

COMPRESSOR DEFINITION

Designation	NE 2134Z
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	262JG92

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	CSIR		
6 Starting torque	HST - High 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	14.2	[kgf/cm ²] (202 psig)	/ °C - °F
9.2 Peak	15.9	[kgf/cm ²] (226 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/2	[hp]
2 Displacement	14.28	[cm ³] (0.871 cu.in)
2.1 Bore [mm]	30.157	
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)	11	[kg] (24.25 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	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-64	
3 Start capacitor	189-227(165)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0590/G9	
6 Start winding resistance	6.10	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.96	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	33.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	4.80	[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

TEST CONDITIONS: @115V60Hz			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]
1450	365	425	346	5.30	8.24	4.19	1.06	1.23

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz			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)	1073	270	315	273	4.95	6.08	3.93	0.99	1.15
-25	(-13)	1420	358	416	314	5.16	8.06	4.53	1.14	1.33
-20	(- 4)	1822	459	534	355	5.38	10.37	5.14	1.30	1.51
-15	(+ 5)	2295	578	672	396	5.61	13.10	5.80	1.46	1.70
-10	(+14)	2856	720	837	437	5.87	16.36	6.53	1.64	1.91
-5	(+23)	3522	888	1032	479	6.15	20.26	7.35	1.85	2.15

TEST CONDITIONS: @115V60Hz			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]
-30	(-22)	1013	255	297	279	4.98	5.74	3.63	0.91	1.06
-25	(-13)	1352	341	396	322	5.20	7.68	4.19	1.06	1.23
-20	(- 4)	1747	440	512	368	5.45	9.94	4.75	1.20	1.39
-15	(+ 5)	2215	558	649	415	5.73	12.64	5.33	1.34	1.56
-10	(+14)	2772	699	812	465	6.05	15.88	5.96	1.50	1.75
-5	(+23)	3436	866	1007	517	6.42	19.76	6.65	1.68	1.95

TEST CONDITIONS: @115V60Hz			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)	953	240	279	285	5.02	5.40	3.33	0.84	0.98
-25	(-13)	1284	323	376	331	5.24	7.29	3.88	0.98	1.14
-20	(- 4)	1672	421	490	380	5.52	9.51	4.40	1.11	1.29
-15	(+ 5)	2134	538	625	434	5.85	12.18	4.92	1.24	1.44
-10	(+14)	2688	677	788	492	6.24	15.40	5.45	1.37	1.60
-5	(+23)	3349	844	981	555	6.69	19.26	6.04	1.52	1.77

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
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	6.45 +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		