

## ARUN120LSS5

Multi V | Outdoor Unit - Submittal

R410A | VRF Multi V S



More information can be found at:  
[partner.lge.com](http://partner.lge.com)

\*The actual product may look slightly different from the product image above.

### Features

- Dual Sensing Smart Load Control (Temp. & Humidity)
- Comfort Cooling
- Night Low Noise Operation
- Improved Biomimetic Fan with High Air Flow and Reduced Noise
- Wide Louver Plus Fin with Anticorrosion Ocean Black Coating
- BLDC Inverter twin rotary
- High pressure switch
- Defrost / Deicing
- Self diagnosis
- Soft start

### Specification

Classification	Combination Unit (1)	-	ARUN120LSS5
Power Supply	Case 1	-	50 Hz, 380-415 V 3N~
	Limit Range of Voltage(Case 1)	-	342~456
	Case 2	-	60 Hz 380 V 3N~
	Limit Range of Voltage(Case 2)	-	342~418
	Running Current by Voltage (Cooling, Rated)	A	19.62 - 18.64 - 17.97
	Running Current by Voltage (Heating, Rated)	A	14.79 - 14.05 - 13.54
Cooling Capacity	Rated	kW	33.5
		Btu/h	114700
Heating Capacity	Rated	kW	33.5
		Btu/h	114700
	Max	kW	36.7
		Btu/h	125200
Power Input(Cooling)	Rated	kW	12.01
Power Input(Heating)	Rated	kW	9.05
Efficiency	EER(Rated)	W/W	2.79
	COP(Rated)	W/W	3.70
	SEER	Wh/Wh	6.83
	SCOP	Wh/Wh	4.45
	ηs,c	%	270.2
	ηs,h	%	175
Power Factor(Cooling/Heating)	Rated	-	0.93/0.93

For continuous product development, LG reserves the right to modify the specifications without notice and obligations.

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Outdoor Fan	Type	-	Propeller fan
	Air Flow Rate(High)	m³/min	210
	Discharge direction(Side / Top)	-	Side
Outdoor Fan Motor	Type	-	BLDC
	Drive	-	DC INVERTER
	Output	W x No.	250 x 2
Compressor	Type	-	Hermetically Sealed Scroll
	Piston Displacement	cm³/rev	62.1
	Number of Revolution	rev./min	3,600
	Motor Output	W x No.	5300 x 1
	Starting Method	-	Inverter
	Oil Type	-	FW68L(PVE)
Heat Exchanger	Type	-	Fin & Tube
	No.	-	2
	Fin Type	-	Wide Louver Plus
Dimensions	Net(W x H x D)	mm	1090 x 1625 x 380
	Shipping(W x H x D)	mm	1215 x 1795 x 500
Weight	Net	kg	152
	Shipping	kg	166
Exterior	Color	-	Warm Gray
	RAL (Classic)	-	RAL 7044
Protection Device	High Pressure Prevention	-	High pressure sensor / High pressure switch
	Frost Prevention	-	O (Logical)
	Discharge Temperature Control	-	O (Logical)
	Compressor/Fan Protection	-	Over-heat protection / Fan driver overload protector
	Inverter Protection	-	Over-heat protection / Over-current protection
Refrigerant	Type	-	R410A
	Precharged Amount	kg	6.0
	GWP(Global Warming Potential)	-	2087.5
	t-CO2eq.	-	12.525
	Control Type	-	Electronic Expansion Valve
Connecting Pipe	Liquid	mm(inch)	Φ12.7 (1/2)
	Gas	mm(inch)	Φ28.58 (1-1/8)
Piping Connection Type	Liquid	-	Brazing
	Gas	-	Brazing
Sound Pressure Level (Outdoor Unit)	Cooling / Heating	dB(A)	60/60
Measurement Standard (Pressure Level)	-	-	ISO 3745
Sound Power Level (Outdoor Unit)	Cooling / Heating	dB(A)	77/82
Measurement Standard (Power Level)	-	-	ISO 9614
Connecting Cable	Communication Cable(VCTF-SB)	mm² × cores	1.0~1.5 x 2
Electrical Characteristic	Minimum Circuit Amperes (MCA)	A	25.5

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Electrical Characteristic	Maximum Fuse Amperes (MFA)	A	35
	Total Over Current Amperes (TOCA)	A	28
	Comp_Maximum Starting Current (MSC)	A	5.9
	Comp_Rated Load Amperes (Cooling)	A	12.0
	Comp_Rated Load Amperes (Heating)	A	13.5
	Outdoor Fan Motor_Full Load Amperes (FLA)	A	2.4
Connectable indoor units number	Max. (Conditional)	Units	20
Operative Range (Outdoor Temp.)	Cooling	°C(WB)	-5 ~ 48
	Heating	°C(DB)	-20 ~ 18
Operative Range (Indoor Temp.)	Cooling	°C(WB)	14 ~ 27
	Heating	°C(DB)	10 ~ 27

### Notes

- 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" should be considered for electrical work and design.  
Especially the power cable and circuit breaker should be selected in accordance with that.
- 3 Power factor could vary less than  $\pm 1\%$  according to the operating conditions.
- 4 Sound level values are depend on the ambient conditions and values are normally higher in actual operation.  
Sound values of combination model are calculated values based on sound results of independent models.  
Sound values can be increased owing to ambient or installation conditions during operation.  
Sound values of system  $[dB(A)] = 10\log [10^{A1/10} + \dots + 10^{An/10}]$ , A1~An means sound values of independent models.
- 5 EUROVENT Test Condition :
  - Performance values on the this PDB are based on Ceiling Mounted Cassette combination.
  - Refer to EUROVENT web site ([www.eurovent-certification.com](http://www.eurovent-certification.com)) for other indoor unit combination and more detail test conditions.
- 6 Use appropriate power source refer to national standard.
- 7 Voltage supplied to the unit terminals should be within the minimum and maximum range.
- 8 Maximum allowable voltage unbalance between phase is 2%.
- 9 MSC means the Max. current during the starting of compressor.  
MSC and RLA are measured as the compressor only test condition.  
OFM are measured as the outdoor unit test condition.  
TOCA means the total over current value of each outdoor unit.  
Select the wire size based on the larger value among MCA or TOCA.  
MFA is used to select the circuit breaker and ground fault circuit interrupter, and all installation site must require attachment of an earth leakage breaker.  
[circuit breaker type is ELCB(Earth Leakage Circuit Breaker)].
- 10 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.

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### Control & Accessories

- PQCSZ250S0 AC Ez (up to 32 indoor units)
- PACEZA000 AC Ez Touch (up to 64 indoor units)
- PACM5A000 AC Manager 5 (up to 8,192 indoor units)
- PACS5A000 AC Smart 5 (up to 128 indoor units)
- PACS4B000 AC Smart IV (up to 128 indoor units)
- PACP5A000 ACP 5 (up to 256 indoor units)
- PACP4B000 ACP IV (up to 256 indoor units)
- PPWRDB000 PDI (Power Distribution Indicator) Standard, up to 128 indoor units
- PQNUD1S40 PDI (Power Distribution Indicator) Premium, up to 128 indoor units
- PACT5A000 New ACP LonWorks (U60 LonWorks module required)
- PMBUSB00A Modbus RTU Gateway
- PEXPMB000 ACS I/O Module (for 3rd Party Control)
- PLNWKB000 ACP LonWorks Gateway
- PQNFB17C0 ACP BACnet Gateway
- PRDSBM Cool/Heat Selector Switch
- PVDSMN000 ODU I/O Module for Multi V (since IV series)
- PWFMDB200 Cloud Gateway

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## Dimensional Drawing # 1

