

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			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]
11341	2858	3323	1170	10.78	38.81	9.69	2.44	2.84

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)	4600	1159	1348	594	5.71	12.98	7.74	1.95	2.27
-15	(+ 5)	5954	1500	1745	666	6.31	16.87	8.93	2.25	2.62
-10	(+14)	7506	1892	2199	732	6.87	21.36	10.25	2.58	3.00
-5	(+23)	9257	2333	2713	791	7.38	26.46	11.72	2.95	3.44
0	(+32)	11207	2824	3284	843	7.84	32.21	13.33	3.36	3.90
+5	(+41)	13356	3366	3914	888	8.26	38.63	15.06	3.79	4.41
+10	(+50)	15703	3957	4601	926	8.62	45.76	16.92	4.26	4.96

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)	4033	1016	1182	638	6.04	12.32	6.35	1.60	1.86
-15	(+ 5)	5196	1309	1523	719	6.74	15.92	7.23	1.82	2.12
-10	(+14)	6565	1654	1924	797	7.42	20.19	8.22	2.07	2.41
-5	(+23)	8139	2051	2385	871	8.07	25.16	9.32	2.35	2.73
0	(+32)	9920	2500	2907	941	8.69	30.86	10.52	2.65	3.08
+5	(+41)	11906	3000	3489	1007	9.29	37.31	11.83	2.98	3.47
+10	(+50)	14098	3553	4131	1069	9.86	44.54	13.22	3.33	3.87

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)	3578	902	1048	685	6.41	11.92	5.19	1.31	1.52
-15	(+ 5)	4508	1136	1321	775	7.20	15.08	5.84	1.47	1.71
-10	(+14)	5651	1424	1656	864	7.99	19.00	6.56	1.65	1.92
-5	(+23)	7007	1766	2053	953	8.78	23.70	7.36	1.85	2.16
0	(+32)	8576	2161	2513	1041	9.57	29.20	8.23	2.07	2.41
+5	(+41)	10358	2610	3035	1128	10.35	35.53	9.17	2.31	2.69
+10	(+50)	12352	3113	3620	1214	11.13	42.73	10.17	2.56	2.98

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		