

Ref. No.	LGACC-041111-196
Date	Nov. 11. 2004
Rev. No.	REV. 0
Rev. Date	-

# 1. Specification

## 1.1 Compressor

1	Compressor Model Name	GP270PAA
2	Compressor Type	Hermetic Motor Compressor
3	Compression Type	Rotary ( Rolling Piston Type )
4	Displacement	27.0 cm <sup>3</sup> / rev
5	Refrigerant	R410A
6	Oil / Oil Charging Amount	FVC68D / 700 ±10 cc
7	Nitrogen Gas Holding Pressure	0.8 ± 0.2 kg / cm <sup>2</sup> G
8	Painting	Black Color Paint
9	Net Weight ( Including Oil )	22.1 kg
10	Suction Tube I.D.	∅ 16.0 <sup>+0.15</sup> <sub>-0</sub>
11	Discharge Tube I.D.	∅9.7 ± 0.15

## 1.2 Motor

Motor Type / Starting Type	Single Phase Induction Motor / PSC	
Pole / Rated Output	2 POLE / 2150 [ W ]	
Power Source	1 PH - 220/240 V - 50 Hz	
Rated Revolution	2876 rpm	
Insulation Class	E CLASS	
Winding Resistance ( at 25 <sup>o</sup> C )	Main	1.249± 7 % [ Ω ]
	Sub	2.641± 7 % [ Ω ]

Ref. No.	LGACC-041111-196
Date	Nov. 11. 2004
Rev. No.	REV. 0
Rev. Date	-

### 1.3 Performance

	at 220V	at 240 V
Cooling Capacity [ BTU/h ]	23,100	23,400
(± 5%) [ Watts ]	6,770	6,858
Power Input (± 5%) [ Watts ]	2,330	2,412
E.E.R.(± 5%) [ BTU/Wh, (W/W) ]	9.9 ( 2.90 )	9.7 ( 2.84 )
Running Current [ A ]	10.7	10.4
Locked Rotor Ampere [ A ]	-	62
Sound Pressure Level [ dB(A) ]	-	66 ± 2
Vibration [ gal ]	-	2000 Max

Starting Condition	Specification	Pressure Condition
at Normal Condition	start at 90% of Rated Voltage ( 198 Volt )	Ps / Pd = 9.12 / 33.45 kg/cm <sup>2</sup> G
at Overload Condition	start at 95% of Rated Voltage ( 209 Volt )	Ps / Pd = 10 / 42 kg/cm <sup>2</sup> G

#### ※) Rating Conditions

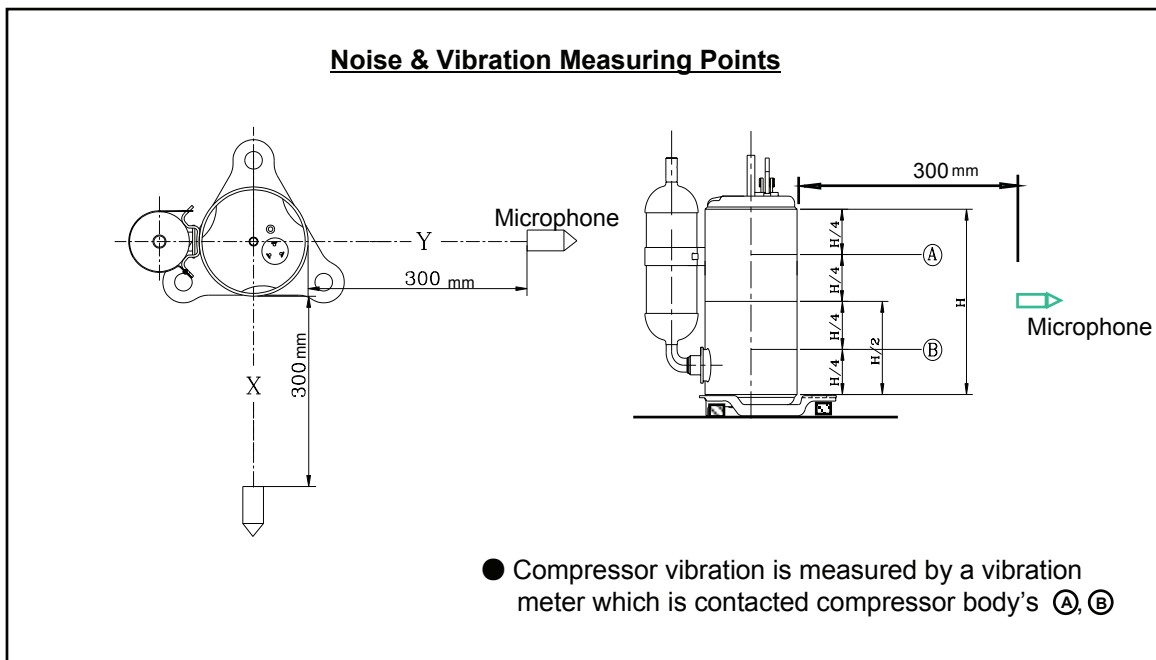
Cond. Temp. : 54.4 °C ( 130 °F )

