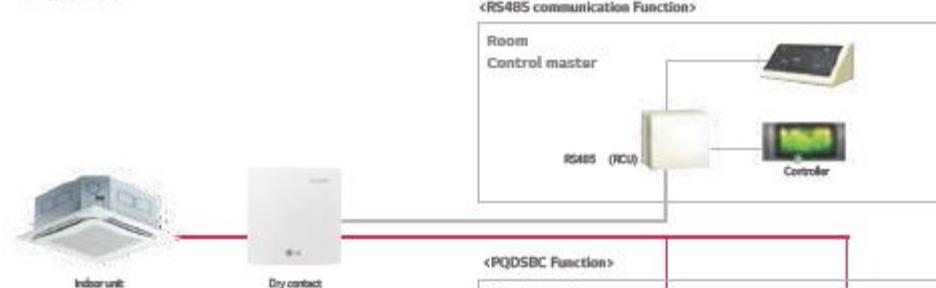
The product is especially designed for interface with other controllers using dry contact communication or RS485 communication.



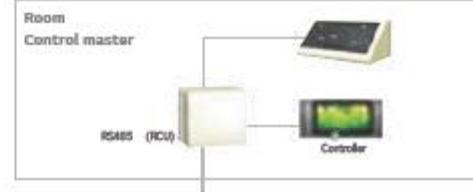
Combination

RS485 Communication Function

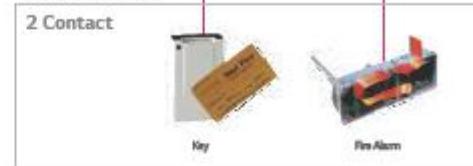
* RCU : Room Control Unit



<RS485 communication Function>



<RS485 Function>



I/O MODULE (INPUT / OUTPUT MODULE)

UART to external device interface module for system air conditioner

PVDSMN000



Features

1) Model name : PVDSMN000

2) Specification

• Applied Model : Only MULTI V IV

• Function

- Demand control
- Low speed control (Night low noise operation)

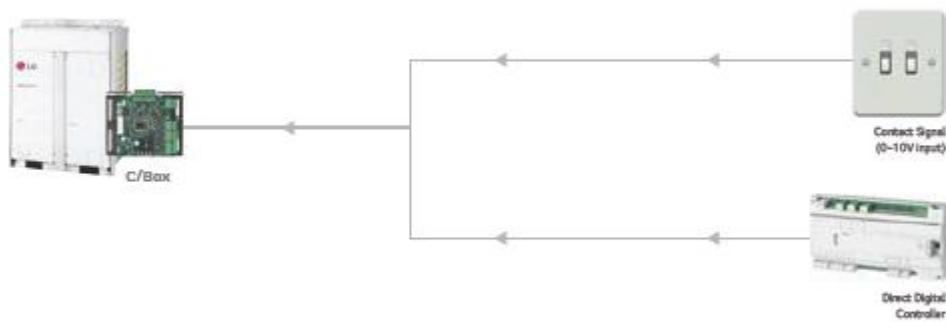
- Operation, error output

- Comp off, system off

3) Description

I/O (Input / Output Module) Module is communication interface module for connection between Multi V IV and external I/O (Input / Output Module) devices.

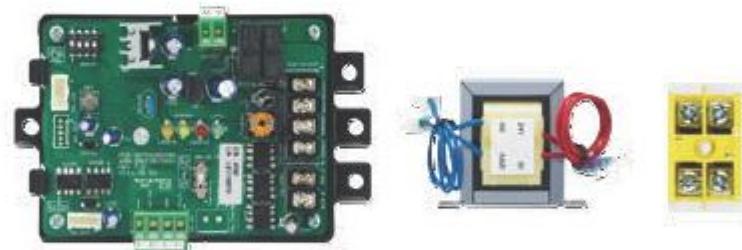
Combination



VARIABLE WATER FLOW CONTROL KIT

Accessory developed for controlling the water flow

PRVCO



Features

1) Model name : PRVCO

2) Specification

• Applied Model : MULTI V WATER

• Function

- Water pump valve control (0~10V)
- Minimum voltage setting available
- Operation, error output (display)

