

Ref. NO.	TBZ35561101
Issued Date	2012.05.07
Rev. NO.	Rev. 2
Rev. Date	Mar. 07. 2013

LG Electronics Inc.

SPECIFICATION SHEET for APPROVAL

MODEL : GKT141MBA.A21DHF

Set P/No : TBZ35561101

CUSTOMER : RAC

Purchasing Manager : _____

Engineering Manager : _____

LG Electronics Inc.

Sales Manager : _____

Engineering Manager : _____

결 재	업무재량권 규정에 의한 재량권자(연구실장)			
	기안자	개발 Gr.장	QA	연구실장
	박재우	안지용	안희갑	노태영

Please Return 1 Copy on Your Approval.

Air Conditioning Compressor Division LG Electronics Inc.
 Tel : (055) 269 - 3890 Fax : (055) 268 - 4886

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1.Specification

1.1 Compressor

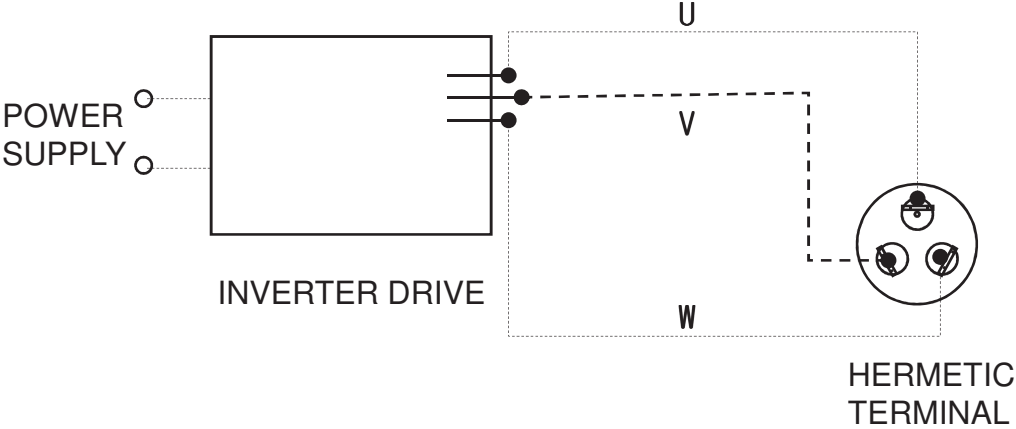
1	Application	Cooling and Heating with BLDC Inverter System
2	Compressor Type	Hermetic Motor Compressor
3	Pump Type	Twin Rotary (Two Cylinder Rolling Piston Type)
4	Displacement	14.1 cm ³ / rev
5	Refrigerant	R410A
6	Oil / Oil Charging Amount	FVC68D / 470 cc
7	Painting	Black Color Paint
8	Net Weight (Including Oil)	10.2 kg
9	Suction Tube I.D	Φ 12.8 $^{+0.15}_0$ mm
10	Discharge Tube I.D	Φ 9.7 $^{+0.1}_0$ mm

1.2 Motor

Motor Type / Starting Type	BLDC Motor / DC Inverter Starting	
Pole / Rated Output	6 Pole / 1,500Watts	
Power Source	Brushless Inverter (200-240 Volts)	
Winding type	Concentrated Winding	
Insulation Class	E Class	
Windings Resistance (at 25 °C)	U-V	1.580 ±7% Ohms
	V-W	1.579 ±7% Ohms
	W-U	1.578 ±7% Ohms

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1.3 Wiring diagram



1.4 Performance

※ Electric source
 DC Link Voltage : 280 V , 180° Sine Wave Current Charge (Designed by LGE)

		60Hz
Cooling Capacity (-5%↑,Z Value : 4.0↑)	[BTU/h]	14,600
	[kW]	4.27
Power Input (+5%↓,Z Value : 4.0↑)	[watts]	1,327
EER (-5%↑,Z Value : 4.0↑)	[BTU/w · hr]	11.0
Running Current	[A]	5.0

