

Ref. No.	LGACC-060526-078
Issued Date	Mar. 26. 2006
Rev. No.	Rev.0
Rev. Date	-

1.Specification

1.1 Compressor

1	Compressor Model Name	ARA049PAA
2	Compressor Type	Hermetic Motor Compressor
3	Compression Type	Scroll Type
4	Displacement	49.04 cm ³ / rev
5	Refrigerant	R410A
6	Oil / Oil Charging Amount	FVC 68D(PVE) 1800 ± 3%
7	Nitrogen Gas Holding Pressure	0.4 ± 0.2 kg/cm ² G
8	Painting	Black Color Paint
9	Net Weight (Including Oil)	42.6 kg (93.9 lb)
10	Suction Tube I.D	∅ 22.4 ± 0.1 mm
11	Discharge Tube I.D	∅ 12.9 ± 0.1 mm

1.2 Motor

Motor Type / Starting Type	Single Phase Induction Motor	
Pole / Rated Output	2 Pole / 3500 watts	
Power Source	1 Ph 220-240volt 50 Hz	
Rated Revolution	2910 rpm	
Insulation Class	B Class	
Winding Resistance (at 25 °C)	MAIN	0.41 ± 7% ohm
	SUB	1.35 ± 7% ohm
	-	

1.3 Safety Device

	SPEC	
IPR Valve	Operation Range	Reseal Range
	△38.7~45.7kgf/cm ²	-
Deep Vacuum operation	Ps 200~500mmHg	

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1.4 Performance

		at 220 volt	at 240 volt
Cooling Capacity (± 5%)	[BTU/h]	42,000	42,400
	[W]	12,309	12,426
Power Input (±5%)	[watts]	4,242	4,283
EER (±5%)	[BTU/wh]	9.9	9.9
Running Current	[A]	20.2	19.0
Locked Rotor Ampere	[A]	140	167
Sound Level	[dB(A)]	75 max.	
Vibration	[micron]	50 max.	

Starting Condition	Specification	Balance Pressure Condition
at Normal Condition	start at 85% of Rated Voltage (187 Volt)	Ps / Pd = 17.14 / 17.14 kg/cm ² G
at Overload Condition	start at 90% of Rated Voltage (198 Volt)	Ps / Pd = 19.18 / 19.18 kg/cm ² G

※) Rating Conditions

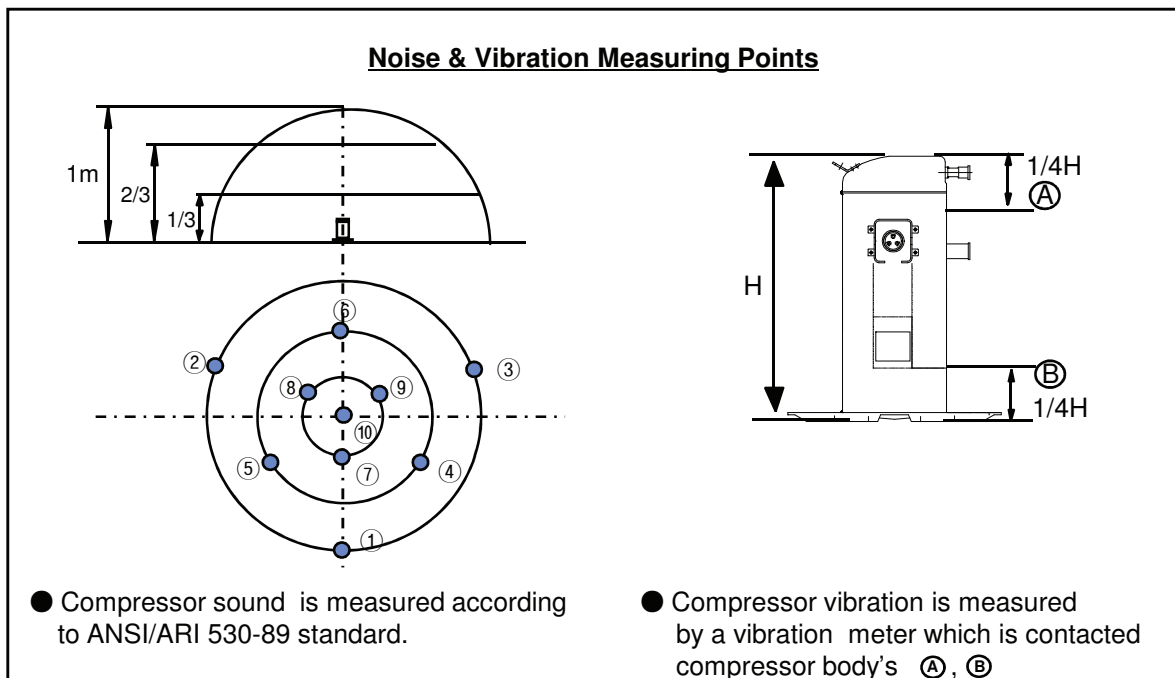
Cond. Temp. : 54.4 °C (130 °F)