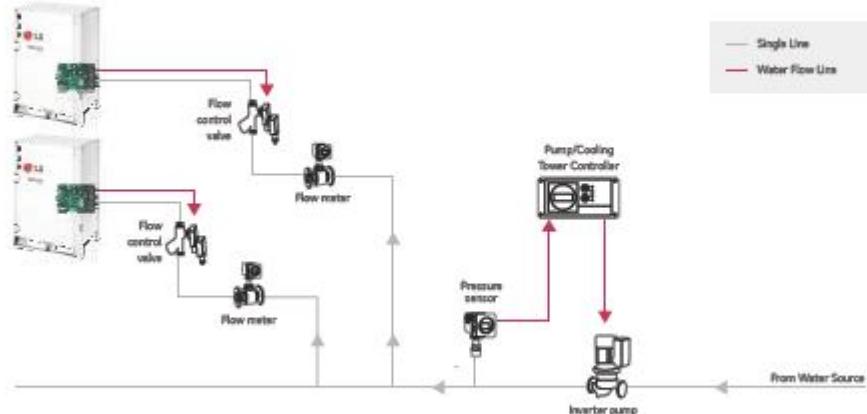
• Advantage

- Water flow consumption reduction
- Pump electricity consumption reduction

3) Description

The product is specially designed to control the water pump valve in MULTI V Water system.

Combination



- Flow control valve : Regulates the flow or pressure of a fluid; normally responding to signals generated by independent devices.
- Flow Meter: Measures mass flow rate of a fluid travelling through a tube. (The mass flow rate is the mass of the fluid traveling past a fixed point per unit time.)
- Pressure Sensor: Measures the pressure.

REMOTE TEMPERATURE SENSOR

Sensor for detecting room temperature

PQRSTA0



Features

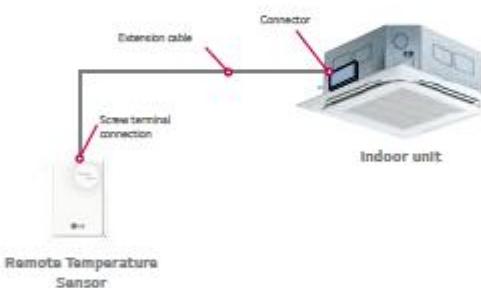
- Helps to detect the exact room temperature.
- Applied to ceiling cassette, ceiling concealed duct, AWP and Hydro Kit.

Parts Included

- Remote temperature sensor
- Extension cable (15m)
- Manual

Wiring Diagram

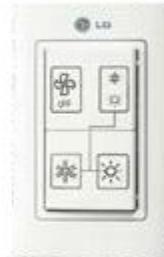
- Wire to the control box in the indoor unit by removing the existing thermistor and connect the extension cable its place.
- Cut the extension cable to the appropriate length and connect the screw terminal of the remote sensor.



COOL / HEAT SELECTOR

Cooling, heating, or fan mode can be selected to prevent cooling and heating mixing errors during seasonal changes.

PRDSBM



Features

- Indoor unit control without central controller
- Select operation mode : Cooling, Heating, Fan mode
- Mode lock for cooling & heating mixing error-proof during the change of season.



Models Applied

- MULTI V PLUS
- MULTI V WATER II, IV
- MULTI V SPACE II
- MULTI V MINI
- MULTI V II, IV

Wiring Diagram



- Connect terminals (1, 2, GND) on the back side of the outdoor dry contact to terminals (1, 2, GND) of outdoor as show below.

* Communication line length can be maximum 300m, use communication line as thick as 1.25mm².