☞ Rated Conditions (ARI Condition)

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	42 kgf / cm ² G
	Low Pressure Side	-
Hydrostatic Strength Pressure	High Pressure Side	170 kgf / cm ² G
	Low Pressure Side	69 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)		60 mg Max.
* Residual Impurities		70 mg Max

*) Each part was measured separately

* Condition

	Rated Condition	Max Load Condition
Con. Temp(°C)	55	65
Eva. Temp(°C)	7	12
Return Gas. Temp(°C)	18.3	25
Ambient Temp(°C)	35	35

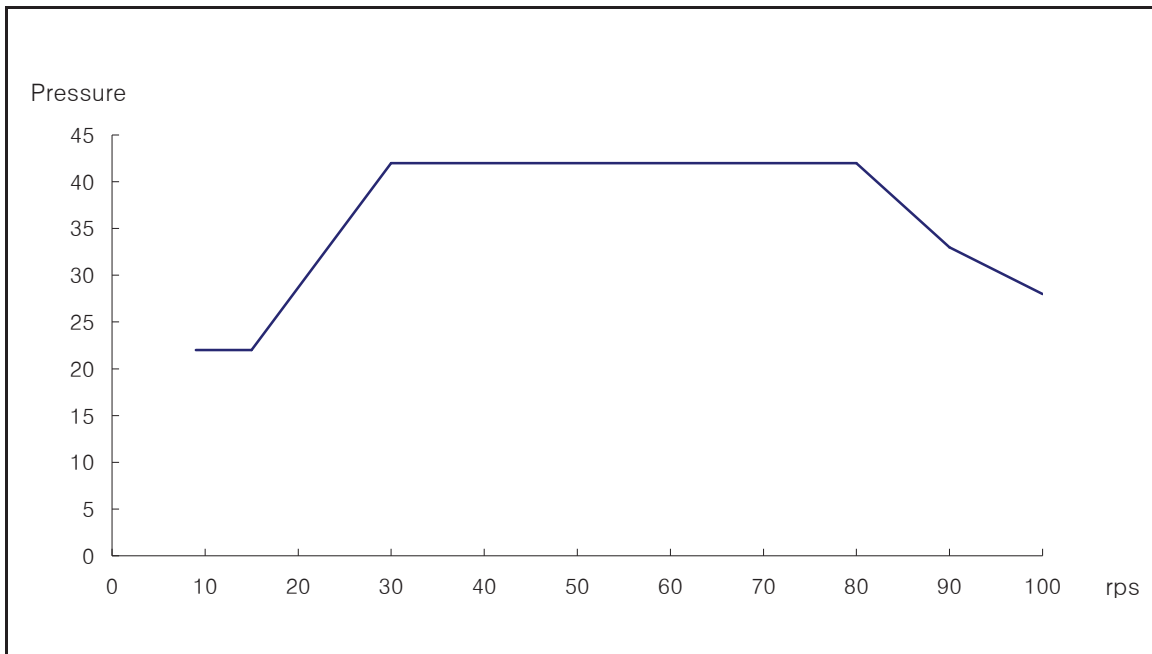
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3.Operating Limit

Application Limit

Discharge Pressure	[kgf/cm ² G]	42 Max.
Suction Pressure	[kgf/cm ² G]	2.4 ~ 14
Discharge Pipe Temp.	[°C]	115 Max.
Motor Coil Temp.	[°C]	130 Max.
Max load current	[Apeak]	14 Max.

