

Ref. No.	LGACC-041113-205
Date	Nov. 13. 2003
Rev. No.	REV. 0
Rev. Date	-

# 1.Specification

## 1.1 Compressor

1	Compressor Model Name	GP290PAA
2	Compressor Type	Hermetic Motor Compressor
3	Compression Type	Rotary ( Rolling Piston Type )
4	Displacement	29.0 cm <sup>3</sup> / rev
5	Refrigerant	R410A
6	Oil / Oil Charging Amount	FVC68D / 1,130 ± 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 )	22.94 kg
10	Suction Tube I.D.	Φ 16.0 <sup>+0.15</sup> <sub>-0</sub>
11	Discharge Tube I.D.	Φ 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°C )	Main	1.249 ± 7 % [ Ω ]
	Sub	2.641 ± 7 % [ Ω ]

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### 1.3 Performance

	at 220V	at 240 V
Cooling Capacity [ BTU/h ]	24,700	24,900
(± 5%) [ Watts ]	7,239	7,297
Power Input (± 5%) [ Watts ]	2,470	2,541
E.E.R.(± 5%) [ BTU/Wh ,(kcal/Wh) ]	10.0 ( 2.93 )	9.8 ( 2.87 )
Running Current [ A ]	11.5	11.0
Locked Rotor Ampere [ A ]	-	62
Sound Pressure Level [ dB(A) ]	-	66 ± 2
Vibration [ gal ]	-	2,000 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

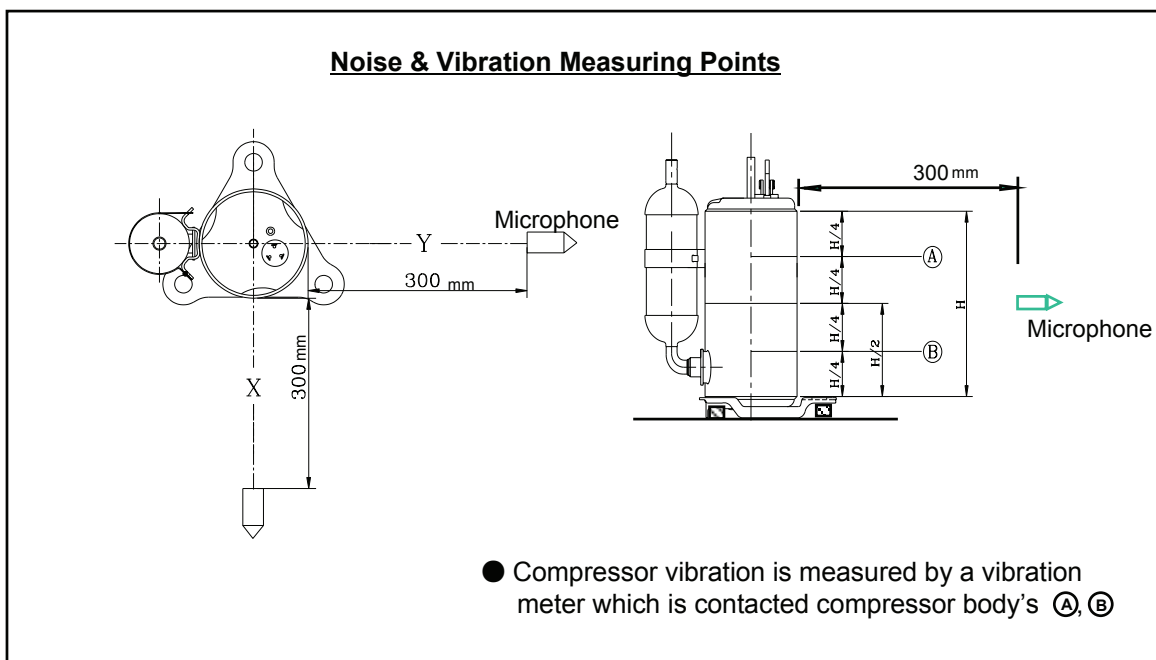
Cond. Temp. : 54.4 °C ( 130 °F )

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 )



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#### 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.

#### 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	
Compressor	GP290PAA	1	-	<input checked="" type="radio"/> YES	<input type="radio"/> NO
O.L.P	Internal Type	1	-	YES	<input checked="" type="radio"/> NO
Spring, O.L.P	—	1	4970U - L002A	YES	<input checked="" type="radio"/> NO
Cover, Terminal	—	1	3550U - L005A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Gasket	—	1	4986U - L004A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Nut, Hexagon Flange	—	1	1NFZU - L001A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Washer, Plain Cover	—	1	1WPZU - L001A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Grommet	—	3	4022U - L005A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Sleeve, Grommet	—	3	4816U - L001D	YES	<input checked="" type="radio"/> NO
Bolt, Stud	—	3	1BSZU - L002A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Washer, Plain	—	3	1WPZU - L002A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Nut, Hexagon	—	1	1NHZU - L001A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Capacitor			-	YES	<input checked="" type="radio"/> NO

※ ) Refer to Attachments ( Accessory Parts Drawings. )

Date	Rev.No.	Description	Ref. No.	LGACC-041113-205
Feb.26.2005	△	• The suction pressure was 1.7~11.0	Date	Nov. 13. 2003
			Rev. No.	REV. 1
			Rev. Date	Feb. 26. 2005