GROUP CONTROL WIRE

Cables used to connect a wired remote controller to as many as 16 indoor units

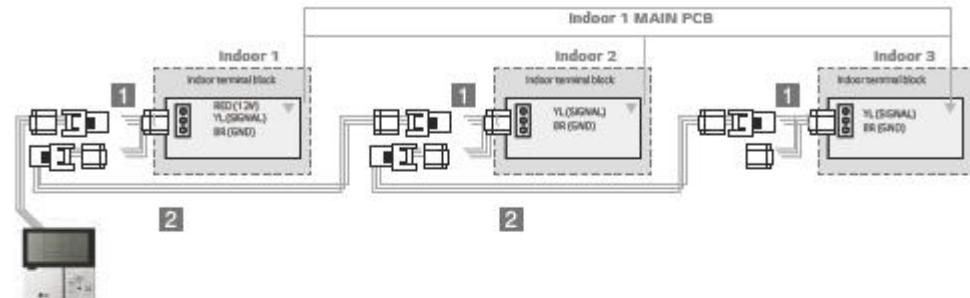
PZCWRG3



Features

Categories	PZCWRG3
Y-type cable	25m length
Long Cable	96m length

Wiring Diagram



Note 1 Cable assembly for indoor units.

2 Cable assembly for connecting indoor to indoor.

- Please connect cable assembly 1 with already connected indoor unit.

MECHANICAL ACCESSORIES

Drain Pump Kit

> pg.126



Auto Elevation Grille

> pg.128



Ventilation Kit (Fresh kit)
for New Cassette

> pg.129



Cassette Cover

> pg.130



Mechanical Accessories Line up and Application

Categories	SCAC Type	MULTI Type	MULTI V Type	Remark
ARTCOOL Panel	○	○	○	ARTCOOL indoor unit
Electric Heater	○	-	-	Single package / Ducted split
Drain Pump Kit	○	○	-	Ceiling concealed duct
Auto Elevation Grille	○	-	○	4 Way Cassette
Cassette Cover	○	○	○	4 Way Cassette

DRAIN PUMP KIT

Drains away condensed water

ABDPE

ABDPG

ABDPT



Features

- In some places where natural drainage is not possible, a drain pump can be used to pump out condensed water from indoor units.
- Drain pump assembly (AC 220~240V, 50/60Hz)

Models Applied

- Ceiling concealed duct (refer PDB for applicable models)

Accessory Model Name

- Ceiling concealed duct (refer PDB for applicable models)

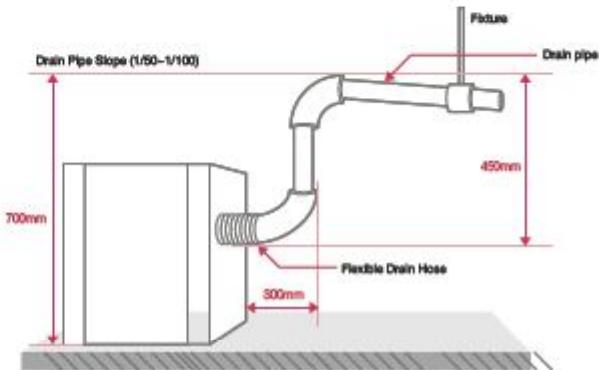
Category	E Chassis	G/H/R Chassis	T Chassis
MULTI V Type	ABDPE	ABDPG	ABDPT
MULTI Type	○	○	○
SCAC Type	○	○	-

Application

High head drain pump automatically drains water up to 700mm of drain-head height.



- * Included in H-inverter
- * Supplied as accessory for Standard Inverter (ABDPG)



Parts Included

For E Chassis Models :

- Drain pump assembly (1EA)
(AC 220~240V/50/60Hz,400CMM)
- Elbow (Ø32)(1EA)
- Hose (1EA)
- Tie wrap (2EA)
- Screw (10EA)
- Rubber (1EA)
- Installation manual (1EA)

For G/H/R/T Chassis Models :

- Drain pump assembly (1EA)
(AC 220~240V/50/60Hz,400CMM)
- Screw (4EA)
- Cap (1EA)
- Installation manual (1EA)

AUTO ELEVATION GRILLE

Easy filter cleaning with elevation grille

PTEGM0



Features

Easy filter cleaning with elevation grill

- Installation inside main body
- Auto horizontal control
- 4 points support structure
- Height Memory
- Max 4.5m length
- Model : PTEGM0(TM, TN, TP)



*Operating with wired remote controller POCVSM020W0 and wireless remote controller included in PTEGM0.