Return Gas Temp. : 35.0 °C ( 95.0 °F )

Evap. Temp. : 7.2 °C ( 45 °F )

Liquid Temp. : 46.1 °C ( 114.9 °F )

Ambient Temp. : 35.0 °C ( 95 °F )



Ref. No.	LGACC-041111-196
Date	Nov. 11. 2004
Rev. No.	REV. 0
Rev. Date	-

## 1.4 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	80.0 kg/cm <sup>2</sup> G
Insulation Resistance (with 500V D.C Mega Tester)		50 MΩ Min.
Withstand Voltage		at 1,800V - 1 min.(2,200 V- 1 sec.) Leakage Current is less than 5mA.
*) Residual Moisture / Residual Impurities		150 mg Max. / 70 mg Max.

\*) Each part is measured separately

## 1.5 Electrical Component

Part Name	Specification
Running Capacitor	50 μF / 400 VAC
Overload Protector	Internal Type

## 2. Delivered Parts List

Parts Name	Type ( Model )	EA	Parts Dwg. NO.( LG )	Supply	
			-	YES	NO
Compressor	GP270PAA	1	-	<input checked="" type="checkbox"/>	<input type="checkbox"/>
O.L.P	Internal Type	1	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cover, Terminal	-	1	3550U - L005A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gasket	-	1	4986U - L004A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nut, Hexagon Flange	-	1	1NFZU - L001A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Washer, Plain Cover	-	1	1WPZU - L001A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Grommet	-	3	4022U - L005A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bolt, Stud	-	3	1BSZU - L002B	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Washer, Plain	-	3	1WPZU - L003A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nut, Hexagon	-	3	1NHZU - L001A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Capacitor	-	1	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>

※ ) Refer to Attachments ( Accessory Parts Drawings. )

Date	Rev.No.	Description	Ref. No.	LGACC-041111-196
Feb.26.2005	△	• The suction pressure was 1.0~7.0	Date	Nov. 11. 2004
			Rev. No.	REV. 1
			Rev. Date	Feb. 26. 2005

### 3.Operating Limit

Discharge Pressure	[ kg / cm <sup>2</sup> G ]	42 Max.
Suction Pressure	[ kg / cm <sup>2</sup> G ]	△ 3.0 ~ 12.0
Motor Coil Temp.	[ °C ]	135 Max.

Refrigerant Charge Limit	SRAC Cooling Only	1,700g Max.
	SRAC Heat Pump	1,150g Max.
Continuous Flood Back	Continuous Flood Back before the accumulator should not be more than 10% of the total circulation quantity of refrigerant.	
On/Off Interval & Cycles	On / Off = 3 Minutes / 3 Minutes 20,000 Cycles or less	
Voltage Range	Rated Voltage -15 % , +10 %	
Frequency Range	Rated Frequency ± 2 %	
Pressure Difference in Operating	The Pressure Difference in operating shall be 0.49 MPa or more, but 3 minutes starting excluded.	
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 5 ° or less	

