

COMPRESSOR DEFINITION

Designation	NT X6225UV
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	843HD72

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	208-230 / 60	[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 - High 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 ²] (262 psig)	/ °C - °F
9.2 Peak	20.6	[kgf/cm ²] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1	[hp]
2 Displacement	22.37	[cm ³] (1.365 cu.in)
2.1 Bore [mm]	36.990	
2.2 Stroke [mm]	20.830	
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)	17.86	[kg] (39.37 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA5AF3C-106	
3 Start capacitor	108-130(330)	[µF(VAC minimum)]
4 Run capacitor	20(350)	[µF(VAC minimum)]
5 Motor protection	USP-605-84	
6 Start winding resistance	3.27	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.44	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	35.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @230V60Hz			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°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]	
6827	1720	2000	1018	4.59	28.53	6.71	1.69	1.97	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V60Hz		ARI4 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)	4870	1227	1427	742	3.39	17.19	6.56	1.65	1.92
-15	(+ 5)	6056	1526	1775	813	3.71	21.54	7.45	1.88	2.18
-10	(+14)	7431	1873	2178	876	3.99	26.65	8.49	2.14	2.49
-5	(+23)	8995	2267	2636	929	4.22	32.56	9.68	2.44	2.84
0	(+32)	10748	2709	3150	974	4.42	39.34	11.04	2.78	3.24
+5	(+41)	12690	3198	3719	1010	4.58	47.01	12.57	3.17	3.68
+10	(+50)	14821	3735	4343	1038	4.69	55.63	14.26	3.59	4.18

TEST CONDITIONS: @230V60Hz		ARI4 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)	4129	1041	1210	786	3.56	16.14	5.25	1.32	1.54
-15	(+ 5)	5156	1299	1511	870	3.93	20.28	5.92	1.49	1.74
-10	(+14)	6358	1602	1863	944	4.26	25.23	6.73	1.70	1.97
-5	(+23)	7735	1949	2266	1008	4.54	31.03	7.67	1.93	2.25
0	(+32)	9287	2340	2721	1063	4.78	37.72	8.74	2.20	2.56
+5	(+41)	11015	2776	3228	1107	4.98	45.36	9.96	2.51	2.92
+10	(+50)	12918	3255	3785	1142	5.14	53.99	11.32	2.85	3.32

TEST CONDITIONS: @230V60Hz		ARI4 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)	3427	864	1004	814	3.68	15.07	4.21	1.06	1.23
-15	(+ 5)	4292	1082	1258	917	4.13	19.01	4.69	1.18	1.38
-10	(+14)	5319	1340	1559	1009	4.53	23.80	5.28	1.33	1.55
-5	(+23)	6507	1640	1907	1090	4.89	29.49	5.96	1.50	1.75
0	(+32)	7858	1980	2303	1160	5.21	36.11	6.76	1.70	1.98
+5	(+41)	9370	2361	2746	1220	5.49	43.73	7.68	1.93	2.25
+10	(+50)	11045	2783	3236	1269	5.72	52.38	8.71	2.20	2.55

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		