

COMPRESSOR DEFINITION

Designation	NT 6224GKV
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	923JG08

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	115 / 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	25.2	[kgf/cm ²] (358 psig)	/ °C - °F
9.2 Peak	28.3	[kgf/cm ²] (402 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1	[hp]
2 Displacement	20.44	[cm ³] (1.247 cu.in)
2.1 Bore [mm]	36.990	
2.2 Stroke [mm]	19.030	
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)	17.4	[kg] (38.36 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA2AE3D-660	
3 Start capacitor	243-292(250)	[µF(VAC minimum)]
4 Run capacitor	40(440)	[µF(VAC minimum)]
5 Motor protection	15HM1958	
6 Start winding resistance	2.39	[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)	77.00	[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			ASHRAEHBP46 Fan		Evaporating temperature (Condensing temperature		7.2°C (44.96°F) 54.4°C (129.92°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]
12326	3106	3612	1571	14.80	101.48	7.85	1.98	2.30

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz			ASHRAE46 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)	5841	1472	1711	849	8.92	37.05	6.87	1.73	2.01
-15	(+ 5)	7214	1818	2114	927	9.47	46.07	7.79	1.96	2.28
-10	(+14)	8852	2231	2594	1006	10.08	56.87	8.80	2.22	2.58
-5	(+23)	10754	2710	3151	1088	10.73	69.58	9.88	2.49	2.89
0	(+32)	12921	3256	3786	1174	11.43	84.33	11.00	2.77	3.22
+5	(+41)	15352	3869	4499	1264	12.18	101.24	12.14	3.06	3.56
+10	(+50)	18047	4548	5288	1360	12.98	120.45	13.28	3.35	3.89

TEST CONDITIONS: @115V60Hz			ASHRAE46 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)	4979	1255	1459	900	9.29	34.88	5.52	1.39	1.62
-15	(+ 5)	6190	1560	1814	997	10.02	43.64	6.21	1.56	1.82
-10	(+14)	7634	1924	2237	1095	10.78	54.17	6.98	1.76	2.04
-5	(+23)	9310	2346	2728	1193	11.56	66.59	7.81	1.97	2.29
0	(+32)	11219	2827	3287	1292	12.38	81.04	8.69	2.19	2.55
+5	(+41)	13360	3367	3915	1394	13.23	97.63	9.59	2.42	2.81
+10	(+50)	15734	3965	4610	1500	14.12	116.50	10.49	2.64	3.07

TEST CONDITIONS: @115V60Hz			ASHRAE46 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)	4025	1014	1180	938	9.55	31.66	4.30	1.08	1.26
-15	(+ 5)	5084	1281	1490	1058	10.48	40.26	4.80	1.21	1.41
-10	(+14)	6344	1599	1859	1176	11.43	50.60	5.39	1.36	1.58
-5	(+23)	7804	1967	2287	1293	12.38	62.83	6.03	1.52	1.77
0	(+32)	9466	2385	2774	1409	13.35	77.06	6.72	1.69	1.97
+5	(+41)	11328	2855	3319	1526	14.33	93.43	7.43	1.87	2.18
+10	(+50)	13391	3374	3924	1644	15.32	112.07	8.14	2.05	2.38

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal
2 Tray holder	No
3 Connectors	
3.1 SUCTION	12.7 +0.25/-0.25 [mm] (0.500" +0.010"/-0.010")
3.1.1 Material	Steel
3.1.2 Shape	ROTOLOCK(Ex. thr. 1"-14UNS-2A)
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