COMPRESSOR DEFINITION

Designation	**NT 6224U**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**842PA04**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Medium Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 10°C	(-4°F to 50°F)	
5 Motor type	CSCR		
6 Starting torque	HST - Hight starting torque		
7 Expantion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	18.4	[kgf/cm²] (262 psig)	/ ºC - ºF
9.2 Peak	20.6	[kgf/cm²] (293 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1	[hp]
2 Displacement	22.37	[cm³] (1.365 cu.in)
2.1 Bore [mm]	36.990	
2.2 Stroke [mm]	20.830	
3 Lubricant charge	450	[ml] (15.22 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	AB / ISO32	
4 Weight (with oil charge)	17.2	[kg] (37.92 lb.)
5 Nitrogen charge	-	[kgf/cm²]

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA3AN3C-575	
3 Start capacitor	72-88(330)	[µF(VAC minimum)]
4 Run capacitor	20(420)	[µF(VAC minimum)]
5 Motor protection	T0907/G6	
6 Start winding resistance	8.80	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	2.30	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	30.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CCC - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V50Hz**			**EN12900MBP** **Fan**		Evaporating temperature (Condensing temperature	**-10°C (14°F)** **45°C (113°F))**		
Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
5265	1327	1543	817	3.76	17.65	6.44	1.62	1.89

E - PERFORMANCE - CURVES

TEST CONDITIONS: **EN12900** (Condensing temperature **35ºC (+95ºF))**
@220V50Hz **Fan**

Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	**(- 4)**	4021	1013	1178	637	2.94	13.01	6.32	1.59	1.85
-15	**(+ 5)**	4996	1259	1464	699	3.21	16.29	7.14	1.80	2.09
-10	**(+14)**	6153	1550	1803	758	3.48	20.19	8.11	2.04	2.38
-5	**(+23)**	7491	1888	2195	811	3.73	24.75	9.23	2.33	2.71
0	**(+32)**	9013	2271	2641	861	3.97	30.01	10.48	2.64	3.07
+5	**(+41)**	10716	2700	3140	905	4.20	36.03	11.85	2.99	3.47
+10	**(+50)**	12602	3176	3693	945	4.41	42.85	13.32	3.36	3.90

TEST CONDITIONS: **EN12900** (Condensing temperature **45ºC (+113ºF))**
@220V50Hz **Fan**

Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	**(- 4)**	3467	874	1016	678	3.14	12.34	5.13	1.29	1.50
-15	**(+ 5)**	4261	1074	1249	746	3.44	15.24	5.72	1.44	1.67
-10	**(+14)**	5232	1319	1533	813	3.75	18.82	6.42	1.62	1.88
-5	**(+23)**	6381	1608	1870	880	4.07	23.13	7.23	1.82	2.12
0	**(+32)**	7708	1942	2259	946	4.38	28.20	8.14	2.05	2.38
+5	**(+41)**	9212	2321	2699	1011	4.69	34.08	9.11	2.30	2.67
+10	**(+50)**	10894	2745	3192	1076	4.99	40.82	10.15	2.56	2.97

TEST CONDITIONS: **EN12900** (Condensing temperature **55ºC (+131ºF))**
@220V50Hz **Fan**

Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	**(- 4)**	2844	717	833	715	3.29	11.25	3.96	1.00	1.16
-15	**(+ 5)**	3498	882	1025	789	3.64	13.92	4.45	1.12	1.30
-10	**(+14)**	4325	1090	1267	866	4.01	17.34	5.01	1.26	1.47
-5	**(+23)**	5325	1342	1560	946	4.39	21.53	5.64	1.42	1.65
0	**(+32)**	6497	1637	1904	1030	4.78	26.56	6.31	1.59	1.85
+5	**(+41)**	7842	1976	2298	1117	5.18	32.45	7.02	1.77	2.06
+10	**(+50)**	9360	2359	2743	1207	5.58	39.25	7.74	1.95	2.27

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	9.6 +0.07/+0.00	[mm]	(0.378" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Vertical		
3.2 DISCHARGE	6.42 +0.08/+0.00	[mm]	(0.253" +0.003"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Vertical		
3.3 PROCESS	6.42 +0.08/+0.00	[mm]	(0.253" +0.003"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Vertical		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		