COMPRESSOR DEFINITION

Designation	**NJ X6244US**
Nominal Voltage/Frequency	**400 V 50 Hz / 440 V 60 Hz**
Engineering Number	**887BS21**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	400 / 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	3PHASE		
6 Starting torque	HST - Hight starting torque		
7 Expantion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	18.4	[kgf/cm²] (262 psig)	/ ºC - ºF
9.2 Peak	20.6	[kgf/cm²] (293 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1 3/4	[hp]
2 Displacement	37.88	[cm³] (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)	21.7	[kg] (47.84 lb.)
5 Nitrogen charge	-	[kgf/cm²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	400 V 50 Hz / 440 V 60 Hz 3 ~ (Three phase)	
2 Starting device type	3PHASE	
2.1 Starting device		
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	34HM294-50	
6 Start winding resistance	7.77	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	7.77	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50/60 Hz)	23.00/23.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50/60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50/60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	UL - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@440V60Hz**			**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]
11131	2805	3262	1648	2.90	40.06	6.75	1.70	1.98

E - PERFORMANCE - CURVES

TEST CONDITIONS: **EN12900** (Condensing temperature **35ºC (+95ºF))**
@440V50Hz **Fan**

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)**	7206	1816	2112	1038	2.49	23.35	6.94	1.75	2.03
-15	**(+ 5)**	8987	2265	2633	1130	2.59	29.30	7.95	2.00	2.33
-10	**(+14)**	11068	2789	3243	1221	2.69	36.30	9.07	2.28	2.66
-5	**(+23)**	13450	3389	3941	1311	2.80	44.41	10.26	2.59	3.01
0	**(+32)**	16133	4066	4727	1400	2.90	53.71	11.52	2.90	3.38
+5	**(+41)**	19117	4817	5602	1489	3.00	64.28	12.84	3.24	3.76
+10	**(+50)**	22401	5645	6564	1577	3.10	76.18	14.20	3.58	4.16

TEST CONDITIONS: **EN12900** (Condensing temperature **45ºC (+113ºF))**
@440V50Hz **Fan**

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)**	6110	1540	1790	1125	2.68	21.73	5.44	1.37	1.59
-15	**(+ 5)**	7636	1924	2238	1236	2.79	27.30	6.18	1.56	1.81
-10	**(+14)**	9452	2382	2770	1345	2.90	34.00	7.02	1.77	2.06
-5	**(+23)**	11558	2913	3387	1454	3.02	41.90	7.94	2.00	2.33
0	**(+32)**	13954	3516	4089	1562	3.15	51.06	8.93	2.25	2.62
+5	**(+41)**	16640	4193	4876	1669	3.27	61.57	9.97	2.51	2.92
+10	**(+50)**	19616	4943	5748	1776	3.40	73.50	11.05	2.78	3.24

TEST CONDITIONS: **EN12900** (Condensing temperature **55ºC (+131ºF))**
@440V50Hz **Fan**

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)**	5262	1326	1542	1212	2.78	20.80	4.34	1.09	1.27
-15	**(+ 5)**	6509	1640	1907	1341	2.91	25.91	4.86	1.22	1.42
-10	**(+14)**	8035	2025	2354	1470	3.06	32.22	5.47	1.38	1.60
-5	**(+23)**	9839	2480	2883	1598	3.21	39.81	6.15	1.55	1.80
0	**(+32)**	11923	3005	3494	1726	3.36	48.74	6.91	1.74	2.02
+5	**(+41)**	14286	3600	4186	1853	3.52	59.10	7.71	1.94	2.26
+10	**(+50)**	16927	4266	4960	1980	3.69	70.96	8.55	2.15	2.51

E - PERFORMANCE - CURVES

TEST CONDITIONS: **EN12900** (Condensing temperature **35ºC (+95ºF))**
@440V60Hz **Fan**

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)**	8204	2068	2404	1223	2.42	26.58	6.71	1.69	1.97
-15	**(+ 5)**	10489	2643	3074	1359	2.57	34.20	7.71	1.94	2.26
-10	**(+14)**	13049	3288	3824	1497	2.72	42.80	8.71	2.20	2.55
-5	**(+23)**	15884	4003	4654	1635	2.87	52.45	9.71	2.45	2.85
0	**(+32)**	18994	4786	5566	1775	3.03	63.24	10.70	2.70	3.14
+5	**(+41)**	22380	5640	6558	1915	3.20	75.25	11.69	2.95	3.42
+10	**(+50)**	26041	6562	7631	2057	3.39	88.56	12.66	3.19	3.71

TEST CONDITIONS: **EN12900** (Condensing temperature **45ºC (+113ºF))**
@440V60Hz **Fan**

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)**	7000	1764	2051	1307	2.48	24.89	5.35	1.35	1.57
-15	**(+ 5)**	8974	2261	2630	1473	2.68	32.09	6.09	1.54	1.79
-10	**(+14)**	11213	2826	3286	1638	2.87	40.34	6.85	1.73	2.01
-5	**(+23)**	13717	3457	4019	1801	3.07	49.72	7.62	1.92	2.23
0	**(+32)**	16486	4155	4831	1963	3.27	60.33	8.40	2.12	2.46
+5	**(+41)**	19522	4919	5720	2124	3.48	72.23	9.19	2.32	2.69
+10	**(+50)**	22822	5751	6687	2283	3.71	85.51	9.99	2.52	2.93

TEST CONDITIONS: **EN12900** (Condensing temperature **55ºC (+131ºF))**
@440V60Hz **Fan**

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)**	5906	1488	1731	1388	2.56	23.35	4.26	1.07	1.25
-15	**(+ 5)**	7574	1909	2219	1586	2.80	30.15	4.78	1.20	1.40
-10	**(+14)**	9498	2393	2783	1781	3.04	38.08	5.33	1.34	1.56
-5	**(+23)**	11677	2942	3421	1972	3.28	47.23	5.92	1.49	1.73
0	**(+32)**	14111	3556	4135	2159	3.51	57.68	6.53	1.65	1.91
+5	**(+41)**	16801	4234	4923	2343	3.76	69.50	7.17	1.81	2.10
+10	**(+50)**	19747	4976	5786	2522	4.02	82.79	7.83	1.97	2.30

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		