

COMPRESSOR DEFINITION

Designation	NT X6220GKV
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	927BF72

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
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	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		[hp]
2 Displacement	13.44	[cm ³] (0.820 cu.in)
2.1 Bore [mm]	31.740	
2.2 Stroke [mm]	17.000	
3 Lubricant charge	385	[ml] (13.02 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	16.5	[kg] (36.38 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL 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	RVAH9AD3C-555	
3 Start capacitor	243-292(250)	[µF(VAC minimum)]
4 Run capacitor	30(400)	[µF(VAC minimum)]
5 Motor protection	UP14NA5345-T	
6 Start winding resistance	2.82	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.47	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	50.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	9.60	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification		

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 +/- 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]
4596	1158	1347	792	7.69	49.53	5.80	1.46	1.70

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz		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)	3434	865	1006	578	5.90	28.89	5.95	1.50	1.74
-15	(+ 5)	4268	1075	1251	623	6.26	36.50	6.86	1.73	2.01
-10	(+14)	5273	1329	1545	667	6.63	45.69	7.90	1.99	2.31
-5	(+23)	6448	1625	1890	712	7.00	56.67	9.04	2.28	2.65
0	(+32)	7795	1964	2284	757	7.39	69.66	10.28	2.59	3.01
+5	(+41)	9312	2347	2729	802	7.79	84.85	11.60	2.92	3.40
+10	(+50)	11000	2772	3223	848	8.21	102.47	13.00	3.28	3.81

TEST CONDITIONS: @115V60Hz		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)	2794	704	819	642	6.41	27.43	4.33	1.09	1.27
-15	(+ 5)	3438	866	1008	709	6.97	33.98	4.85	1.22	1.42
-10	(+14)	4247	1070	1245	771	7.50	42.45	5.51	1.39	1.62
-5	(+23)	5221	1316	1530	829	8.00	53.08	6.31	1.59	1.85
0	(+32)	6359	1603	1863	882	8.46	66.05	7.22	1.82	2.12
+5	(+41)	7662	1931	2245	930	8.89	81.59	8.25	2.08	2.42
+10	(+50)	9129	2301	2675	973	9.30	99.90	9.36	2.36	2.74

TEST CONDITIONS: @115V60Hz		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)	2077	524	609	666	6.60	24.42	3.13	0.79	0.92
-15	(+ 5)	2571	648	753	753	7.35	30.57	3.42	0.86	1.00
-10	(+14)	3223	812	945	831	8.03	39.01	3.87	0.98	1.13
-5	(+23)	4034	1017	1182	899	8.63	49.95	4.48	1.13	1.31
0	(+32)	5003	1261	1466	957	9.16	63.59	5.23	1.32	1.53
+5	(+41)	6131	1545	1796	1006	9.61	80.15	6.11	1.54	1.79
+10	(+50)	7417	1869	2173	1044	9.99	99.82	7.10	1.79	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		