Pressure Limit

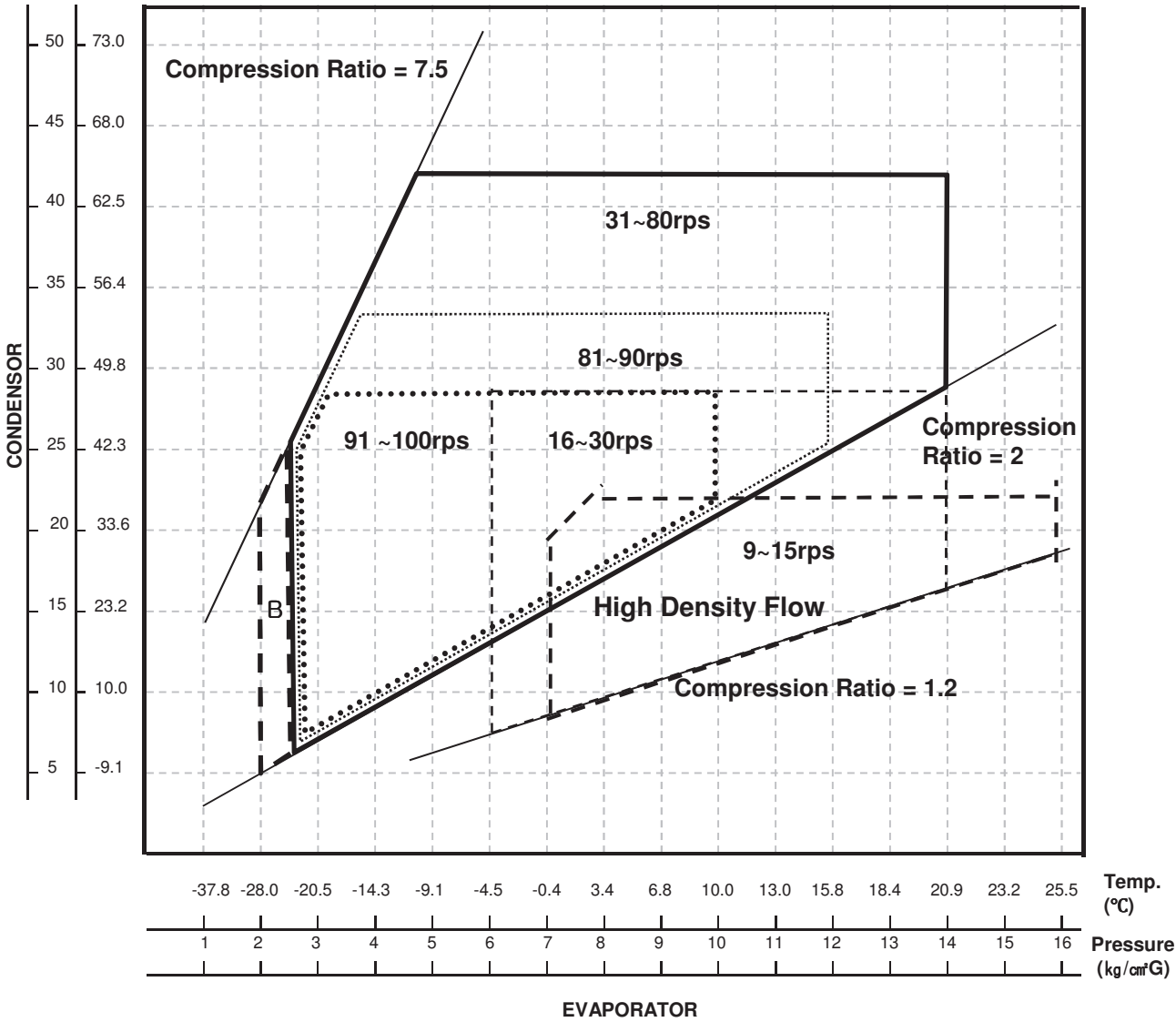


Operating Speed (rps)	9	15	30	80	90	100
Discharge pressure_Max (kgf/cm ²)	22	22	42	42	33	28

