



## COMPRESSOR TECHNICAL DATA

### COMPRESSOR DEFINITION

Designation	NE 1121Z
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	262AA50

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	220-240 / 50	[ V / Hz ]	
4 Application type	Low Back Pressure R134a		
4.1 Evaporating temperature range	-30°C to -5°C	(-22°F to 23°F)	
5 Motor type	RSIR		
6 Starting torque	LST - Low Starting Torque		
7 Expansion device	Capillary tube		
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 pressures/temperature			
9.1 Operating (gauge)	16.2	[kgf/cm <sup>2</sup> ] (230 psig)	/ °C - °F
9.2 Peak (gauge)	20.6	[kgf/cm <sup>2</sup> ] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	1/4	[hp]
2 Displacement	9.26	[cm <sup>3</sup> ] (0.565 cu.in)
2.1 Bore [mm]	24.282	
2.2 Stroke [mm]	20.000	
3 Lubricant charge	350	[ml] (11.84 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	10.92	[kg] (24.07 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (2.84 to 4.27 psig)

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRP-0073	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0480/G6	
6 Start winding resistance	39.85	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	7.30	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	1.47	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CCC - IMQ	



## COMPRESSOR TECHNICAL DATA

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature		-23.3°C (-9.94°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]
863	217	253	198	1.46	4.90	4.36	1.10	1.28

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		ASHRAE32 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]
-35 (-31)	514	130	151	145	1.49	2.91	3.52	0.89	1.03
-30 (-22)	682	172	200	165	1.56	3.87	4.14	1.04	1.21
-25 (-13)	899	227	263	186	1.63	5.11	4.84	1.22	1.42
-20 (- 4)	1166	294	342	208	1.70	6.64	5.60	1.41	1.64
-15 (+ 5)	1482	373	434	232	1.77	8.46	6.40	1.61	1.88
-10 (+14)	1847	465	541	256	1.85	10.58	7.22	1.82	2.11

TEST CONDITIONS: @220V50Hz		ASHRAE32 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]
-35 (-31)	471	119	138	145	1.53	2.66	3.22	0.81	0.94
-30 (-22)	630	159	185	167	1.58	3.57	3.78	0.95	1.11
-25 (-13)	840	212	246	190	1.64	4.77	4.41	1.11	1.29
-20 (- 4)	1100	277	322	216	1.71	6.26	5.10	1.28	1.49
-15 (+ 5)	1411	356	414	243	1.79	8.06	5.81	1.46	1.70
-10 (+14)	1773	447	519	271	1.89	10.16	6.53	1.65	1.91

TEST CONDITIONS: @220V50Hz		ASHRAE32 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]
-35 (-31)	429	108	126	145	1.57	2.42	2.91	0.73	0.85
-30 (-22)	580	146	170	169	1.60	3.29	3.43	0.86	1.01
-25 (-13)	783	197	229	195	1.65	4.44	4.02	1.01	1.18
-20 (- 4)	1037	261	304	223	1.72	5.90	4.64	1.17	1.36
-15 (+ 5)	1343	338	394	254	1.81	7.67	5.29	1.33	1.55
-10 (+14)	1701	429	498	287	1.93	9.74	5.93	1.49	1.74



## COMPRESSOR TECHNICAL DATA

### F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.1 +0.10/+0.00	[mm]	(0.319" +0.004"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		