Specification sheet

Model C-BZN200L5R

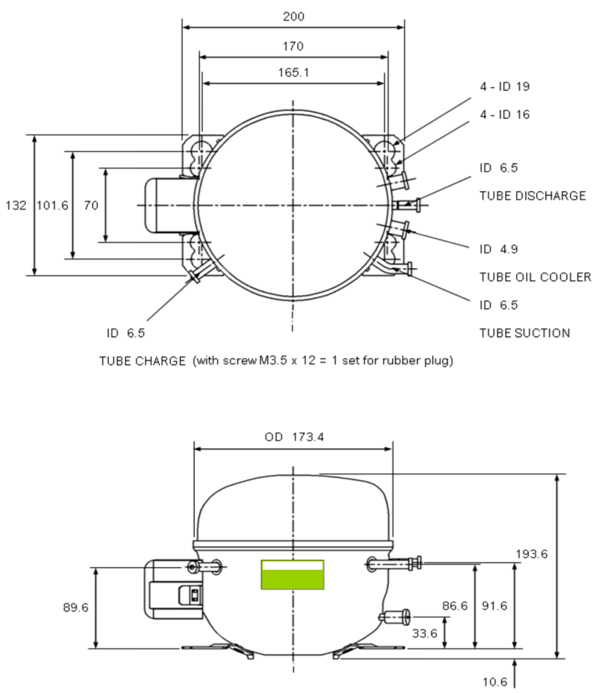
Customer

Name Phu Dai Hung

Hermetic compressor NON-CFC

220-240 V~ 50 Hz 1 Phase

Dimension (mm)



Performances data

Cooling capacity ± 8 %		(Btu/h)	793.8
	± 8 %	(Kcal/h)	200.2
	± 8 %	(W)	232.8
Input power ± 8 %		(W)	184.9
Input current ± 8 %		(A)	1.35
COP		(W/W)	1.26
EER		(Btu/h.W)	4.29
		(Kcal/h.W)	1.08
Starting V.(at 3 kg/cm^{2}G)		(V)	187 max
Noise (Distance 30 cm)		dB(A)	47 max
Power consumption			220V/50Hz

Test condition

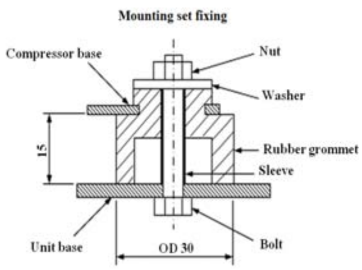
Evaporating temp.	(°C)	-23.3	(-10 °F)
Condensing temp.	(°C)	54.4	(130 °F)
Suction gas temp.	(°C)	32.2	(90 °F)
Liquid temp.	(°C)	32.2	(90 °F)
Ambient temp.	(°C)	32.2	(90 °F)

Application

LBP (Low back pressure)

Evaporating temp. range	(°C)	-35 ~ -5	(-31 ~ 23 °F)
Refrigerant		HFC-134a	
Compressor cooling		Oil cooler convection	
Voltage range	(V)	187-264	

Mounting set

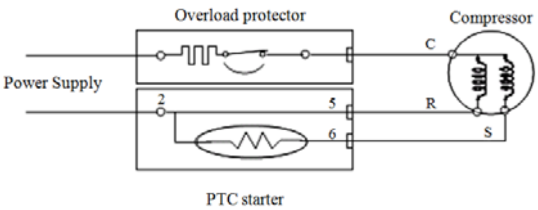


Item	Code	Q'ty (EA)
Nut 6mm.	001	4
Bolt 6x35	210	4
Washer OD20	108	4
Rubber	501	4
Sleeve (L22.5)	501	4
Cover	450	1

Compressor and motor data

Design		Reciprocating 1-Cylinder		
Bore size ID	(mm)	24.0		
Stroke	(mm)	18.5		
Displacement	(cc/rev)	8.37		
Oil charge (Visc.10 mm^2/s)	(cc)	250		
Motor type		PTC-RSIR		
Lock rotor amp	(A)	12.2	12.8	13.2
Winding resistance at 25 °C (77 °F)				
Main coil ± 5 %	(ohm)	11.00		
Aux. coil ± 5 %	(ohm)	12.10		
Revolution	(rpm / Hz)	2900 / 50		
Weight (No oil / with oil)	(kg)	8.3 / 8.5		

Circuit diagram PTC - RSIR



Electrical parts

Overload protector		External thermal over current type
Type		4TM 276RHBYY-53
UT current / ST current	(A)	1.96 / 9.40
PTC starter		35-330MC1
Resistance at 25 °C	(Ohm)	33 ± 20 %
Max voltage	(V)	355
Max current	(A)	6
Power consump. at 25 °C	(W)	3.0 max (280 V)
Starting capacitor	(μF / V)	-
Running capacitor	(μF / V)	-

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Quality Assurance Department / Kulthorn Premier Company Limited.

[C-BN, C-BZN Compressor L.B.P/M.B.P/H.B.P Type]

When use compressor, confirm if the following standards are kept.

