

### COMPRESSOR DEFINITION

Designation	NT 6224UV
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	842KD04

### 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)	16.8	[kg] (37.04 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	RVA4AL3C-649	
3 Start capacitor	72-88(330)	[µF(VAC minimum)]
4 Run capacitor	15(400)	[µF(VAC minimum)]
5 Motor protection	T0728/G9	
6 Start winding resistance	6.60	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.58	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	33.70	[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 (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]
5936	1496	1739	957	4.51	24.81	6.20	1.56	1.82

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V60Hz			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)	4211	1061	1234	720	3.62	14.87	5.85	1.47	1.71
-15	(+ 5)	5315	1339	1557	771	3.83	18.90	6.89	1.74	2.02
-10	(+14)	6524	1644	1912	830	4.06	23.39	7.85	1.98	2.30
-5	(+23)	7840	1976	2297	896	4.32	28.37	8.74	2.20	2.56
0	(+32)	9263	2334	2714	970	4.63	33.89	9.54	2.41	2.80
+5	(+41)	10792	2720	3162	1052	4.97	39.97	10.27	2.59	3.01
+10	(+50)	12428	3132	3642	1141	5.37	46.66	10.91	2.75	3.20

TEST CONDITIONS: @230V60Hz			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)	3483	878	1021	751	3.75	13.62	4.65	1.17	1.36
-15	(+ 5)	4485	1130	1314	826	4.05	17.64	5.44	1.37	1.59
-10	(+14)	5609	1413	1644	904	4.36	22.25	6.21	1.56	1.82
-5	(+23)	6855	1728	2009	985	4.68	27.49	6.96	1.75	2.04
0	(+32)	8225	2073	2410	1069	5.03	33.40	7.70	1.94	2.26
+5	(+41)	9717	2449	2847	1155	5.40	40.02	8.41	2.12	2.46
+10	(+50)	11332	2856	3320	1244	5.80	47.38	9.09	2.29	2.66

TEST CONDITIONS: @230V60Hz			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)	2860	721	838	798	3.93	12.56	3.57	0.90	1.05
-15	(+ 5)	3661	923	1073	885	4.28	16.22	4.14	1.04	1.21
-10	(+14)	4601	1159	1348	969	4.62	20.60	4.75	1.20	1.39
-5	(+23)	5679	1431	1664	1051	4.96	25.75	5.41	1.36	1.58
0	(+32)	6897	1738	2021	1131	5.30	31.71	6.10	1.54	1.79
+5	(+41)	8253	2080	2418	1208	5.65	38.52	6.83	1.72	2.00
+10	(+50)	9748	2457	2856	1283	6.01	46.20	7.60	1.92	2.23

### 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		