

MULTI V[™] S

Suitable for residences and small offices

- Air cooled VRF Heat pump & Cooling Only
- 4~14HP(12.1 ~ 38.0kW) : Cooling capacity based
- Side discharge outdoor unit
- Compact model & Standard model



Energy savings



Reliability



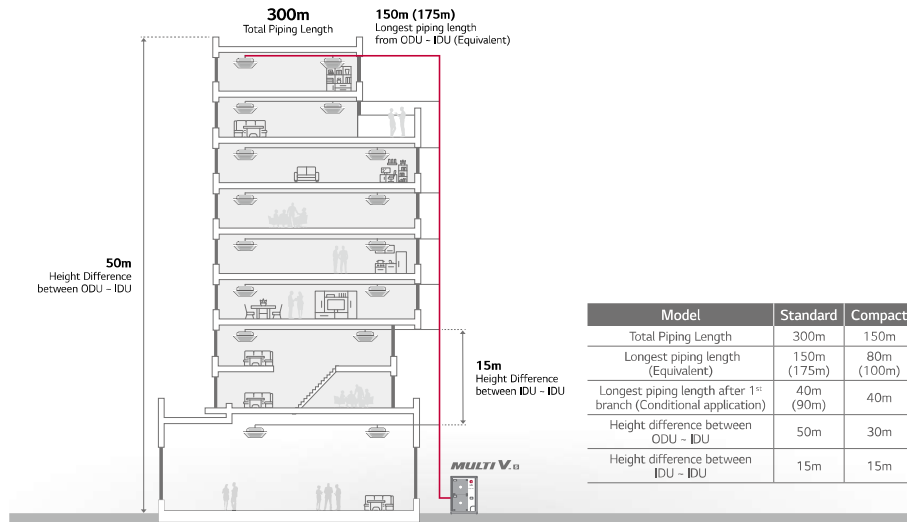
Convenience



Compact yet powerful VRF
For premium residences and small offices

MULTI V S

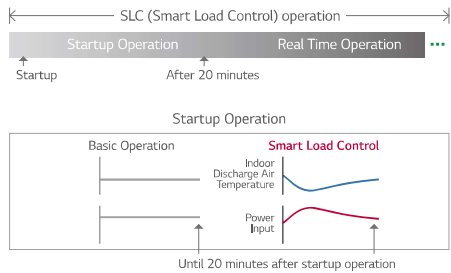
Piping Length



Smart Load Control Applied

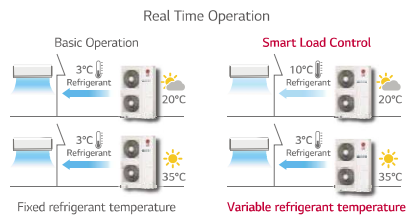
Increase comfortable sensation and Max. 23% energy saving thanks to MULTI V smart load control

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



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

Max. 10% Energy saving

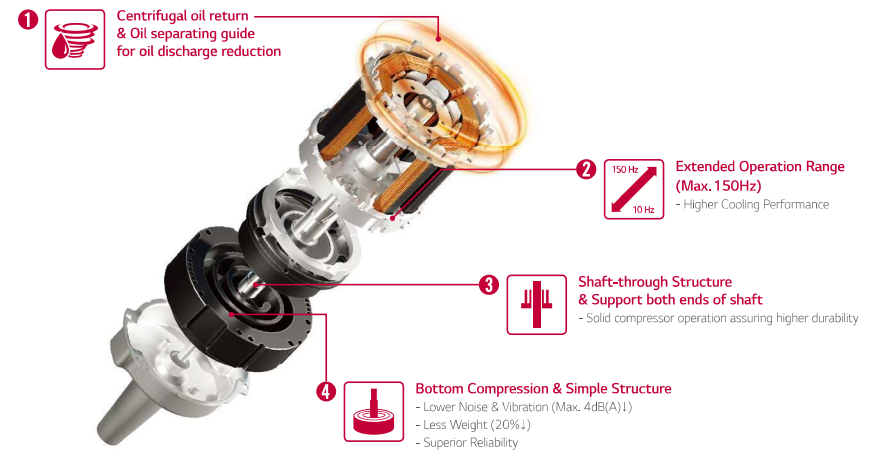


Max. 13% Energy saving

※ How to set up - By dip switch in outdoor unit (Referred to Product Data Book) Factory default setting is OFF.
 ※ Dual sensing (Temperature & humidity) smart load control is possible with Remote controller PTMTB100 (White).