No	Item	Standard & Designation	Conditions - Remark
1	Refrigerant	R134a (HFC-134a)	
2	Evaporating temp .	L.B.P. -35~-5 °C (-31~23 °F) M.B.P./H.B.P -15 ~ 10 °C (5~50 °F)	Except for the short period such as Pull-down etc.
3	Condensing temp.	60 °C (140 °F) max . 40-45 °C (104~113 °F) Recommend temp.	In stabilized at A/T 43 °C (110 °F) In stabilized at A/T 30 °C (86 °F) At the peak in pull-down in A/T 43 °C (110 °F)
		68 °C (154 °F) max .	During the pull-down period at ambient temp. of 43 °C (110 °F)
4	Compression ratio	L.B.P. : 14.5 max. M.B.P./H.B.P : 12.0 max .	Hi-side / Lo-side pressure (abs) Except very short period as pull-down.
5	Motor winding temp.	Usual : 115 °C (239 °F) max. Max. : 130 °C (266 °F) max.	In stabilized at A/T 30 °C (86 °F) In stabilized at A/T 43 °C (110 °F) with ±10% x rated voltage.
6	Shell bottom temp. (low side)	Max. : 105 °C (221 °F) max.	In stabilized at A/T 43 °C (110 °F) with ±10% x rated voltage.
7	Discharge gas temp.	Usual : 105 °C (221 °F) max. Max. : 121 °C (250 °F) max. * Measured on the pipe at 5 cm (2 inches) away from shell.	In stabilized at A/T 30 °C (86 °F) In stabilized at A/T 43 °C (110 °F) with ± 10% x rated voltage.
8	Suction gas temp. (Super Heat)	5 °C (41 °F) min.	Follow strictly items 5, 6 and 7, on the pipe At 20~30 cm (8~12 inches) away from shell.
9	Voltage range	-15%~+10% x rating	At the terminals of compressor
10	Refrigerant Charge	Minimal	Minimize meeting cooling performance, startability, temperature limits, pressure limits and the like.
11	Oil charge	Designated quantity ± 3%	Charge in designated oil Acid number 0.02K0H/g max. Colour 1.0 Max (ASTM standard) Moisture 10 ppm max. Residual gas. 0.2 Vol% max.
12	Moisture	15 ppm max.	Special dryer is needed (For instance XH-7 or XH-9)
13	Non-condensable gas	Total : 1% (Vol) max. Oxygen : 0.01% (Vol) max.	Recommended Level of evacuation should be less than 1.01 Kpa at 24 hours after evacution completed.
14	Dust and Dirt	To be determaind	Need to survey user capability.
15	Pressure rise at abnormal situation	3.43 MPa max.	Even in case of condenser fan-blocked.

[C-BN, C-BZN Compressor L.B.P/M.B.P/H.B.P Type]

When use compressor, confirm if the following standards are kept.

No	Item	Standard & Designation	Conditions - Remark
16	On-Off period	6 times / hour (Recommended)	Recommended to start up at balanced Hi-Low pressure in 5 minutes after standstill.
17	Oil return in comp.	90% min. the charge	Measure in hot condition after designated applirance test.
18	Strain in piping	34.32 N/mm^2 max. 12.26 N/mm^2 max.	At time of start-up and disconnection. in operation
19	Degree of tilt	On running, compressor shall not be tilted more than 5 degrees in all direction.	
20	Electical parts	Designated parts	Confirm its suitability with unit test. Keep to designated temperature range.
21	Mounting parts	Designated parts or equivalents	Confirm its suitability with unit transportation test.

NOTE

A. Remarks on Compressor

(1). In principle, the compressor charged with lubricating oil must be used within about 6 month from production date.
(2). Usual the compressor by removing the plug at the tube end and check to see if gas comes out from the compressor. If no gas is detected. The compressor must not be used.
(3). Do not leave the compressor with its pinch plug open for more than about 15 minutes.
(4). Never run the compressor with any air other than the refrigerant.
(5). Never run the compressor without refrigerant properly filled inside.
(6). Never run when the compressor has vacuum.
(7). Never run the compressor without lubricating oil properly field inside.
(8). Never run the compressor without refrigeration systems properly completed.
(9). A dropped compressor must not be used.

B. Remarks on Refrigeration Systems.

(1). To avoid any contamination on the refrigerator assembly line, a dedicated charging station (refrigerant or oil) must be used.
(2). All materials used in the process must be compatible with the R134a (HFC-134a).
(3). The system components must have a degree of cleanliness better than that of CFC12 system. Especially residue of chlorinated impurity shall not be allowed.
(4). The maximum moisture content in refrigerant cycle should be 150 mg.
(5). Special dryer is needed when using R134a (HFC-134a). (for instance XH-7 or XH-9 from Union Carbide) Usually a 20% larger dryer is recommended.
(6). Special leak-detectors have to be used.

C. Others (The ambient condition to be observed)

(1). 43 °C (110 °F) or less.
(2). Keep well ventilated around the compressors.
(3). Keep well dryed around the compressors.
(4). Avoid operation the compressor when a corrosive gas or an inflammable gas is present.
(5). Do not operate the compressor in any vibration consonant.