COMPRESSOR DEFINITION

Designation	**NB U1114Y**
Nominal Voltage/Frequency	**208-230 V 60 Hz**
Engineering Number	**813BD47**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
3 Nominal voltage and frequency	208-230 / 60	[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	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	-	187 to 244 V
8.2 LBP (43ºC Ambient temperature)	Static	-	187 to 244 V
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	7.7	[kgf/cm²] (109 psig)	/ ºC - ºF
9.2 Peak (gauge)	9.8	[kgf/cm²] (139 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	9.99	[cm³] (0.610 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	18.120	
3 Lubricant charge	350	[ml] (11.84 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	MINERAL / ISO7	
4 Weight (with oil charge)	10.2	[kg] (22.49 lb.)
5 Nitrogen charge	-	[kgf/cm²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	PTC	
2.1 Starting device	V230	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	3(450)	[µF(VAC minimum)]
5 Motor protection	T0503/07	
6 Start winding resistance		[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance		[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A]
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A]
11 Approval boards certification		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@208V60Hz**			**CECOMAFLBP** **Static**		Evaporating temperature (Condensing temperature	**-25°C (-13°F)** **55°C (131°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]
510	129	149	118	0.63	1.94	4.32	1.09	1.27

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@208V60Hz**		**CECOMAF** **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)**	412	104	121	89	0.47	1.32	4.63	1.17	1.36
-30	**(-22)**	535	135	157	100	0.53	1.72	5.37	1.35	1.57
-25	**(-13)**	680	171	199	111	0.59	2.19	6.13	1.54	1.80
-20	**(- 4)**	858	216	251	124	0.65	2.76	6.92	1.74	2.03
-15	**(+ 5)**	1080	272	316	138	0.72	3.47	7.79	1.96	2.28
-10	**(+14)**	1356	342	397	154	0.79	4.37	8.75	2.21	2.56

TEST CONDITIONS: **@208V60Hz**		**CECOMAF** **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)**	335	84	98	88	0.48	1.16	3.81	0.96	1.12
-30	**(-22)**	457	115	134	101	0.55	1.59	4.50	1.13	1.32
-25	**(-13)**	594	150	174	115	0.61	2.07	5.16	1.30	1.51
-20	**(- 4)**	757	191	222	130	0.68	2.64	5.83	1.47	1.71
-15	**(+ 5)**	958	241	281	147	0.76	3.35	6.52	1.64	1.91
-10	**(+14)**	1205	304	353	165	0.84	4.22	7.29	1.84	2.14

TEST CONDITIONS: **@208V60Hz**		**CECOMAF** **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)**	264	66	77	85	0.47	1.01	3.10	0.78	0.91
-30	**(-22)**	383	96	112	101	0.55	1.45	3.74	0.94	1.10
-25	**(-13)**	510	128	149	118	0.63	1.94	4.32	1.09	1.27
-20	**(- 4)**	656	165	192	135	0.71	2.50	4.87	1.23	1.43
-15	**(+ 5)**	832	210	244	154	0.79	3.19	5.42	1.36	1.59
-10	**(+14)**	1048	264	307	175	0.89	4.03	5.99	1.51	1.76

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	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		