Models Applied

- 4-way cassette : Single CAC, MULTI, MULTI V (refer PDB for applicable models)

Parts Supplied

- Inlet Grille (1EA)
- Auto elevation grille kit (1EA)
- Wireless Remote Controller (1EA)
- Screws (4EA)
- Installation manual (1EA)

Application



- Auto elevation grille kit

- Install the back panel
the indoor unit

- Install the front panel
and the inlet grille

- Operate the auto elevation grille by the
wireless remote controller

- Easy maintenance

VENTILATION KIT

Fresh air can be supplied from outside through this ventilation kit

PTVK410

PTVK420

PTVK430



PTVK410

PTVK420

PTVK430

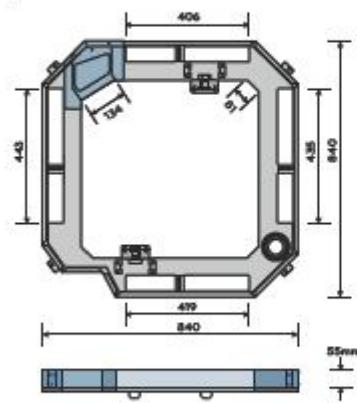
Features

- PTVK410 : 1 Ventilation Kit, 8 Bolts, 1 Insulation
- PTVK420 : 1 Range, 7 Screws
- PTVK430 : 1 Flange, 4 Screws, 1 Insulation

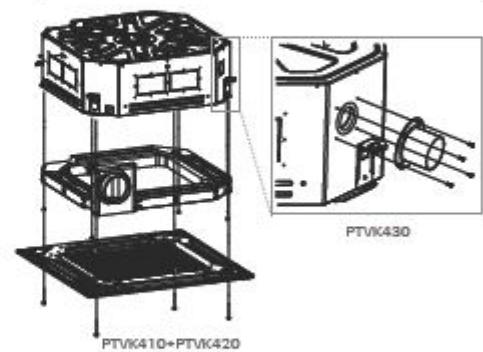
Models Applied

- There are 2 solutions for fresh air
 - PTVK410+PTVK420 (for chassis TP, TN, TM)
 - PTVK430 (for chassis TR, TQ, TP, TN, TM)
- * Users can purchase and use PTVK430 in addition to PTVK410+PTVK420 in need to phase in larger outdoor air volume.

Dimensions



Assembly Diagram



CASSETTE COVER

Air purifying filter to prevent dust and allergens

PTDCM

PTDCQ



Features

- Specially designed for indoor unit.
- Covers the side area of cassette.
- Light weight.
- Suitable when false ceiling is unavailable.

Models Applied

• 4-way cassette (TP, TN, TM, TQ, TR)

Parts Supplied

- Cover A (4EA), Cover B (4EA)
- Cover C (4EA), Cover D (4EA)
- Screws
- Installation Manual (1EA)

Accessory Model Name

Model	Front Panel	Weight(kg)		Dimensions(mm)		
		NET	Gross	W	H	D
PTDCM	PTUMC/ PTUMC1	TP/TN	5.9	9.8	1,157	1,157
		TM	5.9	9.8	1,157	1,157
PTDCQ	PTUQC	TR	5.0	7.3	907	907
		TQ	5.0	7.3	907	907

PIPING ACCESSORIES

Heat Recovery Unit

› pg.132



Y Branch & Header
Branch(MULTI V)

› pg.134



Heat Recovery Unit

PRHR021



PRHR021



PRHR031



PRHR041

PRHR031

PRHR041

Features

- Max. 32 indoor units can be connected. (Max 8 indoor units per branch)
- Due to the automatic search algorithm for piping detection, easy installation
- Subcooling cycle in HR unit provides high system efficiency

Applicable Models

- MULTI V SYNC
- MULTI V SYNC II
- MULTI V WATER II Heat Recovery
- MULTI V III Heat Recovery

