

### 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 - 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 <sup>2</sup> ] (262 psig)	/ °C - °F
9.2 Peak	20.6	[kgf/cm <sup>2</sup> ] (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 <sup>3</sup> ] (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 <sup>2</sup> ]

### 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			EN12900MBP Fan		Evaporating temperature (Condensing temperature		-10°C (14°F) 45°C (113°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]	
9363	2359	2744	1376	7.51	33.69	6.80	1.71	1.99	

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		EN12900 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)	7314	1843	2143	1095	6.24	23.71	6.67	1.68	1.95
-15	(+ 5)	9000	2268	2637	1187	6.61	29.35	7.58	1.91	2.22
-10	(+14)	11025	2778	3231	1277	6.97	36.15	8.64	2.18	2.53
-5	(+23)	13390	3374	3923	1367	7.34	44.20	9.80	2.47	2.87
0	(+32)	16094	4056	4716	1456	7.70	53.58	11.06	2.79	3.24
+5	(+41)	19138	4823	5608	1543	8.05	64.35	12.40	3.13	3.63
+10	(+50)	22521	5675	6599	1630	8.40	76.60	13.81	3.48	4.05

TEST CONDITIONS: @220V50Hz		EN12900 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)	6165	1553	1806	1160	6.46	21.91	5.34	1.35	1.57
-15	(+ 5)	7653	1928	2242	1271	6.90	27.36	6.03	1.52	1.77
-10	(+14)	9457	2383	2771	1383	7.35	34.03	6.83	1.72	2.00
-5	(+23)	11577	2917	3392	1495	7.82	41.98	7.73	1.95	2.26
0	(+32)	14014	3532	4106	1609	8.31	51.29	8.70	2.19	2.55
+5	(+41)	16767	4225	4913	1722	8.81	62.04	9.73	2.45	2.85
+10	(+50)	19836	4999	5813	1837	9.32	74.31	10.81	2.72	3.17

TEST CONDITIONS: @220V50Hz		EN12900 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)	5421	1366	1589	1248	6.81	21.43	4.33	1.09	1.27
-15	(+ 5)	6609	1665	1936	1380	7.32	26.31	4.79	1.21	1.40
-10	(+14)	8089	2038	2370	1515	7.87	32.44	5.34	1.35	1.57
-5	(+23)	9861	2485	2890	1652	8.46	39.89	5.97	1.51	1.75
0	(+32)	11927	3006	3495	1792	9.09	48.76	6.66	1.68	1.95
+5	(+41)	14286	3600	4186	1933	9.75	59.10	7.39	1.86	2.17
+10	(+50)	16937	4268	4963	2078	10.44	71.00	8.15	2.05	2.39

### 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		