

Ref. No.	LGACC-060413-070
Issued Date	Apr. 13. 2006
Rev. No.	Rev.0
Rev. Date	-

# 1.Specification

## 1.1 Compressor

1	Compressor Model Name	AQA036PAA
2	Compressor Type	Hermetic Motor Compressor
3	Compression Type	Scroll Type
4	Displacement	35.33 cm <sup>3</sup> / rev
5	Refrigerant	R410A
6	Oil / Oil Charging Amount	FVC 68D(PVE) 750 ± 3%
7	Nitrogen Gas Holding Pressure	0.4 ± 0.2 kg/cm <sup>2</sup> G
8	Painting	Black Color Paint
9	Net Weight ( Including Oil )	27.2 kg ( 60.0 lb )
10	Suction Tube I.D	∅ 19.2 ± 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 / 2800 watts	
Power Source	1 Ph 220-240volt 50 Hz	
Rated Revolution	2910 rpm	
Insulation Class	B Class	
Winding Resistance ( at 25 °C )	MAIN	0.84 ± 7% ohm
	SUB	1.60 ± 7% ohm
	-	

## 1.3 Safety Device

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

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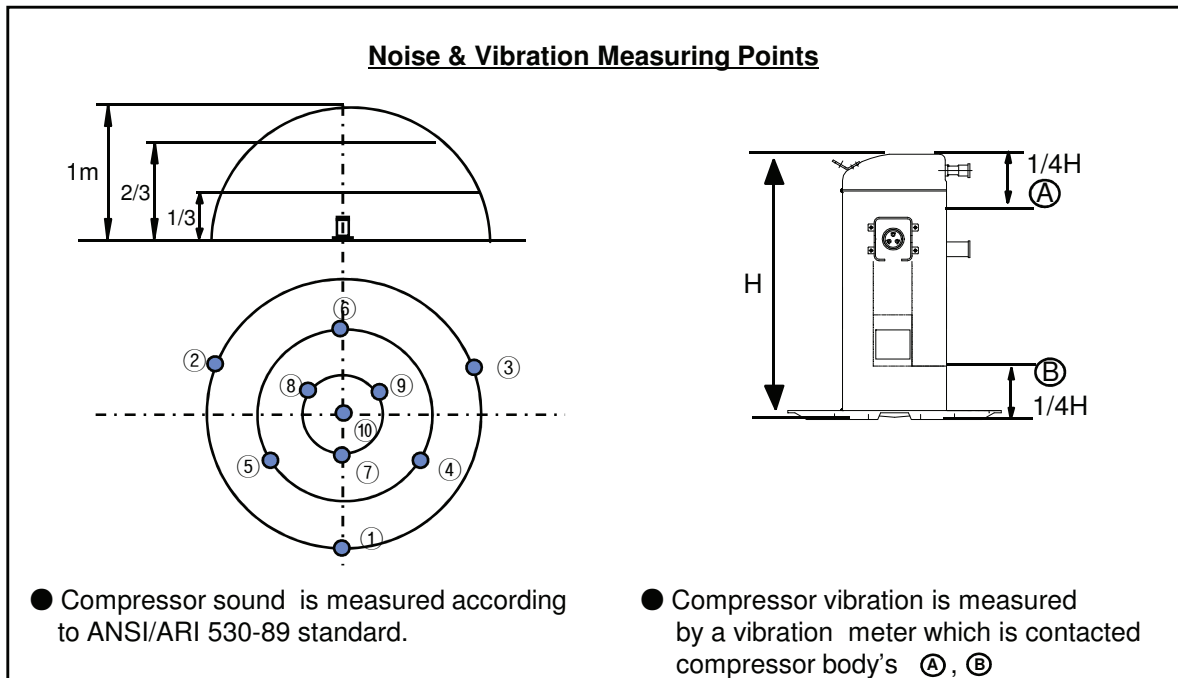
### 1.4 Performance

