

COMPRESSOR DEFINITION

Designation	NJ X6244U
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	887GA21

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	220-240 / 50	[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	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 3/4	[hp]
2 Displacement	37.88	[cm ³] (2.312 cu.in)
2.1 Bore [mm]	44.980	
2.2 Stroke [mm]	23.850	
3 Lubricant charge	750	[ml] (25.36 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	21.82	[kg] (48.10 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA4L3C-566	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	17.5(440)	[µF(VAC minimum)]
5 Motor protection	15HM1963-248	
6 Start winding resistance	6.96	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.27	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	52.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			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]
17689	4458	5183	1983	10.06	60.54	8.92	2.25	2.61

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			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)	8080	2036	2368	1078	6.20	22.82	7.48	1.88	2.19
-15	(+ 5)	9908	2497	2903	1167	6.90	28.08	8.49	2.14	2.49
-10	(+14)	12113	3052	3549	1255	7.26	34.45	9.65	2.43	2.83
-5	(+23)	14694	3703	4306	1343	7.44	41.98	10.94	2.76	3.21
0	(+32)	17651	4448	5172	1430	7.58	50.72	12.35	3.11	3.62
+5	(+41)	20984	5288	6149	1516	7.85	60.70	13.85	3.49	4.06
+10	(+50)	24694	6223	7236	1601	8.39	71.98	15.43	3.89	4.52

TEST CONDITIONS: @220V50Hz			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)	6924	1745	2029	1158	6.55	21.12	6.01	1.51	1.76
-15	(+ 5)	8594	2166	2518	1267	7.31	26.33	6.79	1.71	1.99
-10	(+14)	10600	2671	3106	1376	7.76	32.62	7.70	1.94	2.26
-5	(+23)	12944	3262	3793	1485	8.03	40.03	8.70	2.19	2.55
0	(+32)	15624	3937	4578	1594	8.28	48.61	9.79	2.47	2.87
+5	(+41)	18642	4698	5462	1703	8.66	58.41	10.94	2.76	3.21
+10	(+50)	21996	5543	6445	1812	9.32	69.47	12.15	3.06	3.56

TEST CONDITIONS: @220V50Hz			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)	6228	1569	1825	1252	6.97	20.74	4.96	1.25	1.45
-15	(+ 5)	7654	1929	2243	1383	7.81	25.61	5.53	1.39	1.62
-10	(+14)	9377	2363	2748	1515	8.34	31.53	6.19	1.56	1.81
-5	(+23)	11398	2872	3340	1649	8.70	38.54	6.92	1.74	2.03
0	(+32)	13717	3457	4019	1783	9.05	46.69	7.70	1.94	2.26
+5	(+41)	16333	4116	4786	1918	9.54	56.03	8.52	2.15	2.50
+10	(+50)	19248	4850	5640	2055	10.32	66.59	9.36	2.36	2.74

F - EXTERNAL CHARACTERISTICS

1 Base plate	American Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	12.81 +0.04/-0.04	[mm]	(0.504" +0.002"/-0.002")
3.1.1 Material	Copper		
3.1.2 Shape	Vertical		
3.2 DISCHARGE	8.04 +0.04/-0.04	[mm]	(0.317" +0.002"/-0.002")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted J		
3.3 PROCESS	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+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		