COMPRESSOR DEFINITION

Designation	**NT X6233U**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**843FA72**

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)	17.8	[kg] (39.24 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-647	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	20(400)	[µF(VAC minimum)]
5 Motor protection	USP-577-84	
6 Start winding resistance	5.95	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	1.39	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	40.00	[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: **@220V50Hz**			**ASHRAEHBP46** **Fan**		Evaporating temperature (Condensing temperature	**7.2°C (44.96°F)** **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]
12879	3246	3774	1360	6.76	44.08	9.47	2.39	2.77

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz** — **ASHRAE46** **Fan** — (Condensing temperature **35ºC (+95ºF))**

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)**	6287	1584	1842	700	3.99	17.74	8.97	2.26	2.63
-15	**(+ 5)**	7651	1928	2242	777	4.28	21.68	9.86	2.48	2.89
-10	**(+14)**	9231	2326	2705	856	4.58	26.26	10.79	2.72	3.16
-5	**(+23)**	11033	2780	3233	935	4.90	31.53	11.80	2.97	3.46
0	**(+32)**	13064	3292	3828	1013	5.22	37.55	12.90	3.25	3.78
+5	**(+41)**	15331	3863	4492	1086	5.53	44.35	14.12	3.56	4.14
+10	**(+50)**	17840	4496	5227	1153	5.83	51.99	15.47	3.90	4.53

TEST CONDITIONS: **@220V50Hz** — **ASHRAE46** **Fan** — (Condensing temperature **45ºC (+113ºF))**

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)**	5320	1341	1559	850	4.57	16.24	6.25	1.58	1.83
-15	**(+ 5)**	6576	1657	1927	924	4.86	20.14	7.13	1.80	2.09
-10	**(+14)**	8036	2025	2355	999	5.17	24.72	8.05	2.03	2.36
-5	**(+23)**	9708	2446	2845	1074	5.49	30.02	9.04	2.28	2.65
0	**(+32)**	11598	2923	3398	1146	5.80	36.08	10.12	2.55	2.96
+5	**(+41)**	13712	3455	4018	1213	6.10	42.97	11.30	2.85	3.31
+10	**(+50)**	16058	4047	4705	1273	6.38	50.72	12.61	3.18	3.69

TEST CONDITIONS: **@220V50Hz** — **ASHRAE46** **Fan** — (Condensing temperature **55ºC (+131ºF))**

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)**	4593	1157	1346	899	4.76	15.30	5.10	1.29	1.50
-15	**(+ 5)**	5688	1433	1667	990	5.14	19.03	5.76	1.45	1.69
-10	**(+14)**	6978	1758	2045	1083	5.53	23.46	6.45	1.63	1.89
-5	**(+23)**	8468	2134	2481	1174	5.92	28.63	7.21	1.82	2.11
0	**(+32)**	10164	2561	2978	1261	6.30	34.61	8.05	2.03	2.36
+5	**(+41)**	12075	3043	3538	1343	6.66	41.43	8.98	2.26	2.63
+10	**(+50)**	14206	3580	4163	1416	6.99	49.14	10.04	2.53	2.94

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		