		at 220 volt	at 240 volt
Cooling Capacity ( ± 5%)	[ BTU/h]	29,800	29,900
	[ W]	8,734	8,763
Power Input ( ±5%)	[ watts]	3,170	3,286
EER ( ±5%)	[ BTU/wh]	9.4	9.1
Running Current	[A]	14.7	14.4
Locked Rotor Ampere	[A]	79	86
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 <sup>2</sup> G
at Overload Condition	start at 90% of Rated Voltage (198 Volt )	Ps / Pd = 19.18 / 19.18 kg/cm <sup>2</sup> 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 <sup>2</sup> G
	Lower Pressure Side	- kg/cm <sup>2</sup> G
Hydrostatic Strength Pressure	High Pressure Side	170 kg/cm <sup>2</sup> G
	Lower Pressure Side	80 kg/cm <sup>2</sup> 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		60 MFD / 440 VAC	
Overload Protector	Model Name		
	15HM - 2380 (Internal Type)		
	RUN	Open.Temp.	135°C ± 5°C
		Close Temp.	69°C ± 9°C
U/T	Amps (at 70°C)	35A	

## 2. Delivered Parts List

Parts Name	Type ( Model )	EA	Parts' Dwg. NO.	Supply	
			LG		
Compressor	AQA036PAA	1	-	<input checked="" type="checkbox"/>	<input type="checkbox"/>
O.L.P	15HM - 2380	1	Internal Type	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cover, Terminal	-	1	3550U - D002B	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gasket	-	1	4986U - L002E	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Grommet	-	4	4022U - L004A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Grommet,Sleeve	-	4	4816U - L001E	<input checked="" type="checkbox"/>	<input type="checkbox"/>

※ 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

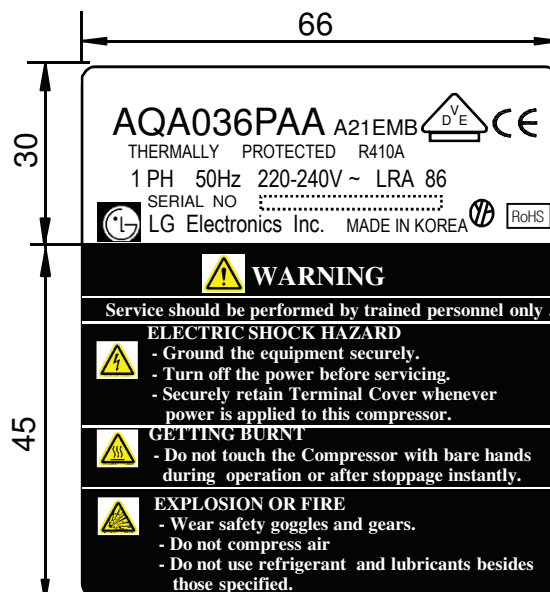
Discharge Pressure	[ kg / cm <sup>2</sup> G ]	42 Max
Suction Pressure	[ kg / cm <sup>2</sup> G ]	1.7 ~ 11.0
Motor Coil Temp.	[ °C ]	135 Max.
Discharge Temp.	[ °C ]	130 °C Max.

