COMPRESSOR DEFINITION

Designation	**NB T1114Z**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**297AA47**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Low Back Pressure		
4.1 Evaporating temperature range	-35°C to -10°C	(-31°F to 14°F)	
5 Motor type	RSIR-RSCR		
6 Starting torque	LST - Low Starting Torque		
7 Expantion device	Capillary tube		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	Static	198 to 254 V	-
8.2 LBP (43ºC Ambient temperature)	Static	198 to 254 V	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	16.2	[kgf/cm²] (230 psig)	/ ºC - ºF
9.2 Peak (gauge)	20.6	[kgf/cm²] (293 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	6.20	[cm³] (0.378 cu.in)
2.1 Bore [mm]	20.873	
2.2 Stroke [mm]	18.120	
3 Lubricant charge	350	[ml] (11.84 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO10	
4 Weight (with oil charge)	10.15	[kg] (22.38 lb.)
5 Nitrogen charge	-	[kgf/cm²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	PTC	
2.1 Starting device	V230	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	4(450)	[µF(VAC minimum)]
5 Motor protection	T0132/07	
6 Start winding resistance	23.40	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	15.40	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	5.10	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.73	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V50Hz**			**ASHRAELBP32** **Static**		Evaporating temperature (Condensing temperature	**-23.3°C (-9.94°F)** **54.4°C (129.92°F))**		
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
552	139	162	117	0.55	3.14	4.73	1.19	1.39

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz**		**ASHRAE32** **Static**				(Condensing temperature **35ºC (+95ºF))**				
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	**(-31)**	311	78	91	78	0.37	1.76	3.99	1.00	1.17
-30	**(-22)**	429	108	126	89	0.42	2.43	4.81	1.21	1.41
-25	**(-13)**	575	145	168	102	0.48	3.26	5.66	1.43	1.66
-20	**(- 4)**	753	190	221	115	0.54	4.29	6.57	1.66	1.93
-15	**(+ 5)**	970	244	284	128	0.60	5.54	7.56	1.90	2.21
-10	**(+14)**	1229	310	360	142	0.66	7.04	8.63	2.17	2.53

TEST CONDITIONS: **@220V50Hz**		**ASHRAE32** **Static**				(Condensing temperature **45ºC (+113ºF))**				
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	**(-31)**	279	70	82	78	0.37	1.58	3.58	0.90	1.05
-30	**(-22)**	394	99	115	92	0.43	2.23	4.29	1.08	1.26
-25	**(-13)**	536	135	157	107	0.50	3.04	5.02	1.26	1.47
-20	**(- 4)**	708	178	208	122	0.57	4.03	5.78	1.46	1.69
-15	**(+ 5)**	917	231	269	139	0.65	5.23	6.59	1.66	1.93
-10	**(+14)**	1167	294	342	156	0.73	6.69	7.47	1.88	2.19

TEST CONDITIONS: **@220V50Hz**		**ASHRAE32** **Static**				(Condensing temperature **55ºC (+131ºF))**				
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	**(-31)**	246	62	72	76	0.37	1.39	3.23	0.81	0.95
-30	**(-22)**	359	90	105	93	0.43	2.03	3.86	0.97	1.13
-25	**(-13)**	495	125	145	110	0.51	2.81	4.48	1.13	1.31
-20	**(- 4)**	662	167	194	129	0.59	3.76	5.12	1.29	1.50
-15	**(+ 5)**	862	217	253	149	0.68	4.92	5.79	1.46	1.70
-10	**(+14)**	1102	278	323	169	0.78	6.32	6.51	1.64	1.91

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **65ºC (+149ºF))**
@220V50Hz **Static**

Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	**(-31)**	209	53	61	75	0.36	1.18	2.79	0.70	0.82
-30	**(-22)**	318	80	93	94	0.43	1.80	3.37	0.85	0.99
-25	**(-13)**	450	113	132	114	0.52	2.55	3.93	0.99	1.15
-20	**(- 4)**	609	154	179	136	0.62	3.47	4.48	1.13	1.31
-15	**(+ 5)**	802	202	235	159	0.73	4.58	5.05	1.27	1.48
-10	**(+14)**	1032	260	302	183	0.84	5.91	5.64	1.42	1.65

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	4.94 +0.08/-0.08	[mm]	(0.194" +0.003"/-0.003")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted parallel to Base Plate		
3.3 PROCESS	4.94 +0.08/-0.08	[mm]	(0.194" +0.003"/-0.003")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		