

Refrigeration Compressor

BCLBH170F-DJ

208~230V/1Ph/60Hz R22

Compressor Technical Specifications

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1) Application

Model Name	LBH170F-DJ	
Compressor Type	Hermetic Motor Compressor	
A/C Type	Cooling & Heading A/C System	
Refrigerant Type	R22	
Maximal Refrigerant Charged	1.0Kg Max	
Motor Type	Single Phase Induction Motor PSC	
Power Source	208~230V/1Ph/60Hz	
Safety Approval		

2) Specification

Displacement	16.8cm3/rev.	
Oil Charged	ATMOS NM56EP · 350ml	
Weight (Oil Included)	11.3Kg	
Pole Numbers	2 Poles	
Coil Resistance (at 20°C/68°F)	Main: 2.70±5%ΩAux:2.67±5%Ω	
Locked Rotor Amps	(at 1φ-60Hz-230V)+10%29.7A	
Ruing Capacitor	35µF-370V	
Insulation Grade	E Grade	
I.D. of Discharge Pipe	8.2 mm	
I.D. of Suction Pipe	9.8 mm	

3) Rated Performance Parameters

Rated Capacity	3420 ±5% W	
Rated Inverter Input Power	1099 ±5% W	
Rater Inverter Input Current	5.1 ±5% A	
COP	312 ±5%	
Insulation Resistance	≥20 M Ω Nitrogen Charged	
Withstanding Voltage/Leakage Current	AC1500V 1min / 10 mA MAX	
Residual Moisture	≤160mg	
Residual Impurities	≤45 mg	

Rating Condition			
Power Source	208~230V/1Ph/60Hz		
Condenser Temperature	54.4°C / 130°F		
Evaporator Temperature	7.2°C / 45°F		
Return Gas Temperature	35°C / 95°F		
Liquid Temperature	46.1°C / 115°F		
Discharge Temperature	115°C / 239 °F MAX		

4) Wire Connection Figure



S:START R:RUN C:COMMON RC:Run Capacitor OLP: Overload Protector

Limit of System Application

NO.	Item	Standard Cond.	Limit Cond.
1	Discharge Temp.	2.06MPa Max	2.6MPaMax
2	Suction Temp.	0.29~0.59MPa	0.1 ~ 0.69MPa
3	Compressing Ratio	8Max	8 Max
4	Motor Coil Temp.	100°C/212°F Max	125°C/257°F Max

Application Notice:

- 1) No liquid refrigerant goes back to compressor during the whole time.
- During continuous running (include defrost and dehumidify), compressor bottom temperature subtract condensing temperature should be more than 5°C/41°F.

When intermittent running, compressor bottom temperature subtract condensing temperature should be more than 0 °C/32°F.

- 3) When intermittent running, each cycle should be longer than 5 minutes (On: over 2 min, Off: over 2 min).
- 4) The supply voltage should be 208V-10%~230V+10% (187~253V).
- 5) Pressure should be balanced between high and low pressure side.
- 6) During operation there should be no abnormal noises.
- 7) Tilt angle should be less than 5° degrees.
- 8) Oil level confirmation should be tested at:
 - 1) Overload and low load running
 - 2) Refrigerant soaking starting
 - 3) Defrost starting and resuming
 - 4) Connection pipe over 15m
 - 5) Elevation over 5m

Oil level confirmation test performed with side glass compressor:

- 1) At steady running: oil level should be higher than B level.
- 2) Within 3 minutes at starting: oil level should be higher than A level.