RI Compressor™

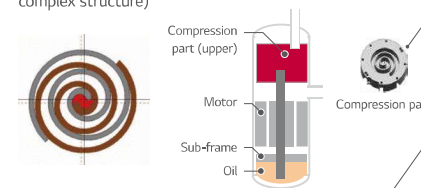
R1 Compressor is one that combines high-efficiency, low sound characteristics of the scroll and the simple compressing structure of the rotary compressor. This technology enables a highly efficient compact model.



Conventional Compressor

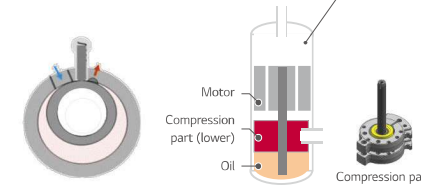
Scroll

High efficiency / Low sound (Continuous compression, but complex structure)



Rotary

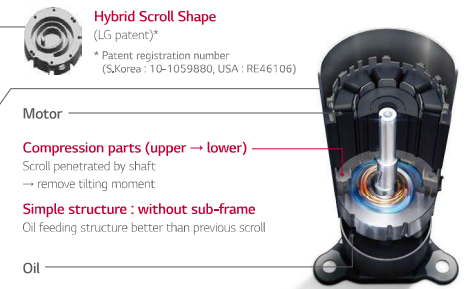
Simple structure (Compression per 1 rotation)



RI Compressor™

Revolutionary Scroll

High efficiency / Stable & Simple Structure



Extended operation (Max. 150Hz)
 Low noise & Vibration (Max. 4dB(A)1)
 Less weight (20%)

Compact model
 (Size 40%1, Weight 25%1)

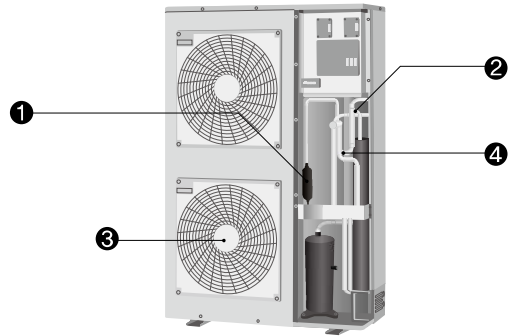


MULTI V S

High Reliability of Refrigerant Components

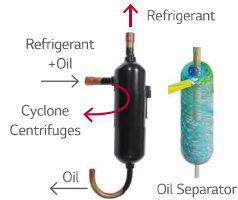
Superior Performance and Strong Durable Components are developed by LG's technologies

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



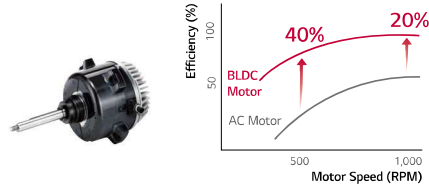
1 Cyclonic Oil Separator

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



3 BLDC Fan Motor

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



2 Large Volume Accumulator

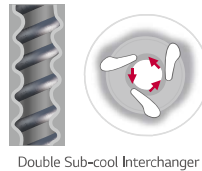
- Improved reliability by adopting the large volume accumulator (38% volume up compared to conventional).
- Prevents the liquid refrigerant entering the compressor suction.
- Maximize efficiency by optimal amount of refrigerant.
- Protect compressor break down and Increase life time.



4 Double Sub-cool Interchanger

- Reliability is enhanced by minimizing pressure drop due to high efficiency spiral structure and 2 times larger size.
 - Long pipe is possible (up to* 175m) and high elevation (up to* 50m).
 - Reduction of indoor refrigerant noise level.

* Based on equivalent pipe length.

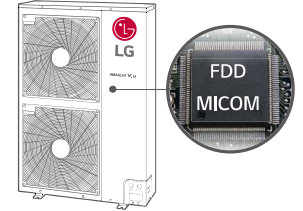


Upgraded Fault Detection and Diagnosis

Easy and convenient maintenance with self-diagnosis

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

- Auto Refrigerant Collection
- Able to access LGMV (LG Monitoring View) by smartphone
- Black box function



Heat Exchanger with Black Fin for Corrosion Resistance

Strong Durability against high salinity and heavily polluted air

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



Corrosion Resistance Proven by Certified Tests

LG Corrosion Resistance solution passed ISO 21207 accelerated corrosion test and the result has been certified by prestigious global certification organization, TÜV.