Specification

Model		PRHR021	PRHR031	PRHR041		
Number of branch	EA	2	3	4		
Max. connectable capacity of indoor units (Per branch/unit)	kW	10/32	10/48	19/58		
Max. number of connectable indoor units per branch	EA	8	8	8		
Normal input	Cooling	kW	0.020	0.040	0.040	
0.040	Heating	kW	0.020	0.040	0.040	
Net. Weight	kg	18	20	22		
Dimensions(WxHxD)	mm	801x218x617	801x218x617	801x218x617		
Piping connectors	Indoor Unit	Liquid	mm(ind)	9.52(3/8)	9.52(3/8)	9.52(3/8)
		Gas	mm(ind)	15.00(5/8)	15.00(5/8)	15.00(5/8)
Outdoor Unit		Liquid	mm(ind)	9.52(3/8)	15.00(5/8)	15.00(5/8)
	Low pressure	mm(ind)	22.2(7/8)	28.58(11/8)	28.58(11/8)	
Power Supply	High pressure	mm(ind)	19.05(3/4)	22.2(7/8)	22.2(7/8)	
	Power Supply	W/V/Hz	1 / 220~240 / 50	1 / 220~240 / 50	1 / 220~240 / 50	

Dimensions

- HR unit (1EA)
- Hanging bolts M10 or M8 (4EA)
- Nut M8 or M10 (8EA)

- Washers M10 (8EA)
- Reducers

Reducers for Indoor Unit and HR Unit

		Liquid pipe	High pressure	Low pressure
Indoor unit reducer				
HR unit reducer	PRHR021			
	PRHR031/ PRHR041			

Convenient Zoning

MULTI V IV heat recovery provides flexible control over individual zones for the user's convenience.

Individual Control

- Replace with individual control in spaces for which ventilation is needed

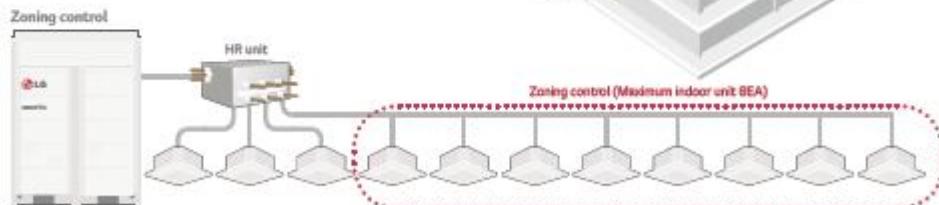
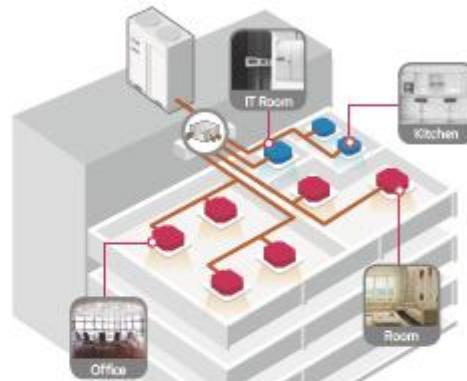
Zone Control

- Maximum of 8 indoor units can be connected to one branch
- Maximum of 32 indoor units can be connected to one HR unit
- Same operational model can be operated by indoor units with zone control function installed

Combination of Individual and Zoning Installations

- Flexible piping design

Saves on product and installation Costs



Y BRANCH AND HEADER BRANCH (MULTI V™)

For refrigerant distribution of indoor units



Features

- Various Y-branch pipes of different capacities make MULTI V Installation more convenient.
- Y-branch and header branch for both gas and liquid are provided.
- Insulation material is provided for covering the branches.

