

COMPRESSOR DEFINITION

Designation	NE 1121Z
Nominal Voltage/Frequency	200-240 V 50 Hz / 230 V 60 Hz
Engineering Number	262AN50

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	200-240 / 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 ²] (230 psig)	/ °C - °F
9.2 Peak (gauge)	20.6	[kgf/cm ²] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/4	[hp]
2 Displacement	9.26	[cm ³] (0.565 cu.in)
2.1 Bore	24.282	
2.2 Stroke	10.000	
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 ²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	200-240 V 50 Hz / 230 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device		
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection (external)	T0056/G5	
6 Start winding resistance	40.70	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	6.60	[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)	1.63	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @230V60Hz			ASHRAELBP32 Fan		Evaporating temperature	-23.3°C (-9.94°F)		
					(Condensing temperature	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]
1010	255	296	232	1.70	5.74	4.35	1.10	1.27

E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V50Hz			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]
-30 (-22)	682	172	200	162	1.56	3.87	4.21	1.06	1.23
-25 (-13)	899	227	263	183	1.64	5.11	4.91	1.24	1.44
-20 (- 4)	1166	294	342	205	1.71	6.64	5.69	1.43	1.67
-15 (+ 5)	1482	373	434	227	1.78	8.46	6.52	1.64	1.91
-10 (+14)	1847	465	541	251	1.85	10.58	7.37	1.86	2.16
-5 (+23)	2262	570	663	275	1.93	13.01	8.22	2.07	2.41

TEST CONDITIONS: @230V50Hz			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]
-26 (-23)	630	252	286	162	1.68	3.37	3.82	0.98	1.32
-20 (- 4)	1100	277	322	211	1.71	6.26	5.21	1.31	1.53
-15 (+ 5)	1411	356	414	238	1.79	8.06	5.93	1.49	1.74
-10 (+14)	1773	447	519	266	1.89	10.16	6.66	1.68	1.95
-5 (+23)	2185	551	640	296	2.00	12.57	7.39	1.86	2.16

TEST CONDITIONS: @230V50Hz			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]
-30 (-22)	580	146	170	162	1.60	3.29	3.58	0.90	1.05
-25 (-13)	783	197	229	189	1.65	4.44	4.15	1.05	1.22
-20 (- 4)	1037	261	304	217	1.72	5.90	4.77	1.20	1.40
-15 (+ 5)	1343	338	394	248	1.81	7.67	5.42	1.36	1.59
-10 (+14)	1701	429	498	281	1.93	9.74	6.06	1.53	1.77
-5 (+23)	2110	532	618	316	2.07	12.14	6.67	1.68	1.96

E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V60Hz		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]	[Btu/Wh]	[kcal/Wh]
-30	(-22)	798	201	234	190	1.81	4.52	4.20	1.06	1.23
-25	(-13)	1052	265	308	214	1.90	5.97	4.91	1.24	1.44
-20	(- 4)	1364	344	400	240	1.98	7.76	5.69	1.43	1.67
-15	(+ 5)	1734	437	508	266	2.06	9.90	6.52	1.64	1.91
-10	(+14)	2161	545	633	293	2.15	12.38	7.37	1.86	2.16
-5	(+23)	2647	667	776	322	2.24	15.23	8.22	2.07	2.41

TEST CONDITIONS: @230V60Hz		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]	[Btu/Wh]	[kcal/Wh]
-30	(-22)	983	288	288	298	1.80	5.58	3.58	0.98	1.32
-20	(- 4)	1287	324	377	247	1.99	7.33	5.20	1.31	1.52
-15	(+ 5)	1651	416	484	279	2.08	9.42	5.92	1.49	1.74
-10	(+14)	2074	523	608	312	2.19	11.88	6.66	1.68	1.95
-5	(+23)	2556	644	749	346	2.32	14.70	7.38	1.86	2.16

TEST CONDITIONS: @230V60Hz		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]	[Btu/Wh]	[kcal/Wh]
-30	(-22)	679	171	199	190	1.85	3.85	3.57	0.90	1.05
-25	(-13)	916	231	268	221	1.91	5.20	4.15	1.05	1.22
-20	(- 4)	1213	306	356	254	1.99	6.90	4.77	1.20	1.40
-15	(+ 5)	1571	396	460	290	2.10	8.97	5.41	1.36	1.59
-10	(+14)	1990	501	583	329	2.24	11.40	6.05	1.53	1.77
-5	(+23)	2469	622	723	370	2.40	14.20	6.67	1.68	1.96

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		