

### 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 - 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)	17.86	[kg] (39.37 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### 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: @208V60Hz			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]
12272	3093	3596	1263	6.23	42.00	9.72	2.45	2.85

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @208V60Hz			ASHRAE46 Fan		(Condensing temperature 35°C (+95°F))					
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)	5619	1416	1646	710	3.46	15.86	7.90	1.99	2.32
-15	(+ 5)	6914	1742	2026	772	3.77	19.59	8.96	2.26	2.63
-10	(+14)	8468	2134	2481	831	4.06	24.09	10.20	2.57	2.99
-5	(+23)	10282	2591	3013	885	4.33	29.38	11.61	2.93	3.40
0	(+32)	12355	3113	3620	936	4.58	35.51	13.20	3.33	3.87
+5	(+41)	14687	3701	4304	982	4.81	42.49	14.95	3.77	4.38
+10	(+50)	17278	4354	5063	1025	5.02	50.36	16.85	4.25	4.94

TEST CONDITIONS: @208V60Hz			ASHRAE46 Fan		(Condensing temperature 45°C (+113°F))					
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)	4823	1215	1413	749	3.66	14.71	6.44	1.62	1.89
-15	(+ 5)	6013	1515	1762	833	4.06	18.42	7.22	1.82	2.12
-10	(+14)	7424	1871	2175	911	4.44	22.85	8.15	2.05	2.39
-5	(+23)	9058	2283	2654	982	4.79	28.01	9.22	2.32	2.70
0	(+32)	10914	2750	3198	1048	5.12	33.96	10.42	2.62	3.05
+5	(+41)	12992	3274	3807	1107	5.41	40.71	11.74	2.96	3.44
+10	(+50)	15292	3854	4481	1160	5.68	48.29	13.19	3.32	3.86

TEST CONDITIONS: @208V60Hz			ASHRAE46 Fan		(Condensing temperature 55°C (+131°F))					
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)	4024	1014	1179	775	3.80	13.41	5.19	1.31	1.52
-15	(+ 5)	5108	1287	1497	884	4.32	17.09	5.78	1.46	1.69
-10	(+14)	6377	1607	1869	984	4.80	21.44	6.48	1.63	1.90
-5	(+23)	7831	1974	2295	1075	5.25	26.47	7.28	1.83	2.13
0	(+32)	9471	2387	2775	1158	5.66	32.23	8.18	2.06	2.40
+5	(+41)	11295	2846	3310	1233	6.04	38.74	9.17	2.31	2.69
+10	(+50)	13304	3353	3898	1299	6.38	46.04	10.23	2.58	3.00

### 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		