Piping Diagram



Applicable Models

- | | | |
|------------------|--------------------|------------------------|
| • MULTIV PLUS | • MULTIV MINI | • MULTIV WATER II |
| • MULTIV PLUS II | • MULTIV SPACE II | • MULTIV WATER IV |
| • MULTIV III | • MULTIV SPACE III | • MULTIV Heat Recovery |
| • MULTIV IV | | |

Accessory Model Name

Header Branch

• BH10A

Model	Gas pipe	Liquid pipe
4 branch / ARBL054		
7 branch / ARBL057		
4 branch / ARBL104		
7 branch / ARBL107		
10 branch / ARBL1010		
10 branch / ARBL2010		

PIPING ACCESSORIES

- R410A / MULTI V PLUS, MULTI V PLUS II

2 Outdoor Units		
Model	Low Pressure Gas pipe	Liquid pipe
ARCNN20		

3 Outdoor Units		
Model	Low Pressure Gas pipe	Liquid pipe
ARCNN20		

- R410A / MULTI V III, MULTI V IV

2 Outdoor Units		
Model	Low Pressure Gas pipe	Liquid pipe
ARCNN21		

3 Outdoor Units		
Model	Low Pressure Gas pipe	Liquid pipe
ARCNN31		

- R410A / MULTI V SYNC, MULTI V SPACE II

2 Outdoor Units			
Model	Low Pressure Gas pipe	Liquid pipe	High Pressure Gas pipe
ARCNB21			

2 Outdoor Units			
Model	Low Pressure Gas pipe	Liquid pipe	High Pressure Gas pipe
ARCNB20			

3 Outdoor Units			
Model	Low Pressure Gas pipe	Liquid pipe	High Pressure Gas pipe
ARCNB30			

- R410A / MULTI V III Heat Recovery

2 Outdoor Units			
Model	Low Pressure Gas pipe	Liquid pipe	High Pressure Gas pipe
ARCNB21			

PIPING ACCESSORIES

- R410A / MULTI V PLUS, MULTI V PLUS II, MULTI V III, MULTI V IV, MULTI V MINI, MULTI V SPACE II,
MULTI V SPACE III, MULTI V WATER II, MULTI V WATER IV

(Unit : mm)

Model	Gas pipe	Liquid pipe
ARBLN01621		
ARBLN03321		

- R410A / MULTI V PLUS, MULTI V PLUS II, MULTI V III, MULTI V IV, MULTI V WATER II,
MULTI V WATER IV

(Unit : mm)

Model	Gas pipe	Liquid pipe
ARBLN07121		
ARBLN14521		

- R410A / MULTI V III, MULTI V IV, MULTI V WATER II, MULTI V WATER IV, MULTI V SYNC,
MULTI V SYNC II

(Unit : mm)

Model	Low Pressure Gas pipe	Liquid pipe	High Pressure Gas pipe
ARBLB01621			
ARBLB03321			
ARBLB07121			
ARBLB14521			

The Total HVAC and Energy Solution Provider

Ever since manufacturing Korea's first homegrown air conditioner in 1968, LG has remained at the forefront of air conditioning innovation. For eight of the last 10 years, LG has been the world's top selling manufacturer of residential air conditioning solutions. And in 2008, LG became the first company to sell a cumulative total of more than 100 million air conditioners.

Building on its success and technological leadership in the residential air conditioning sector, LG has moved into system air conditioning as well. The company's range of high-performance system air

conditioning products provides effective temperature control to large-scale buildings and facilities. Over time, LG has evolved into the total HVAC and energy solution provider, investing in new technologies and adding chillers, VRF systems, and building management systems (BMS) into its comprehensive product portfolio.

Along with a wide range of innovative solutions, LG delivers unrivaled customer service. The company produces world class air conditioning professionals at its AC academies, of which there are more than 100 worldwide. These centers of excellence provide detailed product

workshops and training programs that offer invaluable hands-on experience. LG also provides useful tools for HVAC system engineers and installers, including its timesaving LG Air Conditioner Technical Solution (LATS) software.

Additionally, LG operates several state-of-the-art R&D facilities in various countries. One such facility is the Energy Lab, a purpose-built R&D and testing center in northern France. Helping to keep the company ahead of the competition, the scientists and engineers at the Energy Lab study the effects of different environmental

conditions on LG's products. This in-depth research and analysis enables LG to tailor its solutions to the specific environmental demands of each individual market.

With 10 manufacturing plants throughout the world, LG produces in excess of 17 million reliable compressors and 16 million first-class HVAC solutions per year. Combining the best technologies with the best ideas, LG's high quality products are now enjoyed by consumers in over 100 countries.

