COMPRESSOR DEFINITION

Designation	**NT 6220U**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**842NA04**

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	3/4	[hp]
2 Displacement	17.39	[cm³] (1.061 cu.in)
2.1 Bore [mm]	34.120	
2.2 Stroke [mm]	19.030	
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	[kg] (37.48 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	RVA4AL3C-560	
3 Start capacitor	43-53(330)	[µF(VAC minimum)]
4 Run capacitor	15(440)	[µF(VAC minimum)]
5 Motor protection	T0485/G9	
6 Start winding resistance	9.00	[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	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS:			**EN12900MBP**			Evaporating temperature	**-10°C (14°F)**	
@220V50Hz			**Fan**			(Condensing temperature	**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]
4042	1019	1184	628	3.56	13.55	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)**	2927	738	858	499	3.14	9.49	5.85	1.48	1.72
-15	**(+ 5)**	3721	938	1090	538	3.26	12.13	6.91	1.74	2.03
-10	**(+14)**	4617	1163	1353	579	3.39	15.13	7.99	2.01	2.34
-5	**(+23)**	5680	1431	1664	617	3.52	18.76	9.21	2.32	2.70
0	**(+32)**	6978	1759	2045	650	3.65	23.24	10.74	2.71	3.15
+5	**(+41)**	8578	2162	2514	675	3.79	28.83	12.70	3.20	3.72
+10	**(+50)**	10545	2657	3090	689	3.92	35.76	15.25	3.84	4.47

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)**	2395	604	702	521	3.21	8.52	4.60	1.16	1.35
-15	**(+ 5)**	3091	779	906	567	3.35	11.04	5.46	1.38	1.60
-10	**(+14)**	3873	976	1135	615	3.51	13.93	6.29	1.58	1.84
-5	**(+23)**	4808	1211	1409	663	3.68	17.45	7.23	1.82	2.12
0	**(+32)**	5962	1502	1747	708	3.86	21.82	8.43	2.12	2.47
+5	**(+41)**	7403	1866	2169	747	4.04	27.30	10.03	2.53	2.94
+10	**(+50)**	9197	2318	2695	776	4.23	34.12	12.17	3.07	3.56

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)**	1944	490	570	537	3.26	7.70	3.61	0.91	1.06
-15	**(+ 5)**	2519	635	738	591	3.45	10.01	4.28	1.08	1.25
-10	**(+14)**	3164	797	927	650	3.65	12.69	4.87	1.23	1.43
-5	**(+23)**	3948	995	1157	710	3.86	15.99	5.55	1.40	1.62
0	**(+32)**	4936	1244	1446	768	4.09	20.16	6.43	1.62	1.88
+5	**(+41)**	6195	1561	1815	823	4.33	25.43	7.67	1.93	2.25
+10	**(+50)**	7793	1964	2284	869	4.58	32.05	9.42	2.37	2.76

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		