

### COMPRESSOR DEFINITION

Designation	NE 1121Z
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	262AG70

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	115 / 60	[ 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)	10.95	[kg] (24.14 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	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRP-55	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0843/G6	
6 Start winding resistance	6.70	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.30	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	37.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	4.40	[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

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @100V60Hz		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)	576	145	169	164	2.89	3.25	3.44	0.87	1.01
-30	(-22)	744	188	218	188	3.02	4.22	3.96	1.00	1.16
-25	(-13)	972	245	285	213	3.17	5.52	4.56	1.15	1.34
-20	(- 4)	1260	317	369	240	3.34	7.17	5.24	1.32	1.54
-15	(+ 5)	1607	405	471	270	3.54	9.18	5.96	1.50	1.75
-10	(+14)	2015	508	590	301	3.77	11.54	6.70	1.69	1.96
-5	(+23)	2482	625	727	334	4.03	14.28	7.43	1.87	2.18

TEST CONDITIONS: @100V60Hz		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)	520	131	152	160	2.86	2.94	3.20	0.81	0.94
-30	(-22)	688	173	202	187	3.01	3.90	3.68	0.93	1.08
-25	(-13)	915	231	268	216	3.18	5.19	4.24	1.07	1.24
-20	(- 4)	1200	302	352	247	3.39	6.83	4.85	1.22	1.42
-15	(+ 5)	1545	389	453	281	3.62	8.82	5.50	1.39	1.61
-10	(+14)	1947	491	571	317	3.89	11.16	6.14	1.55	1.80
-5	(+23)	2409	607	706	356	4.20	13.86	6.77	1.71	1.98

TEST CONDITIONS: @100V60Hz		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)	466	117	136	157	2.83	2.63	2.94	0.74	0.86
-30	(-22)	634	160	186	186	3.00	3.59	3.41	0.86	1.00
-25	(-13)	860	217	252	219	3.20	4.88	3.93	0.99	1.15
-20	(- 4)	1143	288	335	254	3.43	6.51	4.50	1.13	1.32
-15	(+ 5)	1484	374	435	292	3.70	8.47	5.08	1.28	1.49
-10	(+14)	1882	474	552	333	4.01	10.78	5.65	1.42	1.66
-5	(+23)	2338	589	685	378	4.37	13.45	6.19	1.56	1.81

### F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.03 +0.07/+0.00	[mm]	(0.316" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
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	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		