

### COMPRESSOR DEFINITION

Designation	NT X6225UV
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	843HE72

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	115-127 / 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 - 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	[hp]
2 Displacement	22.37	[cm <sup>3</sup> ] (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	AB / ISO32	
4 Weight (with oil charge)	17.69	[kg] (39.00 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115-127 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVAH7AA3C-571	
3 Start capacitor	340-408(250)	[µF(VAC minimum)]
4 Run capacitor	40(400)	[µF(VAC minimum)]
5 Motor protection	UP14LA3105	
6 Start winding resistance	1.52	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.36	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	72.00	[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: @115V60Hz			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°F)	
Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP		
+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
6818	1718	1998	1041	10.05	28.50	6.55	1.65	1.92

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz			ARI4 Fan		(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	4964	1251	1455	784	8.58	17.53	6.33	1.59	1.85
-15	(+ 5)	6168	1554	1807	852	9.13	21.93	7.23	1.82	2.12
-10	(+14)	7542	1901	2210	915	9.68	27.04	8.24	2.08	2.41
-5	(+23)	9087	2290	2663	973	10.23	32.89	9.34	2.35	2.74
0	(+32)	10802	2722	3165	1026	10.77	39.53	10.53	2.65	3.09
+5	(+41)	12687	3197	3718	1074	11.30	47.00	11.82	2.98	3.46
+10	(+50)	14743	3715	4320	1117	11.80	55.34	13.19	3.32	3.86

TEST CONDITIONS: @115V60Hz			ARI4 Fan		(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	4236	1068	1241	825	8.87	16.56	5.15	1.30	1.51
-15	(+ 5)	5297	1335	1552	902	9.49	20.84	5.87	1.48	1.72
-10	(+14)	6515	1642	1909	977	10.11	25.86	6.66	1.68	1.95
-5	(+23)	7890	1988	2312	1048	10.73	31.65	7.52	1.90	2.20
0	(+32)	9422	2374	2761	1115	11.34	38.27	8.44	2.13	2.47
+5	(+41)	11112	2800	3256	1179	11.93	45.76	9.42	2.37	2.76
+10	(+50)	12958	3265	3797	1240	12.50	54.16	10.46	2.64	3.07

TEST CONDITIONS: @115V60Hz			ARI4 Fan		(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	3501	882	1026	859	9.21	15.39	4.07	1.03	1.19
-15	(+ 5)	4399	1109	1289	949	9.92	19.48	4.64	1.17	1.36
-10	(+14)	5441	1371	1594	1038	10.63	24.35	5.25	1.32	1.54
-5	(+23)	6627	1670	1942	1125	11.33	30.03	5.89	1.48	1.73
0	(+32)	7957	2005	2331	1211	12.03	36.57	6.57	1.66	1.93
+5	(+41)	9430	2376	2763	1295	12.70	44.01	7.28	1.83	2.13
+10	(+50)	11047	2784	3237	1377	13.36	52.39	8.02	2.02	2.35

### 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		