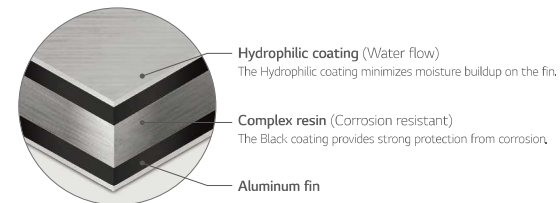
Certified protection



※ Verification of corrosion resistance performance
- Test Method B of ISO21207
- ASTM B117 / ISO 9227 (5000 hours)

Enhanced Coating Layers

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



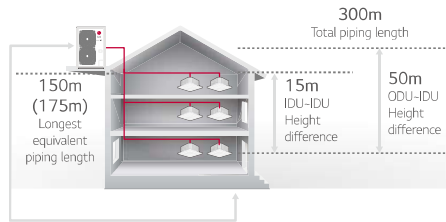
MULTI V S

Sufficient Pipe Length Limit

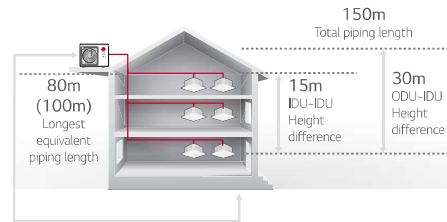
Sufficient pipes length limitation in Design and Installation of immense variety of building

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

Standard Model Piping Capabilities

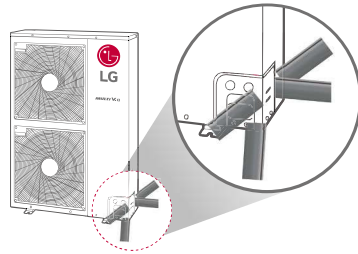


Compact Model Piping Capabilities



4 Way Piping

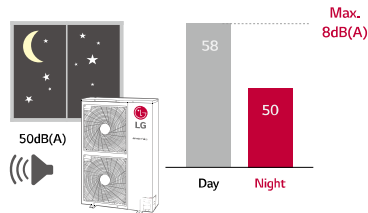
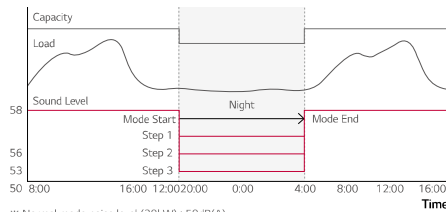
Free design and installation by 4 way piping



Low Noise Operation

Free from noise at any time with low noise operation function

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

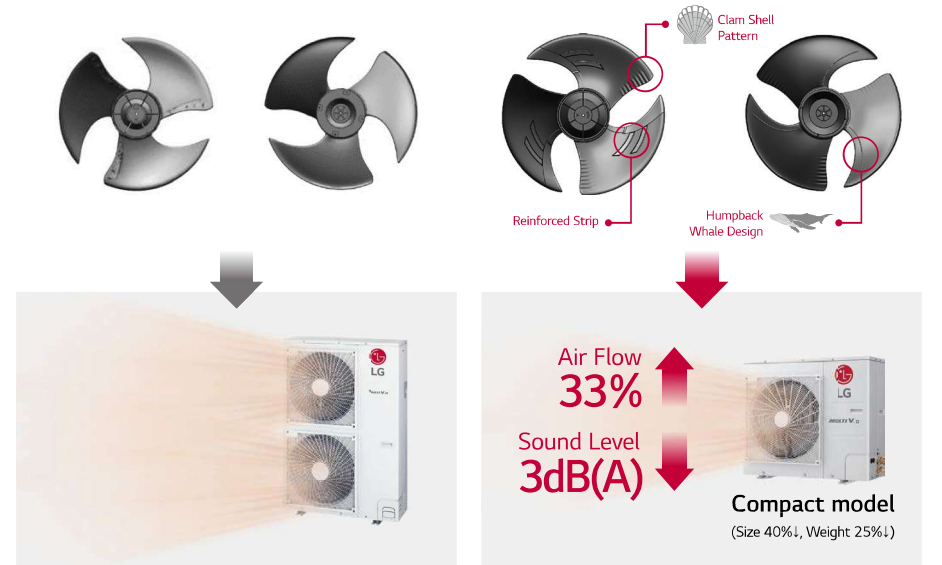


※ Normal mode noise level (28kW) : 58dB(A)
 ※ Night 3 step noise level (28kW) : 56dB(A), 53dB(A), 50dB(A)
 ※ Sound pressure tested by following conditions : 1m distance / 1,5m height

Biomimetic Fan

With biomimetic fan design, newly developed fan blows higher air volume, also operating noise is decreased. This technology enables a highly efficient compact model.

