COMPRESSOR DEFINITION

Designation	**NB T1118Y**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**851BA28**

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)	10.7	[kg] (23.59 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: **@220V50Hz**			**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]
600	151	176	150	0.92	2.29	3.99	1.01	1.17

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz**		**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)**	465	117	136	102	0.77	1.49	4.56	1.15	1.34
-30	**(-22)**	612	154	179	116	0.81	1.97	5.28	1.33	1.55
-25	**(-13)**	785	198	230	131	0.86	2.52	5.98	1.51	1.75
-20	**(- 4)**	991	250	290	148	0.92	3.18	6.70	1.69	1.96
-15	**(+ 5)**	1238	312	363	166	0.98	3.98	7.45	1.88	2.18
-10	**(+14)**	1534	386	449	185	1.05	4.94	8.25	2.08	2.42

TEST CONDITIONS: **@220V50Hz**		**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)**	401	101	117	104	0.77	1.39	3.83	0.96	1.12
-30	**(-22)**	538	136	158	122	0.82	1.87	4.41	1.11	1.29
-25	**(-13)**	696	175	204	140	0.88	2.42	4.98	1.25	1.46
-20	**(- 4)**	881	222	258	159	0.95	3.07	5.55	1.40	1.63
-15	**(+ 5)**	1102	278	323	180	1.03	3.85	6.13	1.55	1.80
-10	**(+14)**	1366	344	400	202	1.11	4.78	6.76	1.70	1.98

TEST CONDITIONS: **@220V50Hz**		**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)**	327	82	96	106	0.77	1.24	3.06	0.77	0.90
-30	**(-22)**	456	115	134	128	0.84	1.73	3.54	0.89	1.04
-25	**(-13)**	600	151	176	150	0.91	2.29	4.00	1.01	1.17
-20	**(- 4)**	766	193	225	173	0.99	2.93	4.45	1.12	1.30
-15	**(+ 5)**	963	243	282	197	1.08	3.69	4.90	1.24	1.44
-10	**(+14)**	1196	302	351	222	1.19	4.59	5.39	1.36	1.58

E - PERFORMANCE - CURVES

TEST CONDITIONS: **CECOMAF** (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)**	245	62	72	102	0.77	1.04	2.42	0.61	0.71
-30	**(-22)**	368	93	108	128	0.84	1.55	2.84	0.71	0.83
-25	**(-13)**	500	126	146	155	0.93	2.11	3.21	0.81	0.94
-20	**(- 4)**	649	164	190	182	1.03	2.75	3.57	0.90	1.05
-15	**(+ 5)**	823	207	241	210	1.14	3.50	3.93	0.99	1.15
-10	**(+14)**	1029	259	301	239	1.26	4.39	4.30	1.08	1.26

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 B.Plate 30°		
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		