COMPRESSOR DEFINITION

Designation	**NT 6230U**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**843DA08**

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 1/4	[hp]
2 Displacement	27.80	[cm³] (1.696 cu.in)
2.1 Bore [mm]	38.100	
2.2 Stroke [mm]	24.400	
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)	17.4	[kg] (38.36 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm²] (2.84 to 4.27 psig)

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	RVA403C-123	
3 Start capacitor	130-156(330)	[µF(VAC minimum)]
4 Run capacitor	20(400)	[µF(VAC minimum)]
5 Motor protection	MST22AGN-3074	
6 Start winding resistance	8.31	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	1.63	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	39.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	5.00	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS:			**ASHRAEHBP46**			Evaporating temperature		**7.2°C (44.96°F)**
@220V50Hz			**Fan**			(Condensing temperature		**54.4°C (129.92°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]
12358	3114	3621	1379	6.61	42.30	8.96	2.26	2.63

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**ASHRAE46**					(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)**	5598	1411	1640	797	4.00	15.80	7.03	1.77	2.06
-15	**(+ 5)**	6804	1715	1994	838	4.22	19.27	8.17	2.06	2.40
-10	**(+14)**	8446	2128	2475	896	4.48	24.02	9.45	2.38	2.77
-5	**(+23)**	10524	2652	3084	970	4.78	30.08	10.82	2.73	3.17
0	**(+32)**	13037	3285	3820	1061	5.13	37.47	12.23	3.08	3.58
+5	**(+41)**	15986	4028	4684	1169	5.52	46.25	13.64	3.44	4.00
+10	**(+50)**	19370	4881	5676	1293	5.97	56.44	15.02	3.79	4.40

TEST CONDITIONS:		**ASHRAE46**					(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)**	4928	1242	1444	844	4.24	15.01	5.76	1.45	1.69
-15	**(+ 5)**	5964	1503	1748	906	4.52	18.27	6.57	1.66	1.93
-10	**(+14)**	7310	1842	2142	976	4.83	22.51	7.51	1.89	2.20
-5	**(+23)**	8966	2259	2627	1056	5.15	27.75	8.53	2.15	2.50
0	**(+32)**	10933	2755	3204	1143	5.51	34.03	9.60	2.42	2.81
+5	**(+41)**	13209	3329	3871	1240	5.89	41.39	10.67	2.69	3.13
+10	**(+50)**	15796	3981	4629	1345	6.30	49.85	11.70	2.95	3.43

TEST CONDITIONS:		**ASHRAE46**					(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)**	4063	1024	1191	898	4.45	13.57	4.59	1.16	1.35
-15	**(+ 5)**	5153	1299	1510	989	4.86	17.25	5.18	1.31	1.52
-10	**(+14)**	6427	1620	1883	1081	5.27	21.59	5.90	1.49	1.73
-5	**(+23)**	7887	1987	2311	1172	5.69	26.63	6.71	1.69	1.96
0	**(+32)**	9530	2402	2793	1265	6.11	32.41	7.55	1.90	2.21
+5	**(+41)**	11359	2862	3328	1359	6.54	38.96	8.39	2.11	2.46
+10	**(+50)**	13372	3370	3918	1453	6.98	46.32	9.19	2.32	2.69

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	12.7 +0.25/-0.25	[mm]	(0.500" +0.010"/-0.010")
3.1.1 Material	Steel		
3.1.2 Shape	ROTOLOCK(Ex. thr. 1"-14UNS-2A)		
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		