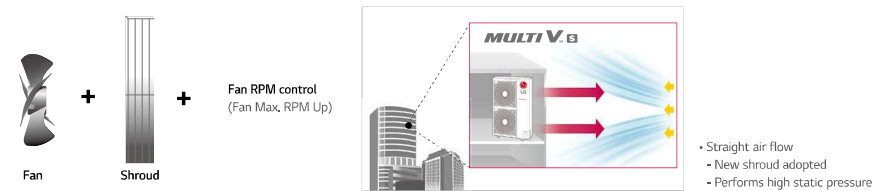
- | Previous | New |
|--|--|
| • General fan design | • Biomimetic fan design |
| • Sound pressure level 53.1dB(A) (110CMM / 2 fan) | • Sound pressure level 49.6dB(A) (110CMM / 2 fan) |
| • Max. Air flow up to 60 CMM (800RPM / 124W Motor x 1EA) | • Max. Air flow up to 86CMM* (1,000RPM / 200W Motor x 1EA) |



* The value is based on 4, 5, 6 model, (ARUN***GSSS, ARUN***LSS5)

Fan RPM Control

Flow of air has straightness due to fan shroud and Fan RPM control even in high-rise building.



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

MULTI V S

COMPACT MODEL

HEAT PUMP (1 PHASE)

ARUN040GSS5 / ARUN050GSS5 / ARUN060GSS5



HP	4		5		6	
Model Name	Combination Unit	ARUN040GSS5	ARUN050GSS5	ARUN060GSS5		
Capacity	Cooling (Rated)	kW	12,1	14,0	15,5	
		kcal/h	10,400	12,000	13,300	
		Btu/h	41,300	47,800	52,900	
	Heating (Rated)	kW	12,1	16,0	18,0	
		kcal/h	10,400	13,800	15,500	
		Btu/h	41,300	54,600	61,400	
Exterior	Color	Warm Gray	Warm Gray	Warm Gray		
Heat Exchanger	Type	Black Fin	Black Fin	Black Fin		
	Type	LG BLDC Inverter Scroll (R1)	LG BLDC Inverter Scroll (R1)	LG BLDC Inverter Scroll (R1)		
Compressor	Type	LG BLDC Inverter Scroll (R1)	LG BLDC Inverter Scroll (R1)	LG BLDC Inverter Scroll (R1)		
	Number of Compressor	1	1	1		
Fan	Type	Axial Flow Fan	Axial Flow Fan	Axial Flow Fan		
	Air Flow Rate (High)	m³/min	60	80	80	
	Discharge	Side / Top	Side	Side	Side	
	Gas Pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	
Pipe Connection	Liquid Pipe	mm (inch)	15,88 (5/8)	15,88 (5/8)	19,05 (3/4)	
	Cooling	°C(°F)	-5 - 53 (23 - 127)	-5 - 53 (23 - 127)	-5 - 53 (23 - 127)	
Operation Range	Heating	°C(°F)	-20 - 18 (-4 - 64)	-20 - 18 (-4 - 64)	-20 - 18 (-4 - 64)	
	Dimensions (W x H x D) Net	mm x No.	950 x 834 x 330	(950 x 834 x 330) x 1	(950 x 834 x 330) x 1	
Net Weight	kg x No.	64,7	72 x 1	72 x 1		
Sound Pressure Level	Cooling	dB(A)	50	51	52	
Communication Cable	mm² x No. (VCTF-SB)	2C x 1.0 - 1.5	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C		
	Refrigerant name	R410A	R410A	R410A		
Refrigerant	Control	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve		
	Power Supply	Ø, V, Hz	1, 220-230-240, 50	1, 220-230-240, 50	1, 220-230-240, 50	
Number of maximum connectable indoor units		8	10	13		

HEAT PUMP (3 PHASE)