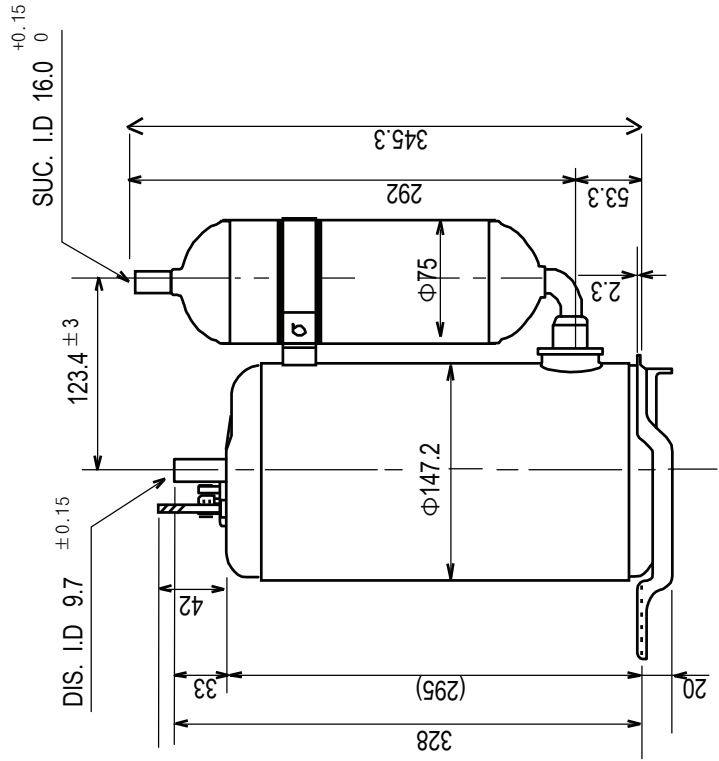
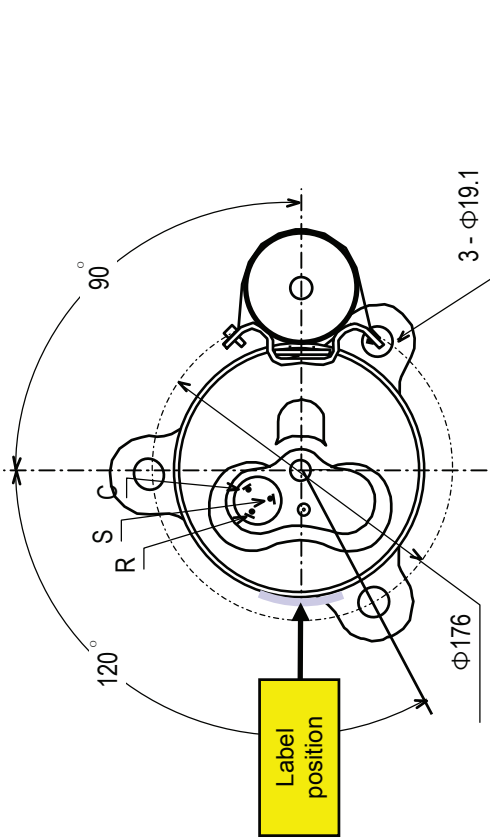
#### \* Effective Period of This Document \*

This document will be effective after LG's receipt with your authorized signature.  
When design modification is approved by the customer, the current document is unavailable.

#### \* LABEL \*



Ref. No.	LGACC-041111-196
Date	Nov. 11. 2004
Rev. No.	REV. 0
Rev. Date	-



NOTES

1. PAINTING : BLACK PAINT ( ELECTRO DEPOSITION )
2. OIL : FVC68D (Ether) OR EQUIVALENT 700 cc CHARGED
3. NITROGEN CHARGED AFTER DEHYDRATION

UNIT	mm	SCALE	N / S
DES. ENGR.	J. T. KIM	CHF. ENGR.	H. C. JEONG
Nov. 11. 2004		Nov. 11. 2004	
LG Electronics Inc. A/C Comp. Division		CUSTOMER EMBRITAL	
<b>COMP. OUT LINE</b>			
<b>GP270PAA</b>			