Return Gas Temp. : 18.3 °C (65 °F)

Evap. Temp. : 7.2 °C (45 °F)

Liquid Temp. : 46.1 °C (115 °F)

Ambient Temp. : 35.0 °C (95 °F)



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1.5 Others

Leak Tight Pressure	High Pressure Side	40 kg/cm ² G
	Lower Pressure Side	- kg/cm ² G
Hydrostatic Strength Pressure	High Pressure Side	170 kg/cm ² G
	Lower Pressure Side	80 kg/cm ² G
Insulation Resistance (with 500V D.C Mega Tester)		50 MΩ Min.
Withstand Voltage		2,200 V- 1 sec. Leakage Current is less than 5 mA.
Residual Moisture / Residual Impurities		200 mg Max. / 80 mg Max.

1.6 Electrical Component

Part Name		Specification	
Running Capacitor		70 MFD / 450 VAC	
Overload Protector	Model Name		
	UP5QA0520 (Internal Type)		
	RUN	Open.Temp.	150°C ± 5°C
		Close Temp.	70°C ± 9°C
U/T	Amps (at 70°C)	50A	

2. Delivered Parts List

Parts Name	Type (Model)	EA	Parts' Dwg. NO.	Supply	
			LG		
Compressor	ARA049PAA	1	-	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
O.L.P	UP5QA0520	1	Internal Type	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Cover, Terminal	-	1	3550U - E002A	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
Gasket	-	1	4986U - L003A	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
Grommet	-	4	4022U - L004A	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
Grommet,Sleeve	-	4	4816U - L001E	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO

※ Refer to Attachments (Accessory Parts Drawings.)

※ O.L.P is the internal type and attached inside of compressor.

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3. Operating Limit

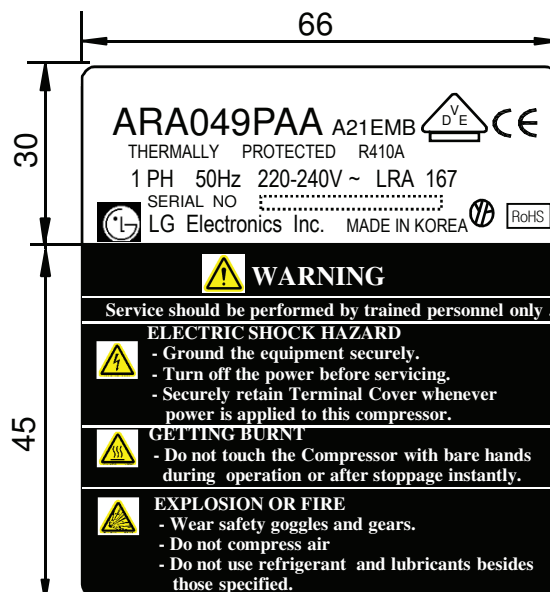
Discharge Pressure	[kg / cm ² G]	42 Max
Suction Pressure	[kg / cm ² G]	1.7 ~ 11.0
Motor Coil Temp.	[°C]	135 Max.
Discharge Temp.	[°C]	130 °C Max.

Refrigerant Charge Limit	2,100g Max.
Continuous Flood Back	Continuous Flood Back before the compressor should not be more than 10% of the total circulation quantity of refrigerant.
On/Off Interval & Cycles	On / Off = 3 Minutes / 3 Minutes 100,000 Cycles or less
Voltage Range	Rated Voltage ± 10 %
Frequency Range	Rated Frequency ± 2 %
Compression Ratio in Operating	The Compression ratio in operating shall be 6.7 or less , except 3 minutes starting period.
Pressure Difference at Starting	When starting, discharge pressure is balanced with suction pressure.
Tilt in Operation	The allowable tilt of the compressor in operation shall be 3 ° or less