ARUN040LSS5 / ARUN050LSS5 / ARUN060LSS5



HP	4		5		6	
Model Name	Combination Unit	ARUN040LSS5	ARUN050LSS5	ARUN060LSS5		
Capacity	Cooling (Rated)	kW	12,1	14,0	15,5	
		kcal/h	10,400	12,000	13,300	
		Btu/h	41,300	47,800	52,900	
	Heating (Rated)	kW	12,1	16,0	18,0	
		kcal/h	10,400	13,800	15,500	
		Btu/h	41,300	54,600	61,400	
Exterior	Color	Warm Gray	Warm Gray	Warm Gray		
Heat Exchanger	Type	Black Fin	Black Fin	Black Fin		
	Type	LG BLDC Inverter Scroll (R1)	LG BLDC Inverter Scroll (R1)	LG BLDC Inverter Scroll (R1)		
Compressor	Type	LG BLDC Inverter Scroll (R1)	LG BLDC Inverter Scroll (R1)	LG BLDC Inverter Scroll (R1)		
	Number of Compressor	1	1	1		
Fan	Type	Axial Flow Fan	Axial Flow Fan	Axial Flow Fan		
	Air Flow Rate (High)	m³/min	60	80	80	
	Discharge	Side / Top	Side	Side	Side	
	Gas Pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	
Pipe Connection	Liquid Pipe	mm (inch)	15,88 (5/8)	15,88 (5/8)	19,05 (3/4)	
	Cooling	°C(°F)	-5 - 53 (23 - 127)	-5 - 53 (23 - 127)	-5 - 53 (23 - 127)	
Operation Range	Heating	°C(°F)	-20 - 18 (-4 - 64)	-20 - 18 (-4 - 64)	-20 - 18 (-4 - 64)	
	Dimensions (W x H x D) Net	mm x No.	950 x 834 x 330	(950 x 834 x 330) x 1	(950 x 834 x 330) x 1	
Net Weight	kg x No.	64,7	72,0	72,0		
Sound Pressure Level	Cooling	dB(A)	50	51	52	
Communication Cable	mm² x No. (VCTF-SB)	2C x 1.0 - 1.5	1.0 - 1.5 x 2C	1.0 - 1.5 x 2C		
	Refrigerant name	R410A	R410A	R410A		
Refrigerant	Control	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve		
	Power Supply	Ø, V, Hz	3, 220-230-240, 50	3, 380-400-415, 50	3, 380-400-415, 50	
Number of maximum connectable indoor units		8	10	13		

Note : 1, Due to our policy of innovation some specifications may be changed without notification.
 2, Wiring cable size must comply with the applicable local and national codes. And "Electric characteristics" chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.
 3, Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.
 Therefore, these values can be increased owing to ambient conditions during operation.
 4, Performances are based on the following conditions :
 • Cooling : Indoor Ambient Temp, 27°CDB / 19°CWB, Outdoor Ambient Temp, 35°CDB / 24°CWB
 • Heating : Indoor Ambient Temp, 20°CDB / 15°CWB, Outdoor Ambient Temp, 7°CDB / 6°CWB
 • Interconnected Pipe Length is 7,5m and difference of Elevation (Outdoor - Indoor Unit) is 0m,
 5, This product contains Fluorinated greenhouse gases, (R410A, GWP(Global warming potential) = 2,087,5)

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 • Heating : Indoor Ambient Temp, 20°CDB / 15°CWB, Outdoor Ambient Temp, 7°CDB / 6°CWB
 • Interconnected Pipe Length is 7,5m and difference of Elevation (Outdoor - Indoor Unit) is 0m,
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MULTI V S

STANDARD MODEL

HEAT PUMP (3 PHASE)

