COMPRESSOR DEFINITION

Designation	**NB T1118Y**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**811BA42**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
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		
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 temperature			
9.1 Operating	6.9	[kgf/cm²] (98 psig)	/ ºC - ºF
9.2 Peak	7.8	[kgf/cm²] (111 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	14.28	[cm³] (0.871 cu.in)
2.1 Bore [mm]	30.157	
2.2 Stroke [mm]	20.000	
3 Lubricant charge	350	[ml] (11.84 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	MINERAL / ISO10	
4 Weight (with oil charge)	10.8	[kg] (23.81 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	-	[µF(VAC minimum)]
5 Motor protection	T0062/07	
6 Start winding resistance	16.40	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	11.00	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	6.90	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.94	[A]
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A]
11 Approval boards certification	CCIB - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS:			**ASHRAELBP32**			Evaporating temperature		**-23.3°C (-9.94°F)**
@220V50Hz			**Static**			(Condensing temperature		**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]
801	202	235	159	0.95	2.52	5.04	1.27	1.48

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**ASHRAE32**					(Condensing temperature **35ºC (+95ºF))**			
@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)**	478	120	140	101	0.77	1.50	4.70	1.18	1.38
-30	**(-22)**	623	157	183	117	0.81	1.95	5.34	1.35	1.56
-25	**(-13)**	799	201	234	133	0.86	2.51	6.04	1.52	1.77
-20	**(- 4)**	1011	255	296	149	0.92	3.17	6.79	1.71	1.99
-15	**(+ 5)**	1265	319	371	166	0.98	3.98	7.59	1.91	2.22
-10	**(+14)**	1569	395	460	185	1.05	4.95	8.44	2.13	2.47

TEST CONDITIONS:		**ASHRAE32**					(Condensing temperature **45ºC (+113ºF))**			
@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)**	444	112	130	104	0.77	1.39	4.29	1.08	1.26
-30	**(-22)**	597	150	175	123	0.82	1.87	4.86	1.23	1.43
-25	**(-13)**	773	195	227	142	0.88	2.43	5.47	1.38	1.60
-20	**(- 4)**	981	247	288	161	0.95	3.08	6.11	1.54	1.79
-15	**(+ 5)**	1227	309	359	181	1.03	3.86	6.78	1.71	1.99
-10	**(+14)**	1516	382	444	202	1.11	4.78	7.47	1.88	2.19

TEST CONDITIONS:		**ASHRAE32**					(Condensing temperature **55ºC (+131ºF))**			
@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)**	395	99	116	104	0.77	1.24	3.79	0.95	1.11
-30	**(-22)**	553	139	162	127	0.84	1.74	4.34	1.09	1.27
-25	**(-13)**	732	184	214	149	0.91	2.30	4.89	1.23	1.43
-20	**(- 4)**	935	236	274	172	0.99	2.94	5.45	1.37	1.60
-15	**(+ 5)**	1172	295	343	195	1.08	3.69	6.01	1.51	1.76
-10	**(+14)**	1446	365	424	220	1.19	4.56	6.56	1.65	1.92

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)**	330	83	97	105	0.77	1.03	3.16	0.80	0.93
-30	**(-22)**	496	125	145	132	0.84	1.56	3.72	0.94	1.09
-25	**(-13)**	675	170	198	158	0.93	2.12	4.25	1.07	1.24
-20	**(- 4)**	875	221	257	184	1.03	2.75	4.76	1.20	1.39
-15	**(+ 5)**	1102	278	323	211	1.14	3.47	5.24	1.32	1.54
-10	**(+14)**	1363	343	399	240	1.27	4.30	5.69	1.43	1.67

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		