

### COMPRESSOR DEFINITION

Designation	NE U6214Z
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	269NE71

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	115-127 / 60	[ V / Hz ]	
4 Application type	High Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-15°C to 10°C	(5°F to 50°F)	
5 Motor type	CSCR		
6 Starting torque	HST - Hight 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 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	1/2	[hp]
2 Displacement	16.80	[cm <sup>3</sup> ] (1.025 cu.in)
2.1 Bore [mm]	31.190	
2.2 Stroke [mm]	22.000	
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)	11.6	[kg] (25.57 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115-127 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA9AD3C-121	
3 Start capacitor	189-227(250)	[µF(VAC minimum)]
4 Run capacitor	25(400)	[µF(VAC minimum)]
5 Motor protection	T0736/G9	
6 Start winding resistance	5.69	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.73	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	50.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[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			ARIHBP Fan		Evaporating temperature (Condensing temperature		7.2°C (44.96°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]
6140	1547	1799	846	7.76	48.18	7.26	1.83	2.13

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz		ARI18 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]
-15	(+5)	2981	751	873	449	4.64	18.64	6.63	1.67	1.94
-10	(+14)	3772	951	1105	505	5.01	23.72	7.47	1.88	2.19
-5	(+23)	4707	1186	1379	569	5.48	29.75	8.26	2.08	2.42
0	(+32)	5785	1458	1695	643	6.06	36.80	9.00	2.27	2.64
+5	(+41)	7006	1766	2053	725	6.73	44.91	9.67	2.44	2.83
+10	(+50)	8370	2109	2453	816	7.50	54.16	10.25	2.58	3.00

TEST CONDITIONS: @115V60Hz		ARI18 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]
-15	(+5)	2610	658	765	472	4.79	17.92	5.53	1.39	1.62
-10	(+14)	3337	841	978	534	5.22	23.03	6.26	1.58	1.83
-5	(+23)	4199	1058	1230	603	5.74	29.14	6.97	1.76	2.04
0	(+32)	5196	1309	1522	680	6.35	36.31	7.65	1.93	2.24
+5	(+41)	6327	1595	1854	764	7.05	44.61	8.28	2.09	2.43
+10	(+50)	7594	1914	2225	856	7.84	54.09	8.87	2.23	2.60

TEST CONDITIONS: @115V60Hz		ARI18 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]
-15	(+5)	2241	565	657	491	4.88	17.10	4.57	1.15	1.34
-10	(+14)	2890	728	847	562	5.40	22.19	5.14	1.30	1.51
-5	(+23)	3665	924	1074	639	6.00	28.33	5.73	1.44	1.68
0	(+32)	4567	1151	1338	723	6.68	35.59	6.32	1.59	1.85
+5	(+41)	5596	1410	1640	812	7.43	44.03	6.89	1.74	2.02
+10	(+50)	6752	1701	1978	908	8.26	53.70	7.43	1.87	2.18

### 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		