JRUN080LSS0 / JRUN100LSS0 / JRUN120LSS0



HP			8	10	12
Model Name	Combination Unit		JRUN080LSS0	JRUN100LSS0	JRUN120LSS0
Capacity	Cooling (Rated)	kW	22,4	28,0	33,6
		kcal/h	19,300	24,100	28,900
		Btu/h	76,400	95,900	114,700
	Heating (Rated)	kW	25,2	31,5	37,8
		kcal/h	21,700	27,100	32,500
		Btu/h	86,000	107,500	129,000
Exterior	Color	Warm Gray	Warm Gray	Warm Gray	
Heat Exchanger	Type	Black Fin	Black Fin	Black Fin	
	Type	LG BLDC Inverter Scroll	LG BLDC Inverter Scroll	LG BLDC Inverter Scroll	
Compressor	Type	Black Fin	Black Fin	Black Fin	
	Number of Compressor	1	1	1	
Fan	Type	Axial Flow Fan	Axial Flow Fan	Axial Flow Fan	
	Air Flow Rate (High)	m³/min	140	190	190
	Discharge	Side / Top	Side	Side	Side
	Gas Pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	12,7 (1/2)
Pipe Connection	Liquid Pipe	mm (inch)	19,05 (3/4)	22,2 (7/8)	28,58 (1 1/8)
	Cooling	°C (°F)	-5 - 53 (23 - 127)	-5 - 53 (23 - 127)	-5 - 53 (23 - 127)
Operation Range	Heating	°C (°F)	-20 - 18 (-4 - 64)	-20 - 18 (-4 - 64)	-20 - 18 (-4 - 64)
	Net	mm x No.	(950 x 1,380 x 330) x 1	(1,090 x 1,625 x 380) x 1	(1,090 x 1,625 x 380) x 1
Dimensions (W x H x D)	Net	mm x No.	(950 x 1,380 x 330) x 1	(1,090 x 1,625 x 380) x 1	(1,090 x 1,625 x 380) x 1
Net Weight	kg x No.	115,0	144,0	157,0	
Sound Pressure Level	Cooling	dB(A)	57	58	60
Communication Cable	mm² x No. (VCTF-SB)	1,0 - 1,5 x 2C	1,0 - 1,5 x 2C	1,0 - 1,5 x 2C	
Refrigerant	Refrigerant name	R410A	R410A	R410A	
	Control	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Power Supply	Ø, V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50	
Number of maximum connectable indoor units		13	16	20	

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 3. Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.
 Therefore, these values can be increased owing to ambient conditions during operation.
 4. Performances are based on the following conditions :
 • Cooling : Indoor Ambient Temp, 27°CDB / 19°CWB, Outdoor Ambient Temp, 35°CDB / 24°CWB
 • Heating : Indoor Ambient Temp, 20°CDB / 15°CWB, Outdoor Ambient Temp, 7°CDB / 6°CWB
 • Interconnected Pipe Length is 7,5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.
 5. This product contains Fluorinated greenhouse gases (R410A, GWP(Global warming potential) = 2,087,5)

COOLING ONLY (1, 3 PHASE)

JRUV050GSD0 / JRUV060GSD0 / JRUV140LSS0



HP			5	6	14
Model Name	Combination Unit		JRUV050GSD0	JRUV060GSD0	JRUV140LSS0
Capacity	Cooling (Rated)	kW	14,5	17,0	38,0
		kcal/h	12,470	14,620	32,700
		Btu/h	49,500	58,000	129,700
	Heating (Rated)	kW	-	-	-
		kcal/h	-	-	-
		Btu/h	-	-	-
Exterior	Color	Warm Gray	Warm Gray	Warm Gray	
Heat Exchanger	Type	LG BLDC Inverter Compressor	LG BLDC Inverter Compressor	LG BLDC Inverter Scroll	
	Type	Black Fin	Black Fin	Black Fin	
Compressor	Type	Black Fin	Black Fin	Black Fin	
	Number of Compressor	1	1	1	
Fan	Type	Axial Flow Fan	Axial Flow Fan	Axial Flow Fan	
	Air Flow Rate (High)	m³/min	60	90	190
	Discharge	Side / Top	Side	Side	Side
	Gas Pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	12,7 (1/2)
Pipe Connection	Liquid Pipe	mm (inch)	15,88 (5/8)	19,05 (3/4)	28,58 (1-1/8)
	Cooling	°C (°F)	-5 - 53 (23 - 127)	-5 - 53 (23 - 127)	-5 - 53 (23 - 127)
Dimensions (W x H x D)	mm x No.	(950 x 834 x 330) x 1	(950 x 1,170 x 330) x 1	(1,090 x 1,625 x 380) x 1	
Net Weight	kg x No.	66 x 1	79 x 1	157 x 1	
Sound Pressure Level	Cooling	dB(A)	51	52	63
Communication Cable	mm² x No. (VCTF-SB)	1,0 - 1,5 x 2C	1,0 - 1,5 x 2C	1,0 - 1,5 x 2C	
Refrigerant	Refrigerant name	R410A	R410A	R410A	
	Control	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Power Supply	Ø, V, Hz	1, 220-240, 50	1, 220-240, 50	3, 380-415, 50	
Number of maximum connectable indoor units		8	9	23	

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 • Heating : Indoor Ambient Temp, 20°CDB / 15°CWB, Outdoor Ambient Temp, 7°CDB / 6°CWB
 • Interconnected Pipe Length is 7,5m and difference of Elevation (Outdoor - Indoor Unit) is 0m.
 5. This product contains Fluorinated greenhouse gases, (R410A, GWP(Global warming potential) = 2,087,5)