

Ref. NO.	LGACC-131104-001
Issued Date	Nov. 04. 2013
Rev. NO.	Rev. 0
Rev. Date	-

1.Specification

1.1 Compressor

1	Compressor Model Name	GPS250PAA
2	Compressor Type	Hermetic Motor Compressor
3	Compression Type	Rotary Type (Rolling Piston Type)
4	Displacement	25.0 cm ³ / rev
5	Refrigerant	R 410A
6	Oil / Oil Charging Amount	POE(RB68A) or PVE(FVC68D) / 750 cc
7	Painting	Black Color Paint
8	Net Weight (Including Oil)	22.0 kg
9	Suction Tube I.D	$\Phi 16.0^{+0.15}_0$ mm
10	Discharge Tube I.D	$\Phi 9.7 \pm 0.15$ mm

1.2 Motor

Motor Type / Starting Type	Single Phase Induction Motor / PSC	
Pole / Rated Output	2 Pole / 2150 Watts	
Power Source	1 Ph - 220 / 240Volts - 50 Hz	
Rated Revolution	2876 rpm	
Insulation Class	E Class	
Windings Resistance (at 75 °C)	Main	1.50 \pm 7% Ohms
	Sub	3.14 \pm 7% Ohms

Ref. NO.	LGACC-131104-001
Issued Date	Nov. 04. 2013
Rev. NO.	Rev. 0
Rev. Date	-

1.3 Performance

Voltage		at 220 V	at 240 V
Cooling Capacity (-5%↑)	[BTU/h]	21,200	21,500
	[kcal/h]	5,342	5,418
Power Input (+5%↓)	[watts]	2,038	2,129
EER (-5%↑)	[BTU/w · hr]	10.4	10.2
Running Current	[A]	9.6	9.6
Locked Rotor Ampere	[A]	60 A	
Sound Level	[dB(A)]	76 (MAX)	
Vibration Standard Condition	[Gal]	2,000 Max	

Ref. NO.	LGACC-131104-001
Issued Date	Nov. 04. 2013
Rev. NO.	Rev. 0
Rev. Date	-

1.6 Minimum Starting Voltage

Cold Start - Temp. Condition : 35°C - Balanced pressure	176 Volts Max.
---	----------------

1.7 Others

Leak Tight Pressure	High Pressure Side	40 kgf / cm ² G
	Low Pressure Side	-
Hydrostatic Strength Pressure	High Pressure Side	170 kgf / cm ² G
	Low Pressure Side	69.0 kgf / cm ² G
Insulation Resistance (with 500V D.C Mega Tester)		50 MΩ Min.
Withstand Voltage		At 2,200 V / 1 Sec. Leakage Current is less than 5 mA
Residual Moisture (Karl Fisher Method)		100 mg Max.
** Residual Impurities		70 mg Max

