

### 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 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Operating voltage range		
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	18.4	[kgf/cm <sup>2</sup> ] (262 psig)	/ °C - °F
9.2 Peak	20.6	[kgf/cm <sup>2</sup> ] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	1 1/4	[hp]
2 Displacement	27.80	[cm <sup>3</sup> ] (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	ESTER / ISO22	
4 Weight (with oil charge)	17.8	[kg] (39.24 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### C - ELETRICAL 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 25°C (77°F)] +/- 8%
7 Run winding resistance	1.39	[Ω at 25°C (77°F)] +/- 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			EN12900MBP Fan		Evaporating temperature (Condensing temperature		-10°C (14°F) 45°C (113°F)	
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
7107	1791	2083	1021	5.18	25.58	6.96	1.75	2.04

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			EN12900 Fan		(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	5461	1376	1600	798	4.36	17.69	6.85	1.73	2.01
-15	(+ 5)	6737	1698	1974	858	4.60	21.97	7.86	1.98	2.30
-10	(+14)	8219	2071	2408	918	4.84	26.95	8.95	2.25	2.62
-5	(+23)	9901	2495	2901	979	5.09	32.70	10.10	2.55	2.96
0	(+32)	11781	2969	3452	1041	5.35	39.23	11.31	2.85	3.31
+5	(+41)	13857	3492	4060	1103	5.62	46.59	12.57	3.17	3.68
+10	(+50)	16123	4063	4724	1165	5.90	54.82	13.85	3.49	4.06

TEST CONDITIONS: @220V50Hz			EN12900 Fan		(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	4718	1189	1383	846	4.54	16.77	5.58	1.40	1.63
-15	(+ 5)	5835	1471	1710	926	4.87	20.87	6.30	1.59	1.85
-10	(+14)	7139	1799	2092	1004	5.20	25.69	7.11	1.79	2.08
-5	(+23)	8627	2174	2528	1081	5.53	31.28	7.97	2.01	2.34
0	(+32)	10295	2594	3017	1158	5.86	37.67	8.89	2.24	2.61
+5	(+41)	12139	3059	3557	1233	6.20	44.91	9.84	2.48	2.88
+10	(+50)	14157	3568	4148	1308	6.54	53.03	10.83	2.73	3.17

TEST CONDITIONS: @220V50Hz			EN12900 Fan		(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	3972	1001	1164	899	4.74	15.71	4.41	1.11	1.29
-15	(+ 5)	4939	1245	1447	993	5.14	19.66	4.98	1.25	1.46
-10	(+14)	6075	1531	1780	1083	5.53	24.35	5.61	1.41	1.64
-5	(+23)	7376	1859	2161	1172	5.92	29.83	6.30	1.59	1.85
0	(+32)	8840	2228	2590	1259	6.30	36.13	7.03	1.77	2.06
+5	(+41)	10463	2637	3066	1343	6.68	43.28	7.80	1.97	2.28
+10	(+50)	12242	3085	3587	1424	7.06	51.34	8.59	2.16	2.52

### 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		