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

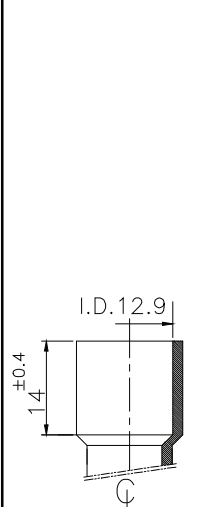
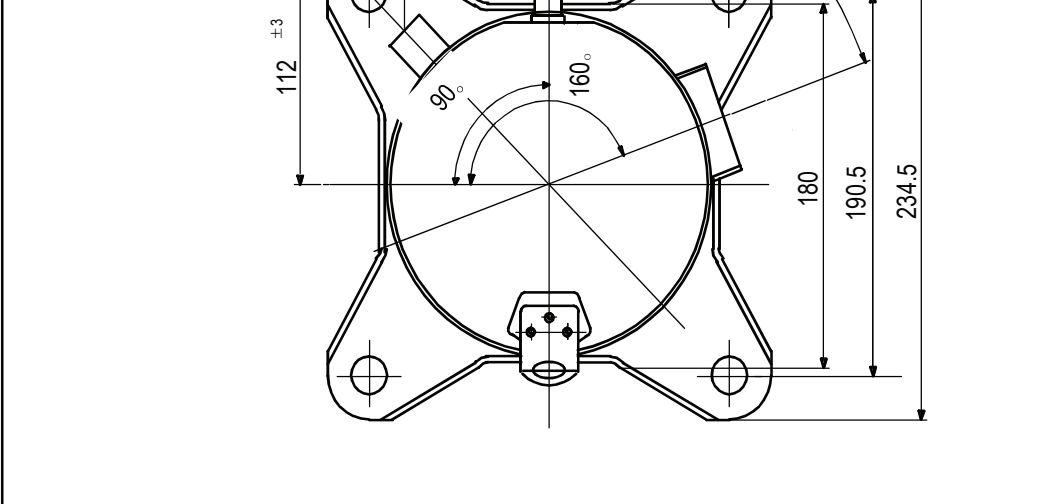
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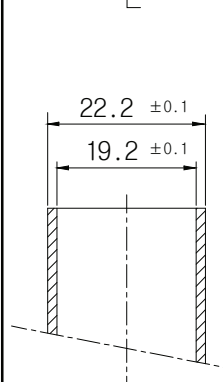
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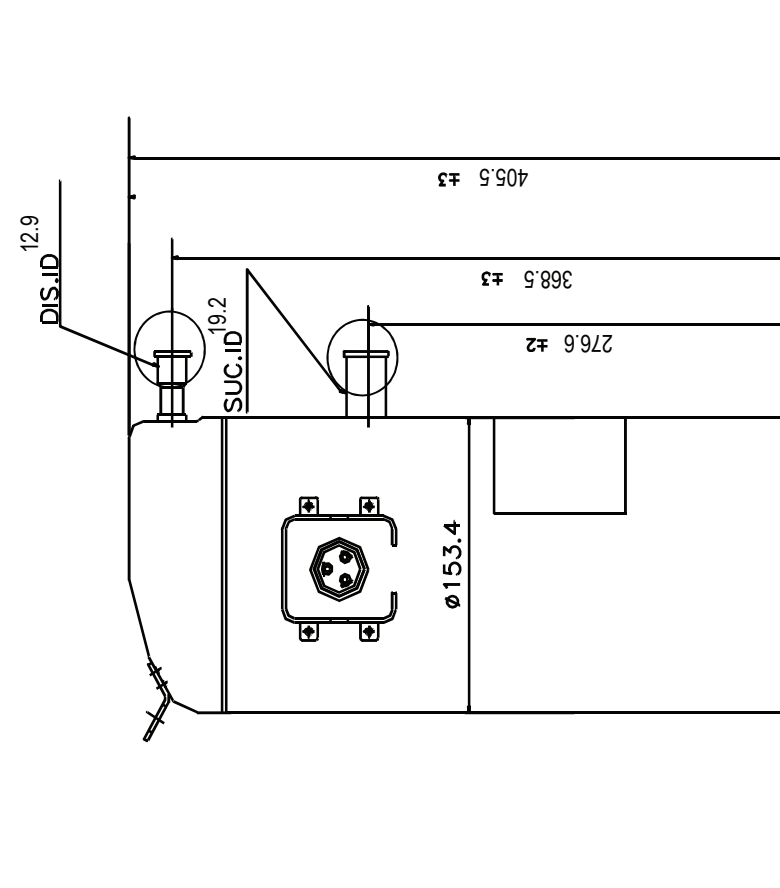
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Detail Suction Tube



Detail Discharge Tube



UNIT	mm	SCALE	N / S
DES. ENGR.	S. H. JI	CHF. ENGR.	W. H. JEONG
Apr. 13. 2006		Apr. 13. 2006	
LG Electronics Inc. COMP. Division		CUSTOMER EMBRITAL	
<b>COMP. OUT LINE</b>			
<b>AQA036PAA</b>			

- NOTES
1. PAINTING : BLACK PAINT ( ELECTRO DEPOSITION )
  2. OIL : FVC 68D(PVE) OR EQUIVALENT 750 cc CHARGED
  3. NITROGEN CHARGED AFTER DEHYDRATION