**) Each part is measured separately

1.8 Electrical Component

Running Capacitor	45 MFD / 400 VAC
Over Load Protector	INTERNAL

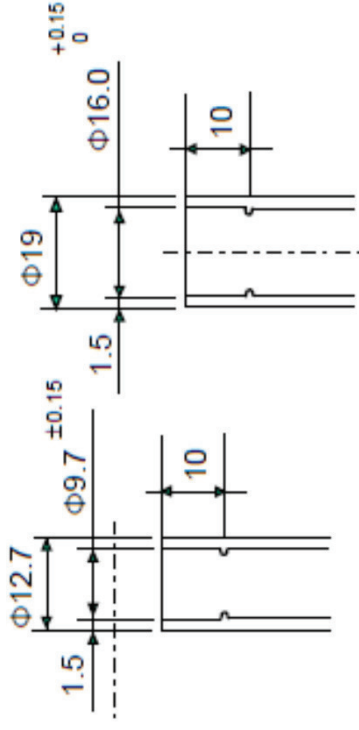
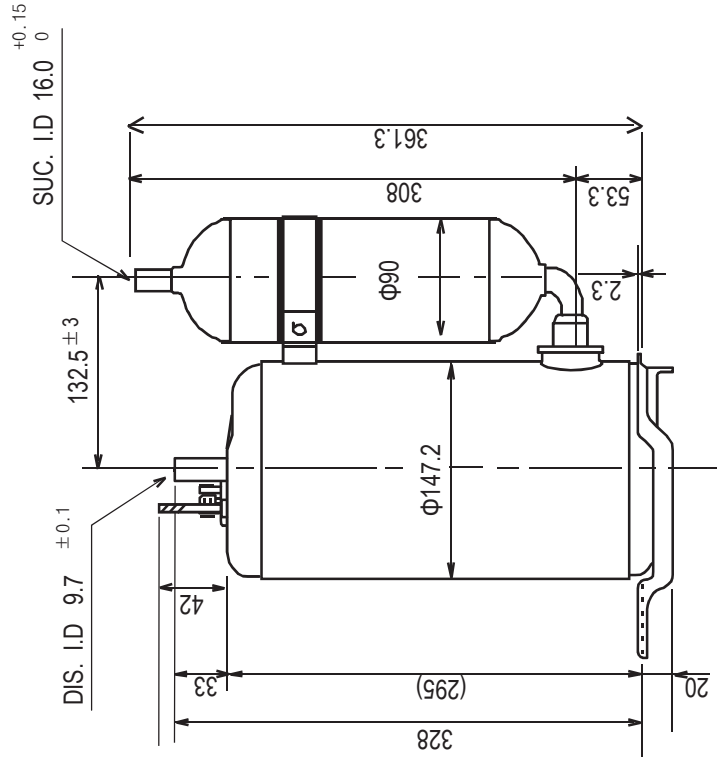
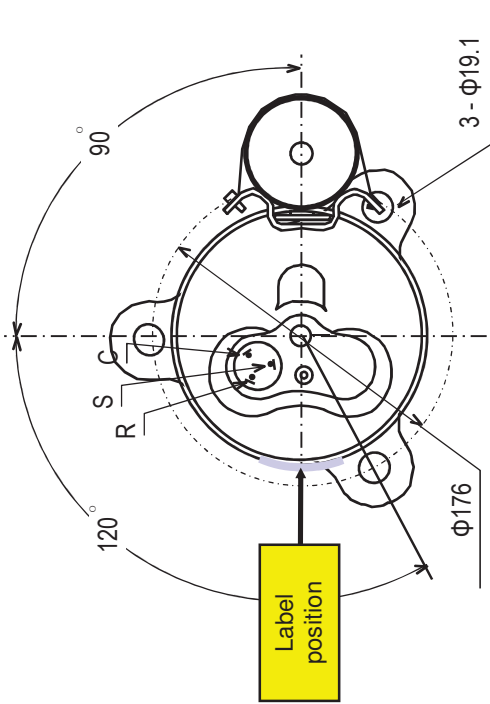
Ref. NO.	LGACC-131104-001
Issued Date	Nov. 04. 2013
Rev. NO.	Rev. 0
Rev. Date	-

3. Operating Limit

Discharge Pressure	[kgf / cm ² G]	42.0 Max.
Suction Pressure	[kgf / cm ² G]	4.0 ~ 12.0
Discharge Temp.	[°C]	115 Max.
Motor Coil Temp.	[°C]	135 Max.

Refrigerant Charge Limit	<p>[Cooling Only] 2,500g Max. (*K≥0.4, **Oil Dilution Rate=0.2) *Must apply the accumulator in effective volume 990cc to use a GPS250PA*</p> <p>[Heat Pump] 2,000g Max. (*K≥0.6, **Oil Dilution Rate=0.25) *Must apply the accumulator in effective volume 990cc to use a GPS250PA*</p>
Liquid Refrigerant Back	System should be designed not to allow the liquid to go back to compressor which cause knocking noise , current increase or undesirable vibration.
Stress In Suction & Discharge Piping Surface (Include Accumulator)	150 kgf / cm ² Max.
Fan Motor in Application	<ul style="list-style-type: none"> • Fan motor of condenser must be operating when compressor is operating. • When OLP of compressor closes , fan motor of condenser should be operating. • In case system has intentional fan stop , compressor should be operated within limits of system application.
On / Off Interval	Running Interval Min. 6 Minutes. On / Off = 3 Minutes / 3 Minutes
Voltage Range (Standard Condition)	Rated Voltage ± 15% (at 220V)
Frequency Range	Rated Frequency ± 2%
Pressure Difference at Starting	When starting , discharge pressure is balanced with suction pressure within 0.05 MPa.
Tilt in Operation	The allowable tilt of the compressor in operation shall be 5° or less.

Ref. No.	LGACC-131104-001
Date	Nov. 04. 2013
Rev. No.	REV.0
Rev. Date	-



Discharge tube **Suction tube**

NOTES

1. PAINTING : BLACK PAINT (ELECTRO DEPOSITION)
2. OIL : RB68A OR EQUIVALENT 750 cc CHARGED
3. NITROGEN CHARGED AFTER DEHYDRATION

UNIT	mm	SCALE	N / S	COMP. OUT LINE	
DES. ENGR.		CHF. ENGR.			
Sep. 14. 2012	S. M. KIM	Sep. 14. 2012	T. Y. NOH		
LG Electronics Inc.	AC Comp. Team	CUSTOMER	UNIONAIRE	GPS250PAA	