

COMPRESSOR DEFINITION

Designation	NT 6224UV
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	842RD04

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)	16.8	[kg] (37.04 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	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 +/- 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]
5952	1500	1744	1037	4.86	24.87	5.74	1.45	1.68

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)	4266	1075	1250	734	3.58	15.07	5.78	1.46	1.69
-15	(+ 5)	5194	1309	1522	816	3.92	18.47	6.37	1.61	1.87
-10	(+14)	6436	1622	1886	901	4.27	23.07	7.16	1.80	2.10
-5	(+23)	7992	2014	2342	988	4.63	28.92	8.11	2.04	2.38
0	(+32)	9862	2485	2890	1077	5.01	36.08	9.17	2.31	2.69
+5	(+41)	12046	3036	3530	1169	5.42	44.62	10.31	2.60	3.02
+10	(+50)	14544	3665	4262	1263	5.86	54.60	11.49	2.90	3.37

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)	3558	897	1043	783	3.77	13.90	4.57	1.15	1.34
-15	(+ 5)	4377	1103	1283	855	4.07	17.22	5.13	1.29	1.50
-10	(+14)	5477	1380	1605	938	4.42	21.74	5.82	1.47	1.71
-5	(+23)	6858	1728	2009	1031	4.82	27.51	6.62	1.67	1.94
0	(+32)	8519	2147	2496	1135	5.27	34.61	7.48	1.89	2.19
+5	(+41)	10462	2636	3066	1250	5.78	43.09	8.37	2.11	2.45
+10	(+50)	12686	3197	3717	1376	6.35	53.02	9.24	2.33	2.71

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)	2901	731	850	856	4.06	12.75	3.38	0.85	0.99
-15	(+ 5)	3586	904	1051	918	4.33	15.88	3.91	0.98	1.15
-10	(+14)	4518	1139	1324	999	4.67	20.22	4.52	1.14	1.33
-5	(+23)	5698	1436	1670	1098	5.10	25.82	5.19	1.31	1.52
0	(+32)	7126	1796	2088	1217	5.61	32.75	5.86	1.48	1.72
+5	(+41)	8801	2218	2579	1355	6.22	41.08	6.51	1.64	1.91
+10	(+50)	10725	2703	3143	1512	6.92	50.86	7.08	1.78	2.08

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		