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:			**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]
6605	1664	1935	1006	4.92	22.15	6.57	1.66	1.93

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)**	5049	1272	1479	789	3.99	0.00	6.39	1.61	1.87
-15	**(+ 5)**	6235	1571	1827	849	4.25	0.00	7.36	1.85	2.16
-10	**(+14)**	7683	1936	2251	911	4.52	0.00	8.45	2.13	2.48
-5	**(+23)**	9393	2367	2752	973	4.80	0.00	9.66	2.43	2.83
0	**(+32)**	11364	2864	3330	1038	5.08	0.00	10.96	2.76	3.21
+5	**(+41)**	13598	3427	3984	1103	5.37	0.00	12.32	3.11	3.61
+10	**(+50)**	16093	4055	4716	1169	5.67	0.00	13.74	3.46	4.03

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)**	4312	1087	1263	843	4.22	0.00	5.10	1.29	1.49
-15	**(+ 5)**	5322	1341	1560	911	4.52	0.00	5.83	1.47	1.71
-10	**(+14)**	6563	1654	1923	983	4.84	0.00	6.67	1.68	1.95
-5	**(+23)**	8036	2025	2355	1059	5.18	0.00	7.58	1.91	2.22
0	**(+32)**	9740	2454	2854	1138	5.54	0.00	8.56	2.16	2.51
+5	**(+41)**	11674	2942	3421	1221	5.92	0.00	9.57	2.41	2.81
+10	**(+50)**	13841	3488	4056	1308	6.31	0.00	10.61	2.67	3.11

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)**	3583	903	1050	895	4.47	0.00	4.02	1.01	1.18
-15	**(+ 5)**	4470	1127	1310	981	4.84	0.00	4.56	1.15	1.34
-10	**(+14)**	5558	1401	1629	1072	5.24	0.00	5.18	1.30	1.52
-5	**(+23)**	6846	1725	2006	1170	5.68	0.00	5.85	1.47	1.71
0	**(+32)**	8335	2101	2442	1274	6.15	0.00	6.54	1.65	1.92
+5	**(+41)**	10025	2526	2938	1383	6.65	0.00	7.25	1.83	2.12
+10	**(+50)**	11915	3003	3491	1499	7.18	0.00	7.94	2.00	2.33

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		