### 3.Operating Limit

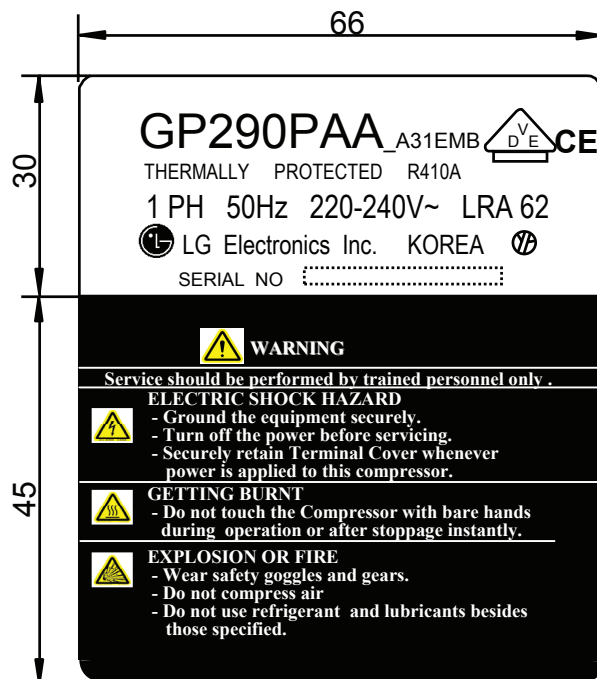
Discharge Pressure	[ kg / cm <sup>2</sup> G ]	42 Max.
Suction Pressure	[ kg / cm <sup>2</sup> G ]	△ 3.0 ~ 12.0
Motor Coil Temp.	[ °C ]	135 Max.

Refrigerant Charge Limit	2,300g Max. for Split type Heat pump
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

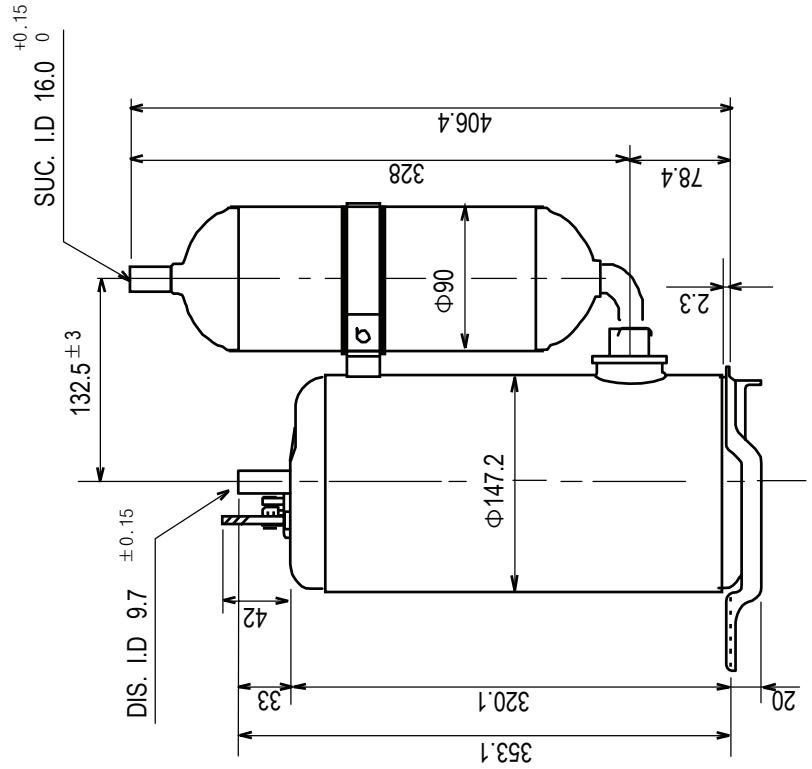
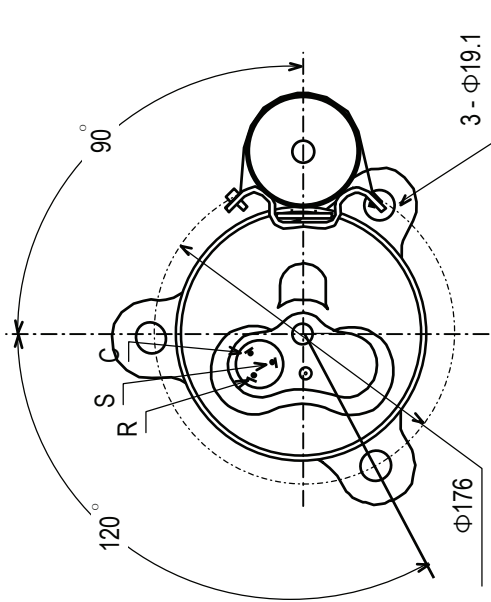
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NOTES

1. PAINTING : BLACK PAINT ( ELECTRO DEPOSITION )
2. OIL : FVC68D (Ether) OR EQUIVALENT 1,130 cc CHARGED
3. NITROGEN CHARGED AFTER DEHYDRATION

UNIT	mm	SCALE	N / S
DES. ENGR.	J. T. KIM	CHF. ENGR.	H. C. JEONG
Nov. 13. 2004		Nov. 13. 2004	
LG Electronics Inc. A/C Comp. Division		CUSTOMER EMBRITAL	
<b>COMP. OUT LINE</b>			
<b>GP290PAA</b>			