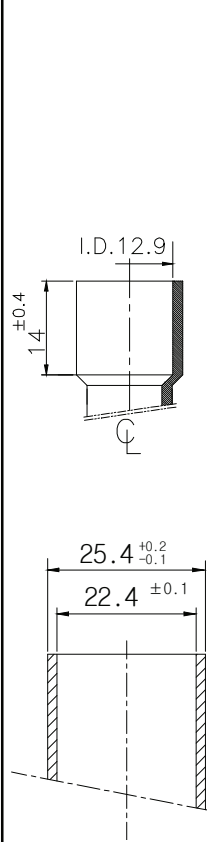
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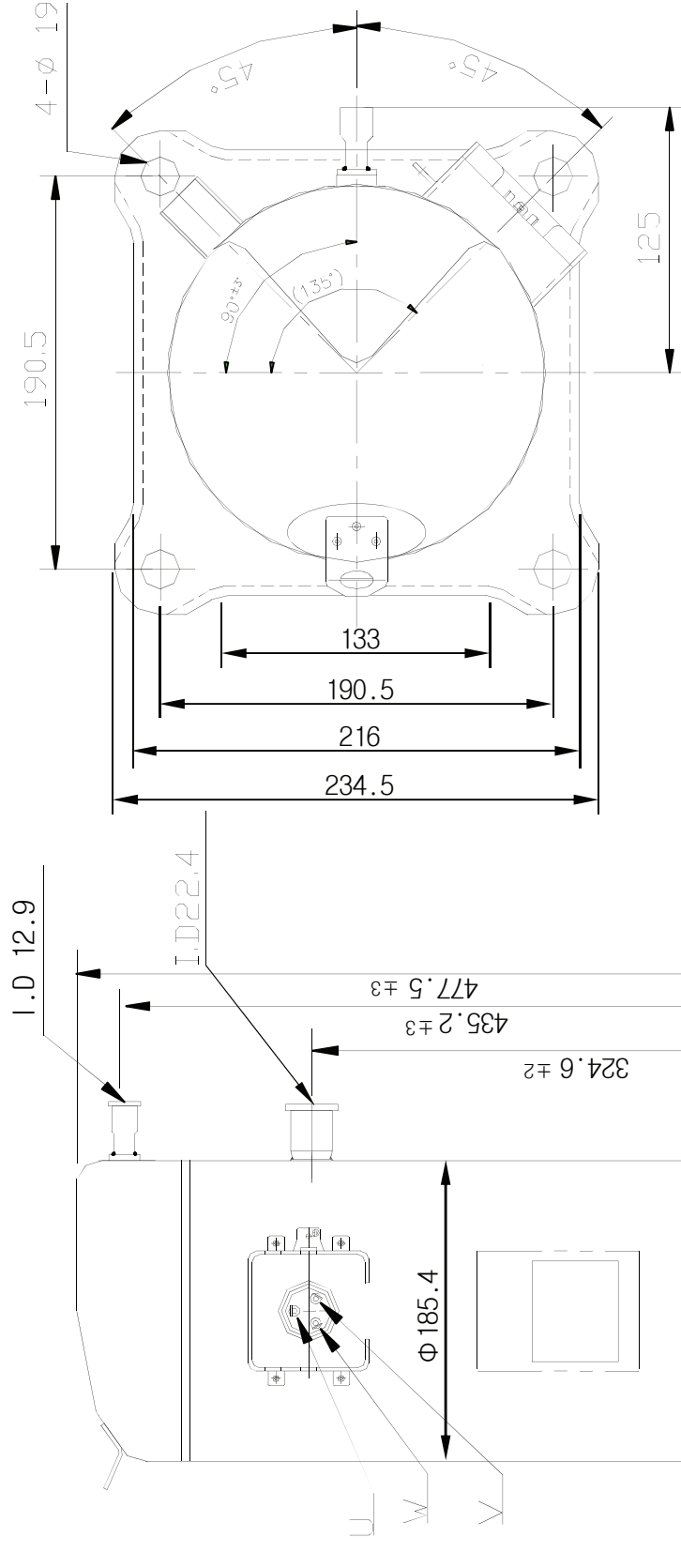


Ref. No.	LGACC-060307-044
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Detail Suction Tube

Detail Discharge Tube



UNIT	mm	SCALE	N / S
DES. ENGR.	S. H. JI	CHF. ENGR.	W. H. JEONG
Mar. 26, 2006		Mar. 26, 2006	
LG Electronics Inc. Comp. Division		CUSTOMER Embrutal	
COMP. OUT LINE			
ARA049PAA			

- NOTES**
1. PAINTING : BLACK PAINT (ELECTRO DEPOSITION)
 2. OIL : FVC 68D(PVE) OR EQUIVALENT 1,800 cc CHARGED
 3. NITROGEN CHARGED AFTER DEHYDRATION