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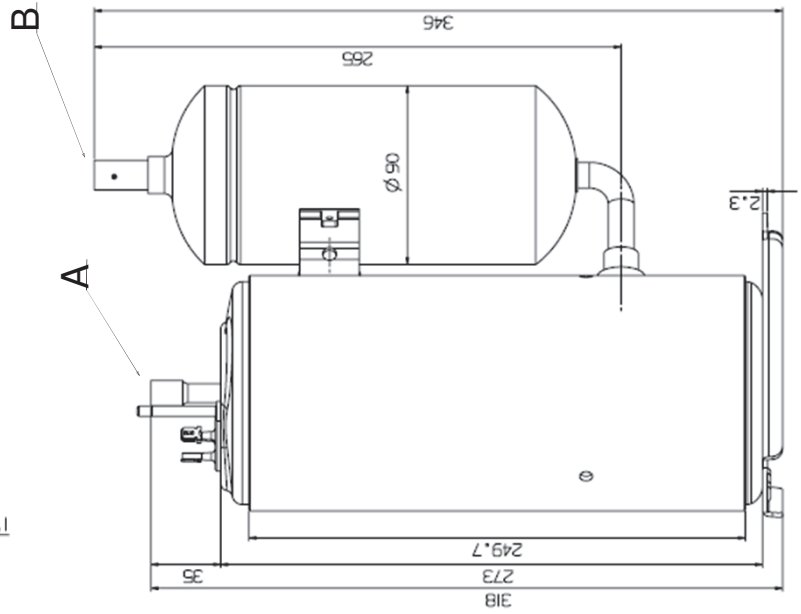
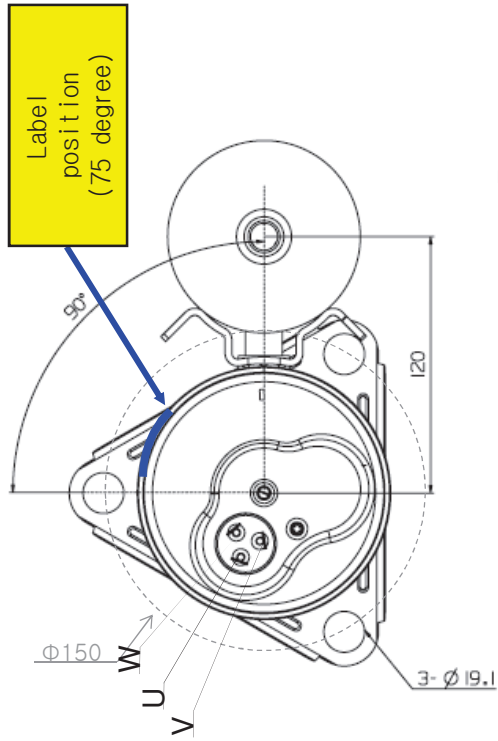
Pressure Limit

Pressure Temp.
(kg/cm²G) (°C)

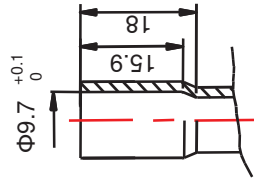


- In case of B Area,
- less than 3 min. at defrosting and restarting after defrosting
 - Motor wire temperature less than 130°C
 - Do not occur liquid refrigerant back
 - Must keep Minimum oil level

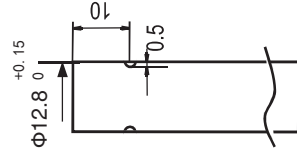
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Detail of A



Detail of B



NOTES

1. PAINTING : BLACK PAINT (ELECTRO DEPOSITION)
2. OIL : FVC68D 470 ± 10 cc CHARGED
3. NITROGEN CHARGED AFTER DEHYDRATION
4. DIMENSIONS ARE mm UNITS.

UNIT	mm	SCALE	N / S
DES. ENGR.	J. W. PARK	CHF. ENGR.	T. Y. NOH
DES. DATE	Feb. 1. 2012	CHF. DATE	Feb. 01. 2012
DES. BY	LG Electronics Inc. EC Comp. Lab	CHF. BY	CUSTOMER RAC
COMP. OUT LINE			
GKT141MBA			