

COMPRESSOR DEFINITION

Designation	NT X6220GKV
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	842TD72

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
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	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	3/4	[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	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	12.5(400)	[µF(VAC minimum)]
5 Motor protection	USP-533-84	
6 Start winding resistance	6.98	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.91	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	30.00	[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: @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]	
4598	1159	1347	778	3.60	49.55	5.91	1.49	1.73	

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)	3451	870	1011	562	2.70	29.19	6.13	1.54	1.79
-15	(+ 5)	4310	1086	1263	613	2.91	36.83	7.02	1.77	2.06
-10	(+14)	5320	1341	1559	659	3.10	46.00	8.08	2.04	2.37
-5	(+23)	6480	1633	1899	698	3.27	56.85	9.29	2.34	2.72
0	(+32)	7791	1963	2283	731	3.41	69.57	10.66	2.69	3.13
+5	(+41)	9252	2332	2711	759	3.52	84.33	12.21	3.08	3.58
+10	(+50)	10864	2738	3183	780	3.59	101.28	13.92	3.51	4.08

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)	2776	700	814	589	2.83	27.09	4.74	1.19	1.39
-15	(+ 5)	3521	887	1032	653	3.10	34.77	5.40	1.36	1.58
-10	(+14)	4384	1105	1285	711	3.35	43.91	6.15	1.55	1.80
-5	(+23)	5366	1352	1572	764	3.58	54.69	7.01	1.77	2.05
0	(+32)	6465	1629	1895	810	3.79	67.28	7.97	2.01	2.33
+5	(+41)	7684	1936	2251	851	3.97	81.84	9.03	2.28	2.65
+10	(+50)	9020	2273	2643	885	4.12	98.55	10.21	2.57	2.99

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)	2098	529	615	601	2.88	24.66	3.47	0.87	1.02
-15	(+ 5)	2682	676	786	680	3.20	31.93	3.95	1.00	1.16
-10	(+14)	3353	845	983	753	3.51	40.61	4.46	1.12	1.31
-5	(+23)	4110	1036	1204	820	3.80	50.88	5.02	1.27	1.47
0	(+32)	4953	1248	1451	882	4.07	62.90	5.62	1.42	1.65
+5	(+41)	5882	1482	1724	938	4.32	76.84	6.27	1.58	1.84
+10	(+50)	6897	1738	2021	988	4.55	92.87	6.97	1.76	2.04

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		