

COMPRESSOR DEFINITION

Designation	NT X6222UV
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	842SE72

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
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	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	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)	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	RVA9AD3C-121	
3 Start capacitor	243-292(250)	[µF(VAC minimum)]
4 Run capacitor	35(400)	[µF(VAC minimum)]
5 Motor protection	UP14NC5245-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)	60.00	[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			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]
6149	1550	1802	906	8.45	25.70	6.79	1.71	1.99

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)	4277	1078	1253	638	6.02	15.13	6.66	1.68	1.95
-15	(+ 5)	5359	1351	1570	709	6.69	19.06	7.56	1.91	2.22
-10	(+14)	6626	1670	1942	771	7.27	23.74	8.61	2.17	2.52
-5	(+23)	8078	2036	2367	826	7.76	29.21	9.80	2.47	2.87
0	(+32)	9713	2448	2846	873	8.17	35.53	11.14	2.81	3.27
+5	(+41)	11534	2907	3380	913	8.51	42.72	12.64	3.18	3.70
+10	(+50)	13539	3412	3967	945	8.79	50.85	14.28	3.60	4.18

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)	3438	866	1007	685	6.58	13.41	5.05	1.27	1.48
-15	(+ 5)	4446	1120	1303	760	7.12	17.48	5.86	1.48	1.72
-10	(+14)	5619	1416	1646	829	7.65	22.31	6.77	1.71	1.98
-5	(+23)	6957	1753	2039	892	8.17	27.92	7.79	1.96	2.28
0	(+32)	8460	2132	2479	948	8.70	34.38	8.92	2.25	2.61
+5	(+41)	10128	2552	2968	998	9.23	41.72	10.16	2.56	2.98
+10	(+50)	11961	3014	3505	1041	9.79	49.98	11.51	2.90	3.37

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)	2924	737	857	701	6.60	12.84	4.16	1.05	1.22
-15	(+ 5)	3713	936	1088	799	7.34	16.45	4.65	1.17	1.36
-10	(+14)	4648	1171	1362	892	8.15	20.81	5.21	1.31	1.53
-5	(+23)	5728	1443	1678	980	9.03	25.97	5.83	1.47	1.71
0	(+32)	6953	1752	2037	1062	9.99	31.96	6.53	1.65	1.91
+5	(+41)	8324	2098	2439	1140	11.05	38.84	7.30	1.84	2.14
+10	(+50)	9841	2480	2884	1212	12.21	46.65	8